Regulatory Analysis Form

(Completed by Promulgating Agency)

IRRC

Independent Regulatory Review Commission

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SECTION I: PROFILE

(1) Agency:
Pennsylvania Department of Agriculture, Bureau of Dog Law Enforcement

(2) Agency Number:

Identification Number: 2-170

IRRC Number: 2785

(3) Short Title: Commercial Kennel Canine Health Regulation

(4) PA Code Cite: 7 PA Code, Chapter 28a.

(5) Agency Contacts (List Telephone Number, Address, Fax Number and Email Address):

Primary Contact: Special Deputy Secretary Jessie L. Smith
2301 North Cameron Street
Harrisburg, PA 17110
Phone: (717) 214-3447 Fax: (717) 346-3301
Email: jlsmith@state.pa.us

Secondary Contact: Bureau Director Sue West
2301 North Cameron Street
Harrisburg, PA 17110
Phone: (717) 787-4833 Fax: (717) 772-4352
Email: suewest@state.pa.us

(6) Primary Contact for Public Comments (List Telephone Number, Address, Fax Number and Email Address) – Complete if different from #5:

(All Comments will appear on IRRC'S website)

(7) Type of Rulemaking (check applicable box):

Proposed Regulation
X Final Regulation
☐ Final Omitted Regulation
☐ Emergency Certification Regulation;
☐ Certification by the Governor
☐ Certification by the Attorney General

(8) Briefly explain the regulation in clear and nontechnical language.

The regulation will set standards for Commercial Kennel operations regarding ventilation, auxiliary ventilation, humidity, ammonia and lighting levels and flooring. The ventilation standards are established as required by section 207(h)(7) of the Dog Law. After consultations with engineers and architects that design and build kennel housing facilities, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and the Department (hereafter "experts"), it was determined that the ventilation rates should be measured in cubic feet per minute (CFM) per dog and that the volumetric airflow rate should be at least 100 CFM per dog. This is an objective standard that is easily measured and is based on animal husbandry practices. The air may be re-circulated, but at least 30 CFM must be fresh air. Again, this standard is based on consultations with experts. The ventilation systems must be of a type that physically moves air with a fan. The air must be filtered and filtration shall be by a disposable filter rated at a minimum efficiency reporting value (MERV) of at least 8. The ventilated air must circulate at the height of the dog. Types of auxiliary ventilation that may be used when the kennel temperature rises above 85 degrees Fahrenheit (85 F) are specified. Humidity levels are established, as required by section 207(h)(7) of the Dog Law. The humidity must be kept between 30-70% when temperatures are below 85 F. When temperatures in the kennel facility rise above 85 degrees, humidity levels must be adjusted to achieve a Heat Index value of 85 (85 HI) or lower. A Heat Index value takes into account the temperature and humidity levels to calculate what the temperature of a structure feels like when heat and humidity levels are combined. It is sometimes referred to as the "apparent temperature". The Heat Index value is established based on animal studies and charts, and consultations with experts. The calculation is based on National Weather Service charts and a heat index calculator. When temperatures inside the kennel facility rise above 85 F, the kennel owner is given a four hour window (consistent with the Federal Animal Welfare Act regulations) in which to reduce humidity and/or temperature to achieve a heat index of 85 HI. However, at no time may the heat index in the kennel facility exceed 90 HI. The 90 HI is based on a dog survivability study, which is attached to the comment and response document and referenced in this document, and the Tufts Animal Care and Condition (TACC) Weather Safety Scale. Air conditioning to cool the air is not required, but may be utilized. If used, it must have a capacity of at least 35 BTU per square foot (this was established by the engineers consulted). Ammonia levels are established as required by section 207(h)(7) of the Dog Law. Ammonia levels must be maintained at 15 parts per million or less, measured at the height of the dog. This standard was set based on consultations with experts. Carbon monoxide levels must be monitored with detectors in areas of the kennel facility that use CO emitting devices. The regulation also establishes lighting standards for both natural and artificial light, as required by section 207(h)(8) of the Dog Law. It reiterates the diurnal cycle requirement of the Act and establishes a light level range of 40-60 foot-candles. Again, the lighting levels were determined after consultation with experts, and are consistent with National Institute of Health policies and guidelines related to biomedical and animal research facility design, and Pennsylvania State University's standards for classroom lighting. Based on veterinarian input related to the health of dogs, the type of artificial lighting is required to be "full spectrum" lighting, a light source that most closely simulates the wavelengths of natural sunlight.

Finally, the regulation reiterates the flooring requirements of the Dog Law found at section 207(i)(3), approves solid flooring as an option meeting the standards of section 207(i)(3)(i) and, pursuant to authority found in sections 207(i)(3)(iii) and 221(f) of the Dog Law, sets requirements for approval of additional flooring options based on animal husbandry practices to provide for the welfare of dogs. The regulation approves radiant heating or cooling systems in flooring under certain conditions.

(9) Include a schedule for review of the regulation including:

A. The date by which the agency must receive public comments: 45 day comment period for Proposed Regulation 9/12/09 through 10/27/09

B. The date or dates on which public meetings or hearings will be held: public hearing held 10/16/09

C. The expected date of promulgation of the proposed regulation as a final-form regulation: September, 2010

D. The expected effective date of the final-form regulation: Immediately upon publication in PA Bulletin

E. The date by which compliance with the final-form regulation will be required: July 1, 2011

F. The date by which required permits, licenses or other approvals must be obtained: N/A

(10) Provide the schedule for continual review of the regulation.

The Bureau of Dog Law Enforcement is required to inspect licensed kennels two times each year. The Bureau will continually evaluate if the regulations are effective and will suggest changes or report problems to the Canine Health Board. In addition, the Board has the authority, with regard to flooring, to review and approve new flooring systems that meet the criteria set forth in the Dog Law and the regulations.

SECTION II: STATEMENT OF NEED

(11) State the statutory authority for the regulation. Include specific statutory citation.

The Department establishes and adopts this final-form rulemaking under the Pennsylvania Dog Law (Act)(3 P.S. § 459-101 *et seq.*) and under the specific authority established by sections 221(g) and 902 of the Act (3 P.S. §§ 459-221(g) and 459-902).

The Canine Health Board (Board), created under section 221 of the Dog Law (3 P.S. § 459-221), issued temporary guidelines which were published at 39 *Pennsylvania Bulletin* 310, on January 17, 2009. As required by section 221(g) of the Act (3 P.S. § 459-221(g), those temporary guidelines were published

by the Department as proposed regulations at 39 *Pennsylvania Bulletin* 5315, on September 12, 2009.

More specifically, section 221(f) of the Act (3 P.S. § 459-221(f)), charges the Board and the Department with the duty to determine standards and promulgate regulations to provide for the health and well being of dogs in the specific areas of ventilation, auxiliary ventilation, humidity and ammonia levels, lighting and flooring in commercial kennels, as set forth at sections 207(h)(6), (7) and (8), (i)(3) and 221(f) of the Act (3 P.S. §§ 459-207(h)(6), (7) and (8), (i)(3) and 459-221(f)).

The Department, under its general authority at section 902 of the Act and under the specific duty and authority established at section 221(g) of the Act, hereby creates Chapter 28a (relating to canine health standards for commercial kennels) of Title 7 of the *Pennsylvania Code*.

(12) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as, any deadlines for action.

There are no court orders or federal law or regulations which mandate this regulation. There are no relevant state or federal court decisions associated with or mandating this regulation. State law does mandate the regulation. The Pennsylvania Dog Law, under the specific authority set forth in the answer to question (11) above, required the Canine Health Board to establish and publish Guidelines setting ventilation, auxiliary ventilation, ammonia and humidity levels standards and lighting requirements. The Department was required to promulgate those Guidelines as proposed regulations. After a public hearing and public comment period, the Department hereby establishes final-form regulations under its general authority at section 902 of the Dog Law and in accordance with the specific mandates of sections 221(g), 221(f), 207(h)(6), (7) and (8) and 207(i)(3) of the Dog Law.

(13) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

The regulation is mandated by statute, as set forth in the answers to questions (11) and (12) above. The Pennsylvania General Assembly, through the passage of Act 119 of 2008, specifically sections 207(h)(7) and (8) and 207(i)(3) and the creation of the Canine Health Board by section 221 (3 P.S. §§ 459-207(h)(7) and (8), 459-207(i)(3) and 459-221), required the promulgation of regulations establishing proper ventilation, auxiliary ventilation, ammonia, humidity, lighting and flooring standards for commercial kennels. The criteria were established by the nine member Canine Health Board, comprised of small animal veterinarians. Additional or modified standards have been added to the final-form regulation in response to public comment and in consultation with members of the Board, engineers and architects that design and build dog kennels, animal scientists and Department veterinarians. The General Assembly, in passing Act 119 of 2008 and requiring that such standards be established, evidenced that there is a public interest in protecting the health, safety and welfare of dogs housed in commercial kennels in this Commonwealth. The standards established by the regulation will assure animal husbandry practices are implemented that provide for and improve the welfare of the dogs raised

in commercial kennels. In doing so, the regulations will help to insure that the general public, in this state and others, will receive healthier puppies. In addition, it assures a healthier climate for adult and breeding dogs that are kept in commercial kennels their entire lives, which was shown to be a great public interest before and during the passage of Act 119 of 2008.

(14) If scientific data, studies, references are used to justify this regulation, please submit material with the regulatory package. Please provide full citation and/or links to internet source.

The Canine Health Board (Board) is comprised of nine (9) licensed veterinarians and their education, expertise, background and knowledge was utilized in drafting the guidelines, and they were consulted with regard to the comments received and changes made to the final-form regulation.

A list of individuals consulted and documents reviewed by the Canine Health Board and the Department, including product information, is attached to this regulatory analysis form.

In addition, the Department met with and consulted: 1. Engineers Scott Learned, Owner, Design Learned Inc., Norwich, CT, who specializes in dog kennels, animal shelters and veterinary hospitals; and Rodger Lease, Director of Mechanical Engineering, Paragon Engineering Services, York, PA, who has designed systems for dog kennels and veterinary hospitals; 2. Architect Lucinda A. Schlaffer, AIA, LEED AP, Partner – ARQ Architects, Kittery, ME; 3. Pennsylvania State University professors Dr. Kenneth Kephart and Dr. Robert Mikesell; 4. Canine Health Board veterinarians; 5. Department veterinarians –Dr. Craig Shultz, Director, Bureau of Animal Health and Diagnostic Services, and Dr. Danielle Ward, Bureau of Dog Law Enforcement veterinarian; and 6. Stacy Mason, American Kennel Club Senior Breed Field Representative.

The Department reviewed the transcripts of the six Canine Health Board public meetings related to the Guidelines and reviewed much of the data utilized by the Board to craft the Guidelines.

In addition, the final-form regulation contains a reference to the website and a chart setting forth the proper Heat Index ranges. This information and data comes from the National Weather Service, as set forth specifically in the regulation itself. The Department also consulted and utilized data and information regarding heat index stress for swine, cattle and fowl and a dog survivability study – all supplied by Dr. Karen Overall, VMD, a member of the Canine Health Board – in coming to conclusions on proper humidity levels and ranges to be employed in commercial kennels.

Finally, the comment and response document, which will be available on the Department's website, has information and studies attached that were utilized in clarifying and modifying the final-form regulation.

(15) Describe who and how many will be adversely affected by the regulation. How are they affected?

The regulation is required by statute (3 P.S. §§ 459-207(h)(7), (h)(8), 459-207(i)(3) and 459-221(f)) and is required to set specific standards for ventilation, auxiliary ventilation, humidity, ammonia and lighting. The regulatory standards addressed in this regulation apply to commercial kennels. In 2009, there were 303 licensed commercial kennels in the Commonwealth and 123 of these kennels closed and some of the others converted to noncommercial kennels. There are approximately 114 commercial kennels remaining in 2010, of which approximately 51 are licensed by the United States Department of

Agriculture and must comply with the Animal Welfare Act and its attendant regulations at 9 CFR § 3.1 *et seq.*. Those regulations already require such kennels to: "...have reliable electric power adequate for heating, cooling, ventilation, and lighting, and for carrying out other husbandry requirements in accordance with the regulations in this subpart" (9 CFR § 3.1(d)). The federal regulations, like the Dog Law, require kennel owners to maintain a temperature of at least 50 degrees Fahrenheit in the kennel facility, and to cool the kennel in a manner that will not allow the temperature in the kennel facility to rise above 85 degrees Fahrenheit for more than four consecutive hours (9 CFR §§ 3.2(a) and 3.3(a)). In addition, USDA-licensed kennels must provide sufficient ventilation to provide for the health and well-being of the dogs and to minimize odors, drafts, ammonia levels and moisture condensation, and must have lighting that provides a diurnal cycle, is uniformly diffused, not excessive and is bright enough to permit routine inspection and cleaning of the facility, and observation of the dogs (9 CFR §§ 3.2(b)(c) and 3.3(b)(c)). The Dog Law, at sections 207(h)(7) and 207(h)(8), establishes these same basic requirements related to ventilation, auxiliary ventilation, humidity and lighting, and then requires that Canine Health Board and the Department to promulgate regulations setting forth the specific standards for adequate ventilation, auxiliary ventilation, humidity, ammonia and lighting. The Commercial Kennel Canine Health Regulation carries out that duty. In carrying out the duty imposed by the statute, the new regulatory standards will require some commercial kennel owners to make changes to their kennels to assure they meet the ventilation, auxiliary ventilation, humidity, ammonia, and lighting requirements established by the regulation. Depending on the current condition of each kennel and the compliance level of USDA regulated kennels, kennel owners will have to incur costs associated with installing new or upgrading current ventilation systems, fans, filters, dehumidifiers and may have to upgrade auxiliary ventilation devices – which are already required by the current Dog Law regulations at section 21.26 (7 Pa.Code § 21.26). Kennels licensed by USDA and meeting the regulatory standards imposed by USDA will not incur the full costs set forth in detail below, with regard to meeting the ventilation, humidity (cooling under USDA), auxiliary ventilation and lighting standards of this regulation. Where artificial lighting sources are utilized to meet the lighting standards of the regulation, the kennel owners will incur additional costs to upgrade lighting systems to be full spectrum lighting and to meet the foot-candle requirements of the regulation. Flooring requirements are imposed by the Act itself and although the regulations reiterate the standards and set forth requirements for alternative flooring options, they do not impose any costs. The Dog Law itself imposes the flooring costs, at section 207(i)(3) (3 P.S. § 459-207(i)(3)), which establishes the flooring criteria and requires the changes to the flooring systems. The regulations can only expand the type of flooring systems allowed within the scope of the act itself. Therefore, the flooring part of the regulation can have no adverse effect, since the Dog Law statute itself requires the specific changes.

(16) List the persons, groups or entities that will be required to comply with the regulation. Approximate the number of people who will be required to comply.

As set forth in the answer to question 15, the Act requires these standards to apply to all commercial kennel owners. Commercial kennel owners will be required to comply with the regulatory standards. The regulatory standards are based on expert input and advice and impose proper and minimal ventilation, auxiliary ventilation, humidity, ammonia and lighting criteria to assure proper animal husbandry and the welfare of the dogs. The Department estimates that there are currently 114 licensed commercial kennels in the Commonwealth. Commercial kennels represent about 6% of the total number of kennels regulated by the Department. Nearly all are in 10 of the 67 counties – 47% are in Lancaster County.

SECTION III: COST AND IMPACT ANALYSIS

(17) Provide a specific estimate of the costs and/or savings to the **regulated community** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

Ventilation, auxiliary ventilation, humidity, ammonia and carbon monoxide standards generally - Section 28a.2.:

The final-form regulation provides:
"Kennels and housing facilities …shall be equipped with circulation equipment that physically moves air with a fan and can provide ventilation, fresh air, circulation, heating, dehumidification and filtration. Such equipment includes: air handlers, roof top units, dehumidifiers, furnaces and unit heaters."

This final-form regulation builds on existing general standards, found in current law and regulations that commercial kennel owners must already meet. These are not new costs. Costs of heating specifically, and costs of heating fuel, are not included in this analysis because the heat requirement comes from the Dog Law itself - section 207(h)(6) requires that "the ambient temperature in the facility must not fall below 50 degrees F." (3 P.S. § 459-207(h)(6)) The Dog Law itself also provides in section 207(h)(6) that dogs must be protected from temperature and humidity extremes.

Dog Law ventilation standards:
Section 207(h)(7) requires the Department to promulgate regulations pertaining to proper auxiliary ventilation and ventilation, humidity and ammonia levels. Section 207(h)(7) states, "The Canine Health Board shall determine auxiliary ventilation to provided it the ambient air temperature is 85 degrees F or higher. The relative humidity must be maintained at a level that ensures the health and well-being of the dogs housed therein. The appropriate ventilation, humidity and ammonia ranges shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) The Department is mandated to establish standards and techniques to meet them.

Dog Law current regulation standards:
The current Dog Law regulations, which apply to all types of kennels, also set ventilation standards generally in Section 21.26: "Indoor housing facilities for dogs shall be sufficiently ventilated when dogs are present to minimize drafts, odors, ammonia levels and moisture condensation. Ventilation shall be provided by means of windows, doors, vents or air conditioners. Auxiliary ventilation from fans, blowers or air conditioners shall be provided when the ambient temperature is 85° F (29.5° C) or higher. The relative humidity shall be maintained at a level that ensures the health and well-being of the dog housed therein in accordance with generally accepted husbandry practices." (7 Pa.Code § 21.26). The current regulations also require generally in Section 21.25 that "…kennel temperature shall be maintained at a level to protect the health and comfort of the type of dogs housed." (7 Pa.Code § 21.25)

USDA Animal Welfare Act & AWA regulation standards:
Approximately 45% of the remaining commercial kennels in Pennsylvania are required to be licensed by the United States Department of Agriculture. These kennels must already comply with the Animal Welfare Act and its attendant regulations at 9 CFR § 3.1 *et seq.*. Those regulations require kennels to: "...have reliable electric power adequate for heating, cooling, ventilation, and lighting, and for carrying out other husbandry requirements in accordance with the regulations in this subpart" (9 CFR § 3.1(d)). The federal regulations, like the Dog Law, require kennel owners to maintain a temperature of at least 50 degrees Fahrenheit in the kennel facility, and to cool the kennel in a manner that will not allow the temperature in the kennel facility to rise above 85 degrees Fahrenheit for more than four consecutive hours (9 CFR §§ 3.2(a) and 3.3(a)). In addition, USDA-licensed kennels must provide sufficient ventilation to provide for the health and well-being of the dogs and to minimize odors, drafts, ammonia levels and moisture condensation, and must have lighting that provides a diurnal cycle, is uniformly diffused, not excessive and is bright enough to permit routine inspection and cleaning of the facility, and observation of the dogs (9 CFR §§ 3.2(b)(c) and 3.3(b)(c)).

General cost estimate:
An average sized commercial kennel housing 100 dogs would have housing facilities of approximately 1500 square feet. The height dimension would range from standard ceiling height to barn height. Pursuant to the minimum primary enclosure size set by section 207(i)(1) of the Dog Law (3 P.S. § 459-207(i)(1)), an average (24" from tip of nose to base of tail) dog must have at least 12.5 square feet of indoor space. Adding in 20% additional space for walkways and area immediately surrounding the primary enclosure gives a density of about one dog per 15 square feet, or about 100 dogs in a 1500 square foot area. This necessarily is only an average – some dogs are smaller, bigger, or have more than the minimum required space. The largest commercial kennel class is a CK6, over 500 dogs, but this is a cumulative total of dogs during a year, not at one time. The Department has made its estimates assuming a 1500 square foot kennel with 100 dogs present because this is average or above for both size and number of dogs. Costs for smaller kennels or those with fewer dogs will be less.

Engineers consulted by the Department have set forth estimates to install or retrofit and certify a system meeting the ventilation, auxiliary ventilation and humidity standards of the final-form regulation. Two engineers gave specific cost ranges: Scott Learned, Owner, Design Learned Inc., Norwich, CT, who specializes in dog kennels, animal shelters and veterinary hospitals; and Rodger Lease, Director of Mechanical Engineering, Paragon Engineering Services, York, PA, who has designed systems for dog kennels and veterinary hospitals. The R. S. Means "Building Construction Cost Data 2010" cost estimating guidebook was used as a reference. The price range identified is between $13-25 per square foot. For a 1500 foot dog kennel, the cost would range from $19,500-37,500. A system at the low end of this range probably would not include Energy Recovery Ventilators (to minimize heat and cooling loss), and so may cost more to operate given the heating and humidity range limits for kennels. If energy recovery ventilators are installed (which is not mandated) they cost $2000-3000 per zone, and achieve 20-30% operating cost savings. In general, better systems cost more to build but less to operate. These estimates also assume that there is either no existing mechanical ventilation system, or the existing system is to be completely retrofitted and renovated. The cost estimate would be less for a kennel owner fine-tuning an existing functional system to meet the specifics of the final form regulation. Kennels licensed by the USDA should already have at least basic cooling, ventilation, auxiliary ventilation and

lighting systems that may or may not need to be upgraded to meet the standards of this regulation. For those kennels the cost estimates set forth below should be very much reduced.

The Department, not the regulated community, will purchase the temperature and humidity monitoring devices to be installed in kennels. This decision took into account comments from the regulated community related to both the cost burden and the need for these devices to be uniform. The Department will bear the cost of buying, calibrating, installing and replacing these devices.

Formulation of final form regulation standards:
The final-form regulation builds on current law and regulation to establish specific and objective standards for proper ventilation, as required by the Act itself. Therefore, the standards and costs imposed are a direct result of the duties imposed by the Act itself.

As set forth in detail in the comment and response document, the source document attached to this RAF, and in summary form below under the heading "Summary of background research supporting specific standards of final-form regulation," the Department consulted engineers and architects that build and design kennels, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and the Department, as well as numerous texts, articles and studies, to establish the proper ventilation, humidity and ammonia level ranges and set forth appropriate auxiliary ventilation techniques and standards. Based specifically on consultations with experts including cost projections, the Department has calculated these estimated costs to the regulated community.

Summary of background research supporting specific standards of final-form regulation:
First, the final-form regulation requires that air must be mechanically circulated. The engineers consulted did not believe that proper volumetric air flow rates could be maintained through natural ventilation. Properties such as inverse convection would prevent such air flow from occurring on a continuous basis and at the proper level of air flow to maintain animal health. Second, the final-form regulation allows for air to be re-circulated and requires filtration of such air. The engineers consulted believe that 100% fresh air would be too costly and would not allow for proper humidity or pathogen control. The final-form regulation establishes specific volumetric air flow rates, fresh air recirculation ranges, and proper filtration of re-circulated air. These standards are based on design standards and animal husbandry practices utilized by the engineers consulted and are approved by the animal scientists and veterinarians consulted.

The Department, as required by sections 207(h)(6) and (h)(7) of the Act (3 P.S. §§ 459-207(h)(6) and (h)(7)), also established auxiliary ventilation requirements. The auxiliary ventilation techniques are techniques currently employed in kennels. This information was gathered from engineers, an AKC Senior Breed Field Representative and Department employees including veterinarians, and all techniques were reviewed by the engineers. Nothing in the final-form regulation requires the reduction of temperature to a level of 85 degrees Fahrenheit (as required by the USDA regulations) or the use of air conditioning. Instead, the final form regulation establishes proper humidity ranges, as required by section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)).

The Department established proper humidity ranges that must be attained and maintained to assure

proper animal health and well-being, as required by section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)). The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. With regard to the levels established for the Department consulted with engineers and architects that design and build dog kennels, had discussions with veterinarians - including Department and Canine Health Board veterinarians - and with animal scientists, such as Drs. Kephart and Mikesell at the Pennsylvania State University. The results of those discussions were that a humidity range of thirty to seventy percent (30%-70%), when temperatures are at 85 degrees Fahrenheit or below, is normal animal husbandry practice and a proper range to control for disease and assure the health, safety and welfare of dogs confined in kennels. Some of these experts suggested an even narrower range of humidity levels that would have capped out at sixty percent (60%) humidity. The Department, however, chose to utilize the minimum standards.

In addition, as required, the Department sought to ascertain the proper humidity levels and auxiliary ventilations standards that would assure the health, safety and welfare of dogs confined to kennels when temperatures rise above 85 degrees Fahrenheit. Kennel owners and others have asserted in their comments that their kennel buildings can be made to "feel cooler" through the use of additional air circulation/ventilation or the mere increase of fan speed and the amount of air being pulled through the kennel building. However, science does not support such a comment or conclusion. There is however, scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The Department, with the assistance of veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle and equine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture on the tongue of the dog has to be evaporated. On a humid day or in a humid environment the high moisture level in the air makes the evaporative process less efficient or non-existent and the dogs' internal body temperature continues to rise. A cooling effect cannot be provided simply by increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling moist, humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not cool. Thus when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. Heat index charts demonstrate that HI standards should be set at a heat index of 85 (85 HI). The heat index charts (attached to the comment and response document) for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Most dogs – the only possible exception being short haired breeds in excellent health - can not survive heat index values in excess of 95-98 degrees for more than six hours. The final-form regulation sets standards for humidity based on heat index values and the use of auxiliary ventilation. The Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established

"survivability" levels for confined dogs. The study evidences that beagle dogs, a short haired breed, cannot survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study concludes that the relative humidity values used in the study should be reduced by twenty percent (20%) to assure safety. The maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values, is 95-98 HI. However, this is tempered by the Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by in 1998 by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine and first published in "Recognizing and Reporting Animal Abuse: A Veterinarian's Guide." This widely-used scale, one of several canine assessment tools focused on consequences for the dog, indicates that, even with water and shade available as in a commercial kennel setting, a potentially unsafe situation develops above a 90 degree F temperature, especially for brachycephalic, obese or elderly dogs, as well as dogs under 6 months of age. Although this regulation is based on heat index, regulates relative humidity rather than temperature, and a temperature of over 90 degrees F would be permitted if combined with a relative humidity that would result in a HI of no more than 90, the inclusion of the TACC Weather Safety Scale as a basis for the regulation emphasizes that the standard being set goes beyond survivability to minimize adverse heat-related consequences for dogs in commercial kennels. The survivability study and the TACC Weather Safety Scale are generally acknowledged to be the only two scholarly resources that give specific heat-related guidance applicable to canines.

The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI). This is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels, as required by the Act. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels, heat indexes and the time period of exposure established in the final-form regulation for temperatures exceeding 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates below.

The ammonia level established in the final-form regulation is based on consultations and discussions with animal scientists from the Pennsylvania State University, engineers and architects and Department veterinarians. These experts came to a conclusion, based on animal husbandry practices and studies done on captive animals such as swine, that ammonia levels of 15 parts per million (PPM) were appropriate to assure there were no ill effects – such as respiratory and eye problems – on the health of dogs housed in commercial kennels. The Department consulted with engineers and architects related to the ammonia

levels established by the final-form regulation and measurement of same. In addition, the Department consulted with veterinarians and animal scientists and did its own research with regard to commonly accepted levels of ammonia in animal operations. The engineers and architects all stated that if kennels were properly ventilated to achieve the air circulation values established in the regulations, then ammonia levels should not be a problem in the kennel. The Act, however, requires the Department to establish the proper ammonia levels for dogs housed in kennels. Discussions with veterinarians and research done by veterinarians on the Canine Health Board affirm that ammonia levels of 20 PPM or higher will cause respiratory and eye irritation and problems in animals. The veterinarians suggested the levels be set at some point below 20 PPM with a consensus that a level of 15 PPM would provide for animal health and welfare and be measurable. Ammonia levels are measured now in the swine industry and can be accurately measured at levels of 15 PPM. The Department's research also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel. The Dog Law does not allow dogs in kennels to be housed in any primary enclosure that is more than 48 inches high for dogs under twelve weeks of age, or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department concludes that ammonia measurements should be taken at the height of the dogs.

The Department has modified the carbon monoxide requirements of the final-form regulation. The regulation no longer establishes a range, but instead merely requires kennels that utilize a carbon source mechanical device to install carbon monoxide detectors. Examples of this would be generators or heating systems that use carbon-based fuel such as oil or gas. The definition of ventilation in the regulation (which was specifically approved by the engineers consulted) includes, "...replacing air in any space to control temperature and humidity or remove moisture, odors, smoke, heat, dust, airborne bacteria, carbon monoxide, carbon dioxide, and to replenish oxygen." The Department after consulting with engineers, animal scientists and veterinarians, and reviewing comments, determined that carbon monoxide must be monitored to ensure the welfare of the dogs. Carbon monoxide is an odorless and colorless gas that is deadly if there is prolonged excessive exposure. The experts consulted opined that it was necessary – while not establishing ranges – to at least monitor for this deadly gas. The final form regulation includes no set range, but instead requires installation of common, inexpensive carbon monoxide monitoring devices in any commercial kennel that utilizes a carbon monoxide emitting device. The regulation is tailored to apply only to kennels that may have a carbon monoxide build up, and sets an objective standard by requiring common detection devices to be installed.

Specific standards for ventilation and circulation – Section 28.a.2.(f)(1)-(6):
The final-form regulation sets these specific standards for ventilation and circulation:

"(1) General: Ventilation and circulation of air shall be provided and distributed throughout the entire area of the kennel and kennel housing facility, at the required volumetric rates and in the manner required by this chapter in all rooms or areas of the kennel and housing facility where a dog is housed, kept or present, including primary enclosures.

(2) Circulation and volumetric rates: Minimum circulation rates in each area or room of a kennel and housing facility, including primary enclosures, where a dog is housed, kept or present shall be maintained at all times at a total volumetric airflow of 100 cubic feet per minute (CFM) per dog. Volumetric air flow rates may be required to be increased as set forth in the Auxiliary Ventilation provisions of this Chapter.

(3) Design capacity: The mechanical ventilation equipment employed to physically circulate and

move the air shall be designed, rated and able to circulate and move the required volume of air based on the highest total number of dogs held in the kennel and kennel housing facility, including primary enclosures, at any one time and shall do so in a manner meeting all requirements of this section.

(4) Fresh air rates: At least 30 CFM per dog of the circulated air shall be fresh air, the rest may be re-circulated air.

(5) Filtration: Filtration of circulated air shall be by disposable filters rated at a minimum efficiency reporting value (MERV) of 8 or higher.

(i) Evidence of the MERV filtration level shall be the information printed by the manufacturer on the filters.

(ii) At a minimum, filters shall be replaced quarterly in equipment serving areas of the kennel and kennel housing facility, including primary enclosures, that houses dogs.

(6) Design and placement: Ventilation shall provide circulation at the height of the dog, meaning the ventilation system shall be designed and placed in such a manner that each dog is in the moving air stream provided by the ventilation."

The need to meet each of these requirements – entire area coverage, 100 CFM airflow per dog, calculated based on dog capacity, 30 CFM fresh air, MERV 8 filtration and circulation at dog height - has been factored into the general cost estimate above, so that these requirements do not add to the cost estimate. There is an additional cost for replacing the disposable filters. MERV 8 filters designed to last 90 days cost between $14-$20 per dozen at Grainger Industrial Supply, www.grainger.com, which has stores in Berks, Chester and Lancaster Counties and 18 stores statewide. A 1500 square foot kennel would require a filter for each zone, and zones would range in size from 800-1600 feet. This would require 2 filters per quarter, 8 per year at a total annual cost of $9-$13.

Auxiliary ventilation generally - Section 28.a.3(a):

The final-form regulation provides:

"(a) General. When temperatures, in any part of a kennel and kennel housing facility where a dog is housed, kept or present, including primary enclosures, rise above 85 degrees Fahrenheit, auxiliary ventilation shall be provided to the dogs in that part of the kennel and kennel housing facility. The auxiliary ventilation shall provide the increased volumetric air flow rates and humidity control required by this chapter and shall be operated in addition to, not in place of, all other ventilation and humidity requirements set forth in this Chapter. Auxiliary ventilation systems may be utilized in the event of a primary ventilation system failure or malfunction."

The Dog Law itself provides in section 207(h)(7) that auxiliary ventilation is required if the housing temperature rises above 85 degrees F. The general auxiliary ventilation requirement of the final-form regulation mirrors this section of the Dog Law, and also mirrors current regulations applicable to all dog kennels, See 7 PA Code §21.26 requiring auxiliary ventilation at temperatures above 85 degrees F "from fans, blowers or air conditioners." So this general requirement imposes no additional costs on kennel owners, since it is neither new nor different

Auxiliary ventilation types – Section 28.a.3(b):

The final-form regulations provide:

"(b) Types of auxiliary ventilation. Auxiliary ventilation devices and techniques may include:

(1) Utilizing fans or air circulation equipment that increases the total volumetric airflow from

100 cubic feet per minute (CFM) per dog to 200 CFM per dog, either by utilizing any additional capacity the current mechanical ventilation system may provide or by adding additional fans or circulating equipment. The proper humidity levels, as established in section 28a.4 of this chapter, shall be maintained at all times.

(2) Providing cooling by moving or circulating air over cool water coils or piping, cooling towers or ice or providing cooling directly to the primary enclosure or space occupied by the dog by a means capable of cooling the enclosure or floor upon which the dog lays or walks, such as piping or coils capable of carrying cool water under or within the flooring system, and at the same time increasing the total volumetric airflow from 100 cubic feet per minute (CFM) per dog to 200 CFM per dog, either by utilizing any additional capacity the current mechanical ventilation system may provide or by adding additional fans or circulating equipment. The proper humidity levels, as established in section 28a.4 of this chapter, shall be maintained at all times.

(3) Air conditioning sufficient to reduce temperature and humidity levels in the kennel to the required levels.

(4) Geothermal systems sufficient to reduce temperature and humidity levels in the kennel to the required levels."

Option 1, doubling airflow from 100 to 200 CFM per dog, has the negligible associated cost of purchasing fans with two speeds, so that the fans could be turned up to the higher speed to accomplish auxiliary ventilation in this manner.

Option 2, water-based cooling methods in addition to doubling airflow as prescribed by Option 1, would be part of the $13-$25 per square foot cost estimate for ventilation and circulation generally. Using ice or pipes with cool water would cost less than $13 per square foot, but would be a component of a system still requiring fans, fresh air intakes, etc. Using cooling pipes in the floors of kennels was a concern because a moist floor could encourage fungal growth or create the "slippery or slick" surface prohibited by Section 28.a.8(d)(6). Floors cooled with water would have to be monitored to avoid these problems. Cooling towers have an advantage over pipes of not increasing indoor humidity levels - since outdoor air does not enter the building - but have a higher cost. Again, this cost would be part of the $13-$25 per square foot estimate.

Option 3, air conditioning, may be the least expensive option. An air conditioning heat pump system would enable the same set of ductwork and compressor, evaporator and fan equipment to provide ventilation, cooling, heating, and dehumidification in a single simple package. This would also be included in the $13-$25 per square foot cost range.

Option 4, geothermal systems, is the exception to this range – such a system would cost approximately twice as much to install, approximately $24-$50 per square foot depending on extent of wells required. This system would not require fuel, and is estimated to cut utility costs by 50%, so there would be an operational savings.

Humidity levels – Section 28.a.4:
The final-form regulation provides:
"(a) General Standards: A kennel and kennel housing facility, where a dog is housed, kept or present, including primary enclosures shall meet the following humidity levels:

(1) Temperatures below 85 degrees Fahrenheit. When temperatures in the kennel and kennel housing facility, where any dog is housed, kept or present, including primary enclosures, are below 85 degrees Fahrenheit (85 F), relative humidity levels shall be kept between 30% and 70%.

(2) Temperatures above 85 degrees Fahrenheit. When temperatures, in any part of the kennel and kennel housing facility, where a dog is housed, kept or present, including primary enclosures, rise above 85 degrees Fahrenheit (85 F), the relative humidity level shall be reduced to a level that will accomplish a Heat Index value of eighty-five (85 HI) or lower.

(3) Four hour window. Once the temperature in any part of the kennel and kennel housing facility, where a dog is housed, kept or present, exceeds 85 degrees Fahrenheit (85 F), the kennel owner shall have no more than four (4) hours to accomplish a heat index of eighty-five (85 HI) or lower, as required by subparagraph (2) above. At no time - during that four hour time period or at any other time - shall the Heat Index value ever reach or exceed ninety (90 HI) in any area, room or part of the kennel and housing facility, where a dog is housed kept or present, including primary enclosures.

(4) Calculation of Heat Index. The tool that shall be utilized to determine the Heat Index value and thereby the proper humidity levels when temperatures rise above 85 degrees Fahrenheit (85 F) shall be the Temperature and Humidity Index of the National Weather Service or its successor standard. This is also available at the National Weather Service web site located at: http://www.hpc.ncep.noaa.gov/html/heatindex.shtml (An example of the Heat Index values are: 86 degrees F and 40 percent humidity = Heat Index of 85 degrees F; 90 degrees F and 20 percent humidity = Heat Index of 86 degree F)"

The need to meet each of these requirements – 30-70% humidity range if under 85 degrees F, Heat Index of 85 degrees F if over 85 degrees F with four-hour window to achieve, Heat Index above 90 absolutely prohibited - has been factored into the general cost estimate above, so that these requirements do not add to the cost estimate of $13-$25 per square foot.

For commercial kennels that hold USDA licenses - those that sell wholesale, about 51 of Pennsylvania's 114 commercial kennels or approximately 45% - the Animal Welfare Act regulatory requirement that temperatures above 85 degrees F must be remedied within a four-hour period already exists. In fact, USDA requires that the temperature be brought down to 85 degrees F (9 CFR § 3.2(a) and 3.3(a)) rather than the more easily achieved 85 HI. It is also a lower standard than the USDA temperature reduction standard, because it allows ambient air temperature in the kennel to be above 85 degrees F so long as the 85 HI humidity level standard is achieved within four hours. Kennels regulated by USDA, that are meeting USDA standards already, should have no additional cost associated with complying with the Heat Index and humidity requirements of these regulations.

Condensation – Section 28.a.4(a)(5):

The final-form regulation provides:

(5) Condensation. Humidity levels, other than during times of cleaning and sanitizing, shall not rise to the level where condensation occurs in any area of the kennel, kennel housing facility or primary enclosures where a dog is housed, kept or present.

This requirement that condensation shall not occur is imposed by the Act. The regulatory language merely mirrors section 207(h)(7) of the Dog Law: "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present…to prevent moisture condensation." (3 P.S. § 459-

207(h)(7)) So this requirement imposes no additional costs on kennel owners, since it is imposed by the Act and not the regulation.

Temperature and humidity measurements – Section 28.a.4(b):
The final-form regulation provides:
"(b) Measurement and Control Standards:

(1) Temperature and humidity levels shall be measured in each area or room within the kennel and housing facility where a dog is housed, kept or present and shall be measured and recorded by either a humidity gauge and a temperature gauge or by a thermo-hygrometer, which shall be installed in each room of the kennel and housing facility in which a dog is housed, kept or present.

(2) The measuring devices shall be provided by and be the property of the Pennsylvania Department of Agriculture and will meet the following minimum standards:

(i) Will not require hard wiring, and may be operated by batteries.

(ii) Shall store temperature and humidity data on an hourly basis and for a time period of at least six months.

(iii) Shall be rated as accurate to within ½ (.5) Fahrenheit degree.

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(5) The humidity gauge and temperature gauge or thermo-hygrometer installed and provided by the Department shall not be tampered with, destroyed, incapacitated, reset or disturbed, including downloading of data, by any person other than a State dog warden or an authorized employee of the Department."

The Department, not the regulated community, will purchase the temperature and humidity monitoring devices to be installed in kennels. This decision took into account comments by the regulated community related to both cost burden and the need for these devices to be uniform. The Department will bear the cost of buying, calibrating, installing and replacing these devices. There will be no cost to the regulated community for this equipment.

Humidity control devices – Section 28.a.4(b)(3) &(4):
The final-form regulation provides:
(3) Evidence of humidity control devices shall be either dedicated dehumidifiers in each room and area of the kennel and housing facility in which a dog is housed, kept or present or may be air conditioning equipment. The equipment utilized shall have documented dehumidification capability.
(4) If air conditioning is utilized, the cooling capacity shall be at least 35 Btu/hr per square foot (1 ton of cooling for every 350 square feet) of animal area as demonstrated by nameplate cooling capability on the cooling equipment.

The required devices – either dedicated dehumidifiers or air conditioning equipment with at least 35 BTU/hour per square foot cooling capacity - have been factored into the general cost estimate above, so the need for humidity control devices does not add to the cost estimate of $13-$25 per square foot.

Ammonia levels – Section 28.a.5:
The final-form regulation provides:
"(a) Levels: Ammonia levels in all areas and rooms of the kennel and kennel housing facility, where a dog is housed, kept or present, including primary enclosures shall not be greater than 15 ppm (parts per

million) except within 30 minutes of the completion of active sanitation of that primary enclosure.
(b) Measurements: Ammonia level measurements shall be taken at the level of the dogs."

Ammonia levels are controlled by proper volumetric air flow and ventilation systems and have been factored into the general cost estimate above, so ammonia level control does not add to the cost estimate of $13-$25 per square foot.

Measurement devices to determine if ammonia levels are being maintained at or below the required levels will cost some additional money, if purchased by the regulated community. Portable ammonia detectors such as Gastec Dosimeter tubes (generically color detector or grab sample detector tubes) cost $57.25 for 10 tests. These are used by snapping off the pre-scored end of the tube and inserting it into a tube holder. No chart or analysis is needed - the printed calibrated scale on the tube is read for exposure measurement in parts-per-million-hours. However, one hour of exposure is required to determine PPM. Alternative equipment to measure ammonia levels, the BW Gas Alert Extreme Ammonia Detector, would cost $490 but does not require a test procedure, and hour of exposure, or continual replacement. Ammonia detectors rather than color detector tubes would be used to test ammonia levels, but ether alternative is available to kennel owners, if they chose to utilize such devices. These devices are considered optional because the engineers consulted stated that, with proper ventilation meeting the specific standards of the final-form regulation, ammonia levels will not rise above the 15 ppm level.

Carbon monoxide detectors – Section 28.a.6:
The final-form regulation provides:
"A kennel or kennel housing facility utilizing any carbon monoxide emitting device, shall install and maintain functioning carbon monoxide detectors in each room or area of the kennel and kennel housing facility in which a dog is housed, kept or present. The carbon monoxide detectors shall meet or exceed the UL standard 2034 or the IAS 6-96 standard, or its successor standards."

Kennel owners may be required to purchase carbon monoxide detectors. Battery-operated First Alert CO detectors cost $25, or $30-$35 for combination with smoke detector. Kidde CO detectors with alarms cost $42. Approximately 1-2 CO detectors would be required for a 1500 square foot building, at a cost of $50-$84.

Certifying ventilation system – Section 28.a.2(b):
The final-form regulation provides:
"The kennel owner shall supply the following information to the Department:
(1) Written Certification under the signature and seal of a professional engineer verifying the professional engineer has inspected the ventilation system to be certified, acknowledging familiarity with the requirements of the Dog Law and this chapter and certifying that the ventilation system of the kennel meets all of the standards and requirements of this section and sections 28a.3 [auxiliary ventilation], 28a.4 [humidity levels], 28a.5 [ammonia levels] and 28a.6 [carbon monoxide detectors] of this Chapter."

The cost of certification has been factored into the general cost estimate for ventilation, so this requirement does not add to the cost estimate of $13-$25 per square foot. If an engineer who did not

design or install the ventilation system is retained for the sole purpose of certifying the system, the cost of this consultation is estimated to range from $600-$1000 including the written report.

Cost of operation of ventilation system - Section 28.a.2(a):
The final-form regulation provides:
"The kennel owner or operator shall assure the mechanical ventilation system is functional, in operation at all times and meets the standards and requirements of this section. The kennel owner or operator shall also assure the auxiliary ventilation system, humidity control system and carbon monoxide detectors are functional, operational and operated or operating in a manner that meets the standards and requirements of this section and sections 28a.3 [auxiliary ventilation], 28a.4 [humidity levels], 28a.5 [ammonia levels] and 28a.6 [carbon monoxide detectors] of this Chapter."

This cost analysis has been prepared as if the cost of operation of the ventilation system is a new cost, even though part of this cost already exists, to comply with the Act itself (3 P.S. § 459-207(h)(6) and (h)(7)) and to comply with the requirements of sections 21.25 and 21.26 of the existing Dog Law regulations (7 Pa.Code §§ 21.25 and 21.26). In addition, for the approximately 51 commercial kennels that must comply with federal Animal Welfare Act regulations, they must already. "...have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)). Those 51 kennels must already have ventilation and cooling systems and electric power to operate these systems. There is no way to estimate the added cost of the specific requirements of the final-form regulation, as compared to the existing costs of meeting the current general requirements. As a result the estimates set forth in this regulatory analysis form, particularly for USDA-licensed kennels, are higher than the added cost actually imposed on commercial kennels by the final-form regulation.

Cost of operation encompasses two costs: the cost of energizing the ventilation system to run continuously, and the cost of maintenance. An estimate of energy costs was obtained from Michael Koslap, PPL Corporation, the electrical service provider for nearly all of Lancaster County and for the central Pennsylvania counties with commercial kennels. (PECO provides service for the Lancaster County municipalities of Lower Chanceford and Peach Bottom and for Chester County; Metropolitan Edison Corporation provides service for Berks County; and Penelec Company (First Energy Corporation) provides electric service for most other commercial kennels in the Commonwealth).

Estimated energy cost for ventilation - requiring 7500 CFM fans for the assumed 1500 square foot dog kennel with 100 dogs - is $782 annually, assuming continuous (720 hours per month) operation. The calculation is 5700 kilowatt hours per year times 13.72 cents, the 2010 average G1D (single phase service cost). Three phase service (2010 average GS3) is slightly cheaper, at a cost of 12.51 cents and a total cost under the same assumptions of $713. Estimated cost for optional air conditioning for the assumed 1500 square foot dog kennel with 100 dogs and an 85 degree F temperature ceiling is $767 annually. The calculation is 1397 kilowatt hours per month during air conditioning season, estimated to be four months with the system running no more than 504 hours a month, or 5588 kilowatt hours annually times 13.72 cents or $767; three phase service $699. The total annual required energy cost for the ventilation system, without air conditioning which is not required although an estimate has been provided for reference, is $713-$782.

The Department is aware that electricity for dog kennels is sometimes supplied by a propane generator rather than from a provider power grid. An assumption has been made that the cost of generating electricity in this manner would be equal to or less than the provider's charge for an equivalent amount of electricity.

An estimate of maintenance cost was obtained from Jason Urich, Commercial Service Account Manager, H. B. McClure Company of Harrisburg, a mechanical contractor that does maintenance work on HVAC systems and offers service contracts for these systems. The cost of maintaining such a system without a service contract in place would be approximately $960 annually, including quarterly filter replacement. With a service contract, this amount may be reduced but no estimate can be given due to the variability of maintenance required.

Cost of malfunction – Section 28.a.2(g):
The final-form regulation provides:
"Mechanical malfunction or failure: In the event of a mechanical system malfunction or failure, the kennel and kennel housing facility shall have windows, doors, skylights, or other openings in the structure that are operable and may be opened to provide natural ventilation and the auxiliary ventilation techniques established in section 28a.3 may be utilized. In the event of a mechanical system malfunction or failure resulting in a failure to meet the requirements set forth in sections 28a.2-28a.5 of this Chapter, the kennel owner shall do all of the following:

(1) Kennel temperatures below 85 degrees Fahrenheit: Take steps to correct the malfunction or failure immediately and restore the kennel housing facility to a condition complying with sections 28a.2-28a.5 of the Chapter within seventy-two (72) hours of the occurrence of the malfunction or failure. If at any time during the seventy-two (72) hour period the temperature in the kennel or kennel housing facility, including the primary enclosures exceeds 85 degrees, the kennel owner shall follow and comply with the requirements of subparagraph (2) of this subsection (28a.2(g)(2) below).

(2) and (3) Kennel temperatures in excess of 85 degrees Fahrenheit: If at any time after the occurrence of a malfunction or failure, the temperature in the kennel housing facility exceeds 85 degrees Fahrenheit, take steps to correct the malfunction or failure immediately and restore the kennel housing facility to a condition complying with sections 28a.2-28a.5 of the Chapter within four (4) hours. If such malfunction or failure cannot be, or is not, corrected such that the kennel housing facility is compliant with sections 28a.2 -28a.5 within four (4) hours of the occurrence of the malfunction or failure, immediately notify the kennel's veterinarian and consult on the steps to be taken to protect the health and well being of the dogs as well as notify the Department of the steps being taken to address the malfunction or failure and to protect the health and well being of the dogs. If the malfunction or failure occurs after 4:00 p.m. on a weekday or on a weekend the kennel owner shall notify the Department by 9:00 a.m. of the next Department business day.

(4) Upon the occurrence of a malfunction or failure requiring the notification set forth in subparagraph (2) of this subsection (28a.2(g)(2) above), notify the Department of the date and time the kennel and kennel housing facility, including the primary enclosures were restored to compliance with sections 28a.2-28a.5."

The windows and doors needed to provide natural ventilation are already required by the current Dog Law regulations at Section 21.26: "Ventilation shall be provided by means of windows, doors, vents or air conditioners." (7 Pa.Code § 21.26) The service contract and/or maintenance cost to operate the system would include correcting malfunctions.

The only potential additional cost would be the veterinary consult. However, section 207(h)(4.1) of the Act requires kennels to "establish a veterinarian-client-patient relationship" (3 P.S. § 459-207(h)(4.1)). Section 207(h)(5) requires a program of veterinary care, and section 207(i)(7) requires each dog to be examined at least once every six months (3 P.S. §§ 459-207(h)(5) and 459-207(i)(7)). Given the relationship and the routine care requirements, it is not clear that such a consult would result in an additional charge to the kennel owner. If it did, the charge would not exceed $200.

Lighting generally – Section 28.a.7(a):
The final-form regulation provides:
"(a) General Lighting Standards: Lighting may be provided by natural or artificial light or both. Whether lighting is provided by natural or artificial light or both, the following standards shall be met:

(1) There shall be ample lighting by natural or artificial means to provide sufficient illumination to allow routine inspection of the kennel, housing facility and primary enclosures and observation of the dogs at any time and to assure proper cleaning and good housekeeping practices and for the well-being of the dogs.

(2) Lighting shall be uniformly diffused throughout the kennel and housing facility where a dog is housed, kept or present, including primary enclosures.

(3) All areas of the kennel and housing facility in which a dog is housed, kept or present, including primary enclosures, shall be provided a regular diurnal cycle through natural or artificial light or both.

(4) The lighting range provided during the twelve hour light period of the diurnal cycle shall be forty to sixty (40 to 60) foot candles, or four-hundred thirty to six-hundred fifty (430-650) lux, in all areas and rooms of the kennel and kennel housing facility, including primary enclosures, where a dog is housed, kept or present.

(5) Primary enclosures and other areas of the housing facility in which a dog is housed, kept or present, including primary enclosures, shall be placed or located in a manner that protects each dog from exposure to excessive light."

NOTE: one foot-candle is the equivalent brightness to 10.76 lux.

Much of the general language and requirements found in the final-form regulation (diurnal cycle, uniformly diffused, sufficient illumination to aid in adequate cleaning and inspection, light not excessive) mirrors the language of the Act, at section 207(h)(8) (3 P.S. § 459-207(h)(8)) and therefore the Act not the regulation imposes any costs associated with compliance. In addition, the current Department regulations (7 Pa.Code § 21.27) and Federal Animal Welfare Act regulations and (9 CFR §§ 3.2(c) and 3.3(c)) impose those standards and therefore they do not present new costs.

The Dog Law at Section 207(h)(8) states: "Housing facilities for dogs must be lighted well enough to permit routine inspection and cleaning of the facility and observation of the dogs. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly

diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs from excessive light."

Section 21.27 of the Dog Law regulations applicable to all kennels contains similar language: "Indoor housing facilities in kennels shall have ample lighting by natural or artificial means. Lighting in indoor housing facilities shall be sufficient to allow observation of the physical condition of the dogs so housed, and to allow observation of the sanitary condition of the indoor housing facility. Dogs housed in these facilities shall be provided a regular diurnal lighting cycle." (7 Pa. Code § 21.27) The sufficient illumination, uniform diffusion, diurnal cycle, and excessive light protection requirements impose no additional costs on kennel owners, since they are neither new nor different than current law. The lighting ranges found in Section 28.a.7(a)(4) are new, consistent with the Dog Law mandate that "the appropriate lighting ranges shall be determined by the Canine Health Board." The cost of providing light in these ranges will be set forth in the next section relating to specific lighting standards.

Specific lighting standards - Section 28.a.7(b):
The final-form regulation provides:
(b) Specific Lighting Standards: The following specific standards are in addition to, not in place of, all other requirements meeting the general lighting standards established in this section. The following specific standards shall apply:
(1) Natural light. Where kennel and housing facility lighting is provided by natural light, any window or opening, with the exception of the openings that provide for unfettered access to the exercise area, which provides natural light shall be covered with a transparent material such as glass or hard plastic and shall remain unobstructed.
(2) Artificial light. Where kennel and kennel housing facility lighting is provided by artificial lighting the following standards shall apply:
(i) The artificial lighting shall be provided by full spectrum lighting
(ii) Lighting sources and systems shall be kept in good repair and functional and shall not have any bulb or part of the system in disrepair, such as being unable to produce light, burned out or emitting irregular bursts of light, such as when a ballast is in disrepair.
(iii) Light sources, whether their primary purpose is to provide heat or light, shall be provided in a manner that prevents dogs from being injured (i.e. through contact with the light, fixture, bulb, switch or cord or though electrocution).

Where a kennel owner chooses to provide appropriate lighting ranges through artificial lighting the following costs will apply. A cost estimate was obtained for providing full spectrum light in a 1500 square foot dog kennel with a brightness range of 40 to 60 foot-candles/430-650 lux. Scott Learned, Owner, Design Learned Inc., Norwich, CT, who specializes in dog kennels, animal shelters and veterinary hospitals, provided a cost range The R. S. Means "Electrical Cost Data 2010" cost estimating guidebook was used as a reference, and fixtures and bulbs were priced using the Grainger Industrial Supply website, www.Grainger.com.

A complete lighting renovation by a professional electrical contractor, including all wiring, fixtures and bulbs, has an estimated cost of $8-9 per square foot, or $12,000-$13,500. The Department believes it is

unlikely, because of current lighting requirements for kennels, that any kennel would have to do a complete renovation.

The breakdown of costs for complete and partial lighting renovations are as follows: 1. The electrical and wiring portion of this is $4-5 per square foot. 2. If existing wiring is utilized the cost of purchasing and installing all new fixtures and bulbs would be reduced to about $4 per square foot or $6,000. 3. Two-three watts per square foot would be needed to achieve the brightness and uniform diffusion specified. Overhead fixtures, the familiar rectangular 4' long type, fitted with two 32-40 watt tube bulbs, cost between $60-$90. 4. A 1500 square foot kennel would require 36-57 fixtures fitted with 72-114 full spectrum lighting tubes. The cost would range from $2160 (36 fixtures costing $60 each) to $5130 (57 fixtures costing $90 each).

So the cost of compliance for lighting will range from $0, if existing lighting meets the new quantified brightness and full spectrum requirements, to an average of $3645 for materials only, to $6000 for materials and professional installation, to $12,000-13,500 for a complete renovation by a professional electrical contractor.

For replacement purposes, full spectrum tube bulbs cost $7-10 each, with the $10 bulb being a high quality, high energy, low mercury fluorescent. It is assumed these tubes will need to be replaced annually, at a cost of $504-1140. However, kennel owners currently face the cost of replacing bulbs to assure compliance, so only a portion of this total cost would represent a new or increased cost of purchasing full spectrum, instead of conventional bulbs.

An estimate of energy costs for the required lighting system was obtained from Michael Koslap, PPL Corporation, the electrical service provider for nearly all of Lancaster County and for the central Pennsylvania counties with commercial kennels. This estimate assumes that lighting will be on for 12 hours a day every day to provide a regular diurnal cycle as required by Section 28.a.7(a)(3) of the final-form regulation. To the extent natural light is used to provide this cycle, lighting costs will be less than this estimate. Estimated cost for lighting the assumed 1500 square foot dog kennel with 100 dogs to the required standards is $3556 annually. The calculation is 25,920 kilowatt hours annually times 13.72 cents 2010 average G1D (single phase service cost) = $3556; three phase service $3243.

However, once again, kennels are currently required to provide a diurnal cycle of lighting and the Act imposes the diurnal lighting cycle requirement. Therefore, none of this cost can be attributed to the regulation. It is neither a new cost nor a cost imposed by the regulation itself.

NOTE:
It is difficult to give a cost estimate for ventilation and lighting for the following reasons.

1. There is no way to easily ascertain which kennels would be required to make alterations to their facilities to meet the final-form regulation.
2. The amount of alterations required will vary greatly among kennels based on size, physical layout, age, existing HVAC systems and lighting, use or nonuse of electricity and prior renovations.
3.

Flooring – Section 28.a.8:
This section of the final-form regulation approves solid flooring, which has been permissible for all types of kennels although not specifically addressed in law or regulation. It also sets additional flooring requirements, beyond those of the Dog Law and regulations, for any additional flooring options that may be approved by the Canine Health Board. At this time, the Canine Health Board has not approved any

such additional flooring options. The Act itself imposes the flooring restrictions and costs. Any new flooring type approved would provide an option from those specifically allowed by the Act (3 P.S. §§ 459-207(i)(3)(i) and (i)(3)(ii)), and as such would not impose a cost. The kennel owner would choose among approved types of flooring using cost effectiveness and other criteria. The regulations reiterate the standards of the Act and set forth the standards the Canine Health Board will utilize to assess whether an additional flooring option meets the standard imposed by section 221(f) of the Dog Law, related to animal husbandry practices that provide for the welfare of the dog (3 P.S. § 459-221(f)).

With regard to subsection 28.a.8(e) and the probable costs associated with that standard the Department has made calculations based on a twenty four inch (24") dog and the space requirements of the Act. Section 207(i)(1) of the Dog Law sets forth the space requirements for primary enclosures for dogs over 12 weeks of age (3 P.S. § 459-207(i)(1)). For purposes of computing the potential additional cost that may be imposed by section 28a.8(e)(related to nursing mothers) of the regulation, the Department has utilized the space requirements for a dog measuring 24 inches from the tip of its nose to the base of its tail. Such a dog would be required to be housed in a primary enclosure having 12.5 square feet of space. Section 207h)(3) of the Dog Law requires that each nursing puppy have at least 5% additional space beyond the space required for the mother (3 P.S. § 459-207(h)(3)). Based on the fact that the average litter considering litter sizes for all breeds is approximately six puppies, the total primary enclosure space of a 24 inch mother dog and her six puppies would be 16.25 square feet. The whelping pen area, the primary enclosure for the nursing mother and her puppies, has a solid-floored whelping box now and the whelping box normally occupies on average about 1/3 of the total space. Therefore, the provisions of section 28a.8(e) requiring that at a minimum 50% of the flooring in a primary enclosure housing nursing mothers and puppies or dams or foster dams and puppies under 12 weeks of age meet the requirements for adult dogs, as set forth at section 207(i)(3) of the Dog Law, would result in commercial kennel owners having to replace an average of 2.76 square feet of their non-solid flooring with flooring meeting the adult standards. Providing, at a minimum, 50% adult flooring for the nursing mothers would require some commercial kennels to replace an average of 17% (50% minus 33%) of their non-solid flooring with adult flooring or as stated an average of 2.76 square feet per whelping pen. Assuming 15 dogs with their puppies in whelping pens, a midrange CK4 kennel with 151-250 total dogs during a year, this would require 41.4 additional square feet of solid flooring to be installed. The total cost of that much slatted flooring, KennelDeck brand, would be between $175 and $210 based on five to six 8 square foot sheets. The cost of that much textured glassboard flooring would be between $38.40 and $65.00, based on two 4'x8' sheets and depending on whether the kennel owner installed seconds or #1 grade glassboard.

Section 207(h)(4) of the Dog Law requires that nursing mothers and their puppies be housed separately from other adult dogs and that puppies under 12 weeks of age may not be housed in a primary enclosure with adult dogs, other than the dam or foster dam (3 P.S. § 459-207(h)(4)). That is the reason the language regarding dams or foster dams is set forth in the regulatory standard.

Finally, about half of the compliant commercial kennels now have whelping pens that have solid flooring and have flooring meeting the adult standards of the Dog Law, that comprises at least 50% of the primary enclosure so this would not create an additional expense for them.

Cost Summary- Highest cost estimates:
Assuming that a kennel owner needs to build from the ground up, or install both a new ventilation system and all wiring and fixtures for a new lighting system – a worst case scenario given that general ventilation and lighting requirements are already in place – and assuming that professional contractors are used to install both systems, the mandatory costs would be $19,500-$37,500 for the ventilation system and $12,000-$13,500 for the lighting system. The mandatory costs for the carbon monoxide detectors, assuming that these devices are not already in place, is $25-$42 each or $50-$84 total annual cost. The cost of powering the ventilation and lighting using grid electricity would be $3956-$4338 ($713-782 ventilation, $3243-3556 lighting – although lighting should not be included as a new cost or one imposed by the regulation) annually, and the cost of maintaining the ventilation system would be $960 annually. The cost of replacement lighting tubes would be $504-$1140 annually, although once again this is a current cost of compliance and the only added cost would be the difference in price between full spectrum and conventional light bulbs.

Total compliance costs assuming the professional design and installation of a ventilation system (since there is no way to estimate the lesser costs for upgrading an existing system) would range from $26,626-56,382. Annual costs for ventilation and lighting operation and maintenance would be $5420-6438.

Installation of at least 50% adult flooring for nursing mothers would cost between $38.40 and $210.00.

Optional costs may include handheld devices to measure temperature, humidity, heat index, ventilation and air velocity at a cost of $259; ammonia detection meter at a cost of $490 or tubes at a cost of $300 each year; and light meters at an average cost of $200.
See also Fiscal Note in Preamble for Final-Form Regulation.

(18) Provide a specific estimate of the costs and/or savings to **local governments** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

The addition of mechanical ventilation, additional artificial and or natural lighting and flooring changes may require UCC permit and inspections. This should not specifically increase or decrease costs to local governments, however. The Department has attached documentation from the Center for Local Government Services, Department of Community & Economic Development (DCED), confirming that municipalities are collecting fees to cover the expenses of Pennsylvania Uniform Construction Code (UCC) administration and enforcement, so that these proposed regulations will not have a fiscal impact on municipalities. Any additional workload generated by these regulations would be offset by the fees collected in association with the specific permit.

The enforcement of the regulations will neither increase nor decrease any costs to local governments. Compliance with these ventilation, lighting and additional flooring standards for commercial kennels standards will be enforced solely by the Department. Local governments will have no role in

enforcement or any other area associated with the regulation itself.

Most PA municipalities do not have commercial kennels. Nearly all are in 10 of the 67 counties - 47% are in Lancaster County.

See also Fiscal Note in Preamble for Final-Form Regulation.

(19) Provide a specific estimate of the costs and/or savings to **state government** associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.

These costs will be paid for entirely from the Dog Law Restricted Account, which is primarily funded by license fees and receives no tax dollars. No General Fund monies will be used. See Fiscal Note in Preamble for Final-Form Regulation.

Equipment for inspectors – Section 28.a.2(c):
The final-form regulation provides:
"(c) Inspection –
(1) Inspection: A State dog warden or other employee of the Department inspecting the kennel will at a minimum:
(i) Assure the mechanical ventilation system is functional, operational and in operation.
(ii) Assure the auxiliary ventilation system is available, functional and operational and, where the temperature in the kennel exceeds 85 degrees, that the auxiliary ventilation system is in operation.
(iii) Assure the humidity control system is available, functional and operational and operating or operated in a manner that meets the standards and requirements of section 28a.4 of this chapter.
(2) A State dog warden or other employee of the Department inspecting the kennel may take ventilation, temperature, humidity and ammonia level readings and measurements to assure compliance with this chapter."

The Department currently has 63 inspectors and supervisors - 14 at most will be equipped and trained for commercial kennel inspections including all supervisors and kennel compliance specialists. This group will be using additional equipment to spot check and assess temperature, humidity, ventilation, cubic feet per minute air flow, ammonia and lighting. The equipment to assess temperature, humidity, heat index, ventilation and air velocity, the Kestrel 4200 Pocket Air Flow Tracker as recommended by USDA, would cost $259; the equipment to measure ammonia levels, the BW Gas Alert Extreme Ammonia Detector, would cost $490; and data logging light meters such as Extech brand would average $200. The total cost to equip each inspector would average $949, with the total cost for 14 inspectors at $13,286.
TOTAL COST: $13,286.

Equipment for kennel owners –Section 28.a.2(a):
The final-form regulation provides:
"(a) General Requirements: Each area of a kennel and kennel housing facility where a dog is housed, kept or present, including primary enclosures, shall utilize a functional, mechanical ventilation system that provides ventilation in a manner that meets the requirements of this section and sections 28a.3

[auxiliary ventilation], 28a.4 [humidity levels], 28a.5 [ammonia levels] and 28a.6 [carbon monoxide detectors] of this Chapter. The kennel owner or operator shall assure the mechanical ventilation system is functional, in operation at all times and meets the standards and requirements of this section. The kennel owner or operator shall also assure the auxiliary ventilation system, humidity control system and carbon monoxide detectors are functional, operational and operated or operating in a manner that meets the standards and requirements of this section and of this Chapter"

Portable temperature humidity data loggers can perform this monitoring function for both the kennel owner and the Department. The Department, not the regulated community, would be required to purchase the temperature and humidity monitoring devices to be installed in kennels. This decision took into account comments from the regulated community expressing concerns related to both cost burden and the need for these devices to be uniform. The Department will bear the cost of buying, calibrating, installing and replacing these devices.

The Department has chosen the Omega data logger, at a cost of $149, for this purpose. MA-Line loggers are available for $70 and Amprobe loggers for $135. The Omega was chosen because it has the highest data storage capacity. Since kennels are inspected twice each year, a data storage capacity of over six months is required. These devices are easily installed, run on batteries, and store data electronically and automatically so that they are tamper-proof, The batteries last for three years, and replacement cost would be $2.50 per battery or $277.50 total. The equipment is self-calibrating, and any calibration malfunction can be remedied by the user consulting the manual and or calling the manufacturer's toll-free hotline. The cost of this equipment for 111 commercial kennels would be $16,539. TOTAL COST: $16,539.

Additional Commercial Kennel Inspection Time:
The final-form regulation, although requiring additional measurements and reporting, has significantly reduced the number of measurements needed and the additional inspection time. Air exchanges per hour are no longer required, and the time to spot check CFM velocity will be much less. Reading the data loggers for temperature and humidity levels will take additional time, as will ammonia level testing, but these tasks will not significantly increase the time necessary to inspect each kennel. This will be done with existing staff if possible. It is not possible to assess whether the additional measurements and reporting will require the Department to hire additional wardens to accomplish its duties as a whole. The Department is not planning to do so at this time. TOTAL COST: $0.

Malfunction reporting – Section 28.a.2(g):

The Department's Dog Law Enforcement veterinarian would develop a response protocol for these calls, and these calls would be handled by inspectors during normal working hours - Monday through Friday, 8:00 a.m. to 4:00 p.m. If a call requires Department action after hours, the Dog Law veterinarian would be contacted to respond further. This will be done with existing staff if possible. There is now some overtime devoted to various emergency situations that arise at kennels, and this malfunction reporting requirement is not expected to significantly increase this time. TOTAL COST: $0

Training:
Training to effectuate the final-form regulation would primarily include training on new equipment,

obtaining correct measurements, reviewing information to be provided by the kennel owner, and reporting. This would require one full day of training for up to 14 inspectors at a central location with associated travel costs, at an estimated cost of $2500, assuming trainers can be obtained at no cost to the Department. TOTAL COST: $5000.

Computer Upgrade and Forms:

PA Dogs and PA DogWarden, the computer applications used by the Department's Bureau of Dog Law Enforcement to record kennel inspections, will require a major upgrade to capture the additional data the final-form regulation requires. The form given to kennel owners at the completion of an inspection, prior to receiving the official inspection form by mail, will also have to be revised to reflect some of this data and reprinted in bulk. The computer software upgrade is estimated to cost $20,000; the revision and reprinting of forms is estimated to cost $10,000. TOTAL COST: $30,000.

(20) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	Current FY Year(08-09)	FY +1 Year	FY +2 Year	FY +3 Year	FY +4 Year	FY +5 Year
SAVINGS:	$	$	$	$	$	$
Regulated Community	none	None	none	none	none	none
Local Government	N/A	N/A	N/A	N/A	N/A	N/A
State Government	none	None	none	none	none	none
Total Savings	none	None	none	none	none	none
COSTS:						
Regulated Community	none	$0-51,000 (design & install) + $5420-6438 (op. & maint. w/o service contract reduction) + $50-84 (CO detectors) + $759-949 (optional detection	$5420-6438 (op. & maint. w/o service contract reduction) + $504-1140(bulb replacemt) $9-13 (breakout for filters)	$5420-6438 (op. & maint. w/o service contract reduction) + $504-1140(bulb replacemt) $9-13 (breakout for filters)	$5420-6438 (op. & maint. w/o service contract reduction) + $504-1140(bulb replacemt) $9-13 (breakout for filters)	$5420-6438 (op. & maint. w/o service contract reduction) + $504-1140(bulb replacemt) $9-13 (breakout for filters)

		devices) + $39.00-210.00 (nursing mother flooring)				
Local Government	None	None	None	None	None	None
State Government	None	$64,825	$ 0	$ 0	$277.50 (Omega battery replacemt)	$ 4500 (replace 1/3 of warden equipmt)
Total Costs		$71,093-$123,506	$5933-$7591	$5933-$7591	$6210.50-$7868.50	$10,433-$12,091
REVENUE LOSSES:						
Regulated Community	None	No accurate measure available: economy, costs, marketing all play a role in this determination	No accurate measure available: economy, costs, marketing all play a role in this determination	No accurate measure available: economy, costs, marketing all play a role in this determination	No accurate measure available: economy, costs, marketing all play a role in this determination	No accurate measure available: economy, costs, marketing all play a role in this determination
Local Government	N/A	N/A	N/A	N/A	N/A	N/A
State Government	N/A	N/A	N/A	N/A	N/A	N/A
Total Revenue Losses	none	No accurate measure available	No accurate measure available	No accurate measure available	No accurate measure available	No accurate measure available

(20a) Provide the past three year expenditure history for programs affected by the regulation.

This is a new regulation, based on criteria and authority established through amendments to the current Dog Law. In addition, the regulations do not establish any new "program." Therefore, there is no past expenditure history for any "programs" or other criteria affected by this regulation.

Program	FY -3	FY -2	FY -1	Current FY
N/A – see above.				

(21) Explain how the benefits of the regulation outweigh any cost and adverse effects.

These specific regulations are required by amendments to the Dog Law, effectuated by Act 119 of 2008. The final-form regulation is based on guidelines established by the Canine Health Board, which were promulgated as proposed regulations by the Department. The Canine Health Board is comprised of nine (9) veterinarians, is separate and apart from the Department and was established by legislation to address the very issues that are the subject of the regulation. The regulation effectuates the requirements of the Dog Law, at sections 207(h)(6)(7) and (8), 207(i)(3) and 221(f) (3 P.S. §§ 459-207(h)(6)(7)(8), 459-207(i)(3) and (459-221(f)), to establish ventilation, auxiliary ventilation, humidity, ammonia and lighting standards and address flooring standards. As set forth more fully above and in both the preamble and comment and response document, the final-form regulation is based on comments received during the proposed stage of rulemaking; and consultations with engineers and architects that design and build kennel housing facilities, animal scientists from the Pennsylvania State University, veterinarians from the Canine Health Board and the Department, and literature searches and review of data and scientific studies by the Department. The benefits of the regulation will be that it will carry out the mandates of the Act to establish clear and objective animal husbandry practices related to ventilation, auxiliary ventilation, humidity, ammonia and lighting levels in commercial kennels. The standards will assure the health and welfare of dogs housed in these kennels. The higher and more specific standards for dogs bred, housed and raised in commercial kennels will benefit the kennel owner through more objective standards and healthier dogs and will also benefit consumers who purchase puppies through healthier and better socialized puppies, and will further benefit breeding dogs and other adult dogs housed, often for their entire lives, in commercial kennels. The general public and the legislature of the Commonwealth, through the passage of Act 119 of 2008, demonstrated that there is a compelling public interest in creating better and proper standards for the care of dogs bred, housed and raised in commercial kennels. This regulation effectuates that intent. Although the regulation imposes additional costs on the regulated community, the regulation merely effectuates the intent of the General Assembly and sets acceptable standards, as determined by the Department with the assistance and input of the Canine Health Board, other licensed veterinarians, engineers, architects and animal scientists.

(22) Describe the communications with and input from the public and any advisory council/group in the development and drafting of the regulation. List the specific persons and/or groups who were involved.

The Department met with members of the Canine Health Board (Board) on three occasions to discuss the public comment received regarding ventilation, auxiliary ventilation, humidity, lighting and, to a lesser extent, flooring. Different members of the Board were in attendance at the three meetings, but nearly all attended at least one meeting held by the Department for the sole purpose of discussing the Department's direction on the final-form regulation. The Department also reviewed the transcripts of the six public meetings the Board held in 2008 to develop its Guidelines, using information from those transcripts and contacting several of the persons (engineer Scott Learned, architect Lucinda Schlaffer, and animal scientists Dr. Kenneth Kephart and Dr. Robert Mikesell) previously consulted by the Canine Health Board. All of these experts also made written comments on the proposed regulations, which were reviewed by the Department. Department veterinarians Dr. Craig Shultz and Dr. Danielle Ward were also consulted. The Department discussed engineering and proper ventilation, auxiliary ventilation, humidity and ammonia levels and standards with the engineers and architects. The animal scientist and veterinarians confirmed that the standards were proper and in line with appropriate animal husbandry practices. Board member Dr. Karen Overall supplied the Department with voluminous data related to animal and canine health: from lighting issues, such as excessive light, full spectrum lighting and health effects of lighting; to ventilation, humidity and temperature levels appropriate for canines and other mammals. Dr. Overall supplied the survivability study and the heat stress indexes that helped establish the appropriate humidity levels in kennels. Dr. Ward reviewed much of the literature supplied by Dr. Overall and helped ensure that the proper levels and ranges of lighting, humidity and ventilation were established in the regulation. Dr. Shultz, Dr. Kephart and Dr. Mikesell also answered animal husbandry questions and concerns related to ventilation ranges, humidity levels, heat stress and lighting. Finally, the Department sought out and consulted with Stacy Mason, an American Kennel Club Senior Field Representative, regarding auxiliary ventilation techniques currently used by kennel owners. The Department then confirmed, with the engineers, that those techniques could be utilized to meet the standards established by the final-form regulation.

In addition, the Board and Department sought out persons with varied relevant expertise, named in the attachment to question 14 above, and consulted with them.

The Department also met with members of the Pennsylvania Professional Dog Breeders Association, their lobbyist Walter Peechatka of Versant Strategies and Robert Yarnall, Jr., President and CEO of the American Canine Association (a purebred canine registry) to discuss their concerns related to the regulation, which related to air conditioning standards, 100% fresh air ventilation requirement, prescribed humidity ranges, the requirement that 8% of kennel space be windows, doors or other openings, and lighting levels. The Department asked for information this group believed was relevant and received a cost estimate from a heating and air conditioning company, supplied by Walter Peechatka and based on compliance with the standards of the proposed regulations. The final-form regulation has reduced the cost of compliance. Messrs. Peechatka and Yarnell also made written comments on the proposed regulations, which were reviewed by the Department, and testified at the October 16, 2009 public hearing.

The Department had a telephone conference with Cori Menkin, an attorney employed by the American Society for the Prevention of Cruelty to Animals (ASPCA). The focus of the final-form regulation was

discussed generally and additional information on humidity levels, heat stress and lighting was solicited at the APSCA's discretion. Attorney Menkin also made written comments on the proposed regulations, which were reviewed by the Department and testified at the October 16, 2009 public hearing.

By the time the final-form regulation is submitted, the Department will have also met with the Honorable Mike Brubaker, Chair of the Senate Agriculture & Rural Affairs Committee, and with Thomas Hickey, a public member of the Dog Law Advisory Board, as well as with representatives of the House Agricultural and Rural Affairs Committee.

The proposed regulations were published on September 12, 2009. During the 45-day comment period, the Department received 4661 comments on the proposed regulation: 4300 form letters total from three advocacy groups; 43 letters from Dog Law Advisory Board members and professionals such as veterinarians and engineers; 20 from legislators; 88 from commercial kennel owners and 210 from the general public. The Department reviewed these letters and responded to all issues raised in its comment and response document.

(23) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

Public comments received were reviewed and alternative provisions offered in these comments were considered. Also, the Department held a public hearing as required by the Dog Law on October 16, 2009 and reviewed the transcript of this hearing. Alternative regulatory provisions or changes were considered and accepted or rejected – many were accepted and the final form regulation was substantially changed from the draft regulation. For example, the ventilation standards are now more objective and can be certified by a professional engineer and verified through inspection of CFM ratings, kennel volume and animal density. Some measuring devices and additional inspection protocols that were viewed by some commentators as burdensome and expensive are not now required. The CFM rating per dog is less burdensome since ventilation can be reduced in smaller kennels. Air can now be re-circulated, reducing heating costs, providing energy recovery options and allowing better control of the kennel environment, including humidity levels. Auxiliary ventilation techniques are based on techniques currently used. There is no longer a temperature cap - instead humidity levels must be monitored and reduced as temperatures rise above 85 degrees F. This is less stringent than federal regulations. The humidity ranges/heat index values are measurable, objective and based on scientific data. Kennel owners have a four hour window to reach the required 85 Heat Index. The humidity ranges for temperatures below 85 degrees are the broadest acceptable animal husbandry standards allowed. Engineers and some veterinarians suggested a narrower range, but the Department employed the broadest range that would still account for animal health and welfare. The lighting levels have been reduced and are based on levels suggested by engineers and animal scientists, as well as those utilized by the National Institutes of Health.

The Department, in consultation with the Canine Health Board, engineers and architects that design and build kennel housing facilities, experts in the field, animal scientists, Department veterinarians and the regulated community, focused on finding less burdensome and acceptable alternatives that still meet animal husbandry and welfare standards and are measureable and objective. The final-form regulation establishes ventilation, auxiliary ventilation, humidity, ammonia level and lighting ranges that can be implemented, verified and complied with, at costs ranging from $13-$25 per square foot depending on the sophistication of the systems. The Department, after research and consultation, believes it has selected the least burdensome acceptable standards while ensuring canine welfare as required by the Act.

On December 16, 2006, before Act 119 of 2008 was introduced, the Department had published proposed regulations of broader scope that contained more specific and stringent provisions related to requirements for all licensed kennels - approximately 2700 kennels at that time - rather than the 111 kennels now defined as commercial. Based in part on public comments received from non-commercial kennel owners that the regulations would burden them and would not be consistent with their practices for the keeping and/or breeding of dogs, these regulations were withdrawn in May 2008. The current proposed regulations represent a less burdensome alternative.

(24) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.

This regulation is required by the Dog Law statute and is more specific with regard to ventilation and lighting standards – required by sections 207(h)(7) and (8) of the Dog Law (3 P.S. § 459-207(h)(7) and (8)) - than the comparable federal standards set by the Animal Welfare Act and its attendant regulations at 9 C.F.R., subpart A, sections 3.2 and 3.3. They may therefore be more stringent when it comes to enforcement. However, they will also add clarity with regard to the standards with which the industry must comply. The federal regulations are broad in nature and therefore may allow for enforcement standards that are more or less stringent than the specific standards set by the final-form regulation with regard to ventilation and lighting. However, the Act requires the regulation to establish specific ventilation, auxiliary ventilation, humidity, ammonia and lighting ranges and standards. The final-form regulation is less stringent than federal requirements with regard to temperature requirements, as the Animal Welfare Act regulations actually require a reduction in temperature. USDA regulated kennels may not exceed 85 degrees Fahrenheit for more than 4 hours. The final-form regulation allows commercial kennels to reduce humidity levels in order to achieve compliance and does not establish a temperature threshold.
The flooring standards set by the regulation are a clarification of specific provisions of the Dog Law, specifically 207(i)(3) (3 P.S. § 459-207(i)(3)), which cannot be amended through regulation.

(25) How does this regulation compare with those of other states? How will this affect Pennsylvania's ability to compete with other states?

Most states either have no dog laws regulating kennels, regulate by county, or regulate kennels based on criteria other than number of dogs, so comparisons are not readily made between Pennsylvania and other states. However, the regulation is based on a Dog Law that arguably is the strictest in the country. This regulation, and the specific standards established in the regulation, is required by the Dog Law to be specific with regard to ventilation and lighting standards. It may therefore be more stringent when it comes to enforcement than some other states. The flooring part of the regulations is no more than a clarification of the specific criteria set by the Dog Law itself.

The initial additional cost that may be required for some commercial kennels to be able to comply with the ventilation requirements will raise their costs initially. Commercial kennels that are complying with all of the standards of the federal regulations – especially regarding electrical power and temperature reduction – will have fewer costs of compliance. The more specific lighting requirements will require some commercial kennels to add lighting. The costs to build a kennel from the ground-up and implement all of the new standards, as well as, the utility costs to run such kennels (normally a cost of doing business), have been set forth specifically above.

The commercial kennels did have the opportunity to defray some of the costs associated with meeting the standards imposed by the Act itself. Under section 207(j) of the Dog Law (3 P.S. § 459-207(j)), commercial kennels were allowed to request a waiver of up to three (3) years, and extensions of that waiver if based on the good faith efforts of the kennel owner to comply. There is no such authority to defer compliance with the regulations. However, those kennels receiving waivers of the statutory standards will be able to spread the regulatory and statutory costs of compliance.

The cost of compliance with the regulatory standards may raise the regulated communities overall cost of operation initially, but should not affect the long term competitiveness of the industry.

(26) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

No

(27) Submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

No appreciable additional legal, accounting or consulting procedures are foreseen. The experts consulted by both the Canine Health Board and the Department donated their time to this effort.
The additional regulatory requirements will have to be added to the State dog wardens' kennel inspection forms, to the Bureau's electronic data base and to the paper forms given to kennel owners on site after the inspection. Recordkeeping and paperwork, other than the additional reporting on the inspection forms, will be negligible. State dog wardens will require additional equipment to measure: (1) air flow; (2) humidity; (3) temperature; (4) ammonia levels; and (5) lighting. Inspections will take longer to perform. Wardens will need to be trained to utilize the equipment and review the data collected as required by the regulations.

Costs associated with computer programming changes and recording devices were set forth above.

(28) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

This regulation pertains to commercial kennels, which are defined as: "A kennel that breeds or whelps dogs and: (1) sells or transfers any dog to a dealer or pet shop kennel; or (2) sells or transfers more than 60 dogs per calendar year." (3 P.S. § 459-102).

All commercial kennels, regardless of the nature of the business or group operating the business, must comply with the standards established by Act 119 of 2008 and set forth at sections 207(h) and (i) of the Dog Law (3 P.S. § 459-207(h) and (i)), including the regulations required by sections 207(h)(7)and (8) and 207(i)(3) (3 P.S. §§ 459-207(h)(7)(8) and 207(i)(3)). The statute does not set forth any special exemptions or exceptions - therefore, there are no special provisions or exceptions established by the regulation.

Attachment responsive to Section (14) of IRRC Regulatory Analysis Form for Proposed Regulations titled "Canine Health Board Standards for Commercial Kennel Regulations"

Individuals:

Art Dunham, PhD
Professor and Associate Chair of Biology, specializing in physiological and mathematical ecology; University of Pennsylvania

Elizabeth "Betty" Goldentyer, DVM
Eastern Regional Director USDA, APHIS Animal Care
consulted by Board member Karen Overall with report to group

Jim Hanson, American Institute of Architects
Leadership Energy and Environmental Design
Facilities Services and Construction Management
Architect specializing in animals used in research facilities

Kate Hurley, DVM
Director of UC Davis Korat Shelter Medicine Program
Associate Clinical Professor in Department of Medicine and Epidemiology at UC Davis School of Veterinary Medicine.

C. Scott Learned, PE, President
Design Learned Inc.-- Specialists in Animal Care Facility Engineering
Mechanical Engineer, specializing in ventilation for animal facilities

Rodger Lease, PE, Director of Mechanical Engineering
Paragon Engineering Services
Mechanical engineer, has designed systems for dog kennels and veterinary hospitals

Kenneth Kephart, PhD
Professor of Animal Science, Department of Dairy and Animal Science
The Pennsylvania State University

Kevin McCarthy
Director of Facilities and Engineering for Clinical and Research
Children's Hospital of Philadelphia
Specializing in animals used in research facilities

Bob Mikesell, Jr, PhD
Senior Instructor
Dept. of Dairy and Animal Science, College of Agriculture Sciences, Penn State University

Lila Miller, DVM
Senior Director & Veterinary Advisor, ASPCA

Co-editor, "Shelter Medicine for Veterinarians and Staff"
Adjunct Assit.Professor at the University of Pennsylvania School of Veterinary Medicine
Consulted by Chair with report to group

Shlomo Rosenfeld
Shlomo Rosenfeld & Associates
Mechanical Engineer, specializing in ventilation systems

Lucinda Schlaffer, American Institute of Architects, LEED AP
ARQ Architects
Architect of Animal Care Facilities

Cristina M. Schulingkamp, MSEH
Environmental Engineer
Radon/Indoor Air Program Coordinator, U.S. EPA Region 3
Email communications recopied and distributed to Board

Steve Zawistowski, PhD
Senior Vice President & Science Advisor, ASPCA
Co-editor, "Shelter Medicine for Veterinarians and Staff"

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Amprobe (www.ambrobe.com)

BW Gas Alert Extreme Ammonia Detector (www.allgasdetectors.com)

Extech data logging light meters (www.extech.com)

First Alert & Kidde carbon monoxide detectors (www.resculite.com)

Johnsonite ComforTech Cushioned Rubber Flooring (www.johnsonite.com)

Kenneldeck (http://www.kenneldeck.com)

Kestrel 4200 Pocket Air Flow Tracker (www.kestrelmeters.com)

MA-Line loggers (www.ma-line.com or www.hvacproductratings.com)

Omega data logger (www.omega.com)

RKI Single Toxic Gas (ammonia) Detector SC01 (www.rkiinstruments.com)
www.rkiinstruments.com/pages/sc01.htm?gclid=CLH9--Ldm

SKC Gastec Dosimeter Color Detector Tubes (www.skcinc.com or www.gastectubes.com)

Thermochron iButtons (www.embeddeddatasystems.com)

PROPOSED RULEMAKING

CANINE HEALTH BOARD

[7 PA. CODE CHS. 28 AND 28a]

Canine Health Board Standards for Commercial Kennels

The Canine Health Board (Board), created under section 221 of the Dog Law (3 P. S. § 459-221) (act), through the Department of Agriculture (Department), as set forth under section 221(g) of the act, proposes to create Chapter 28a (relating to canine health board standards for commercial kennels). Section 221(f) of the act charges the Board with the duty to determine standards to provide for the health and well being of dogs in the specific areas of ventilation, lighting and floors in commercial kennels. The Board was required to and did issue temporary guidelines published at 39 Pa.B. 310 (January 17, 2009), which are to be promulgated as regulations by the Department as set forth in section 221(g) of the act. The Board proposes to create specific standards that will protect the health and well being of dogs in commercial kennels (Class C kennels).

Background

The proposed regulations are required under sections 207(h)(6), (7) and (8), (i)(3) and 221 of the act (3 P. S. §§ 459-207(h)(6), (7) and (8), (i)(3) and 459-221). The intent of the regulations is to create ventilation, lighting and additional flooring standards that will protect the health and well being of dogs housed in Class C kennels. These provisions are necessary as the act created the Board and directed it to address these limited issues.

The major features of the proposed regulations are summarized as follows:

Summary of Major Features

Section 28a.1. Definitions.

This section defines various terms utilized in the body of the regulations to further clarify the regulations.

Section 28a.2. Ventilation.

Standards are established to satisfy the directive of section 207(h)(6) and (7) of the act regarding ventilation. Specifically, the proposed regulation addresses poor ventilation conditions that cause health and welfare problems in dogs, by establishing specific ventilation standards that must be met to ensure that these health and welfare problems do not develop. The specifics include that ventilation must be achieved through a mechanical system that will allow for 8—20 air changes an hour, keep consistent moderate humidity, institute auxiliary ventilation when the temperature rises above 85° F, keep ammonia levels and particulate matter at established levels and keep odor minimized as it is a sign of disease and bacteria growth.

Section 28a.3. Lighting.

The proposed regulation delineates lighting standards of both natural and artificial light in accordance with the Board's duty and requirements set forth in section 207(h)(8) of the act.

Section 28a.4. Flooring.

The Board through this proposed regulation has approved solid flooring to be appropriate for use in Class C kennels as well as the flooring already approved in the legislation in accordance with section 207(i)(3) of the act. The proposed regulation establishes the standards to be met if solid flooring is utilized.

Fiscal Impact

Commonwealth

The proposed regulation, once published as final-form regulations, would impose additional fiscal impacts upon the Department's Bureau of Dog Law Enforcement (Bureau). Once the final regulations are in place, additional fiscal impacts will be imposed. Those costs will be paid for entirely from the Dog Law Restricted Account. No general fund money will be used. The Department, in the Regulatory Analysis Form that accompanies the proposed regulation, has set forth an estimate of costs to the Bureau to enact and enforce the new regulatory standards that would be imposed by the final regulations.

Political Subdivisions

The addition of mechanical ventilation, additional artificial or natural lighting and flooring changes may require UCC permit and inspections. This should not specifically increase or decrease costs to local governments, however. Documentation from the Center for Local Government Services, Department of Community and Economic Development (DCED), confirms that municipalities are collecting fees to cover the expenses of Pennsylvania Uniform Construction Code (UCC) administration and enforcement, so that these proposed regulations will not have a fiscal impact on municipalities. Any additional workload generated by the regulation would be offset by the fees collected in association with the specific permit.

The enforcement of the regulations will neither increase nor decrease any costs to local governments. Compliance with the ventilation, lighting and additional flooring standards required of Class C kennels standards will be enforced solely by the Department. Local governments will have no role in enforcement or any other area associated with the regulations in the Commonwealth.

Most municipalities do not have commercial kennels. Nearly all are in 10 of the 67 counties—more than half are in Lancaster County. Commercial kennels represent about 15% of the total number of kennels regulated by the Department.

Private Sector

The regulations once published as final-form regulations will impose additional costs, at least for initial compliance, on the regulated community (Class C kennels). Class C kennels will likely have to make changes (some significant depending on the current state of their kennel operation) to comply with the ventilation and lighting provisions of the regulation. The flooring provisions of the regulation actually expand the type of flooring allowed under the act, in section 207(i)(3) and do not impose any new requirement. The costs to the regulated community will be varied, depending on the size and condition of the existing kennel. The Department has provided an estimate of costs to existing Class C kennels for compliance with the new standards in the Regulatory Analysis Form that accompanies these proposed regulations.

General Public

The regulations, once promulgated as final-form regulations, may raise the cost of purchasing a dog and

therefore may affect purchasers of dogs. However, the general public will benefit from the implementation of the standards in the regulations, as the standards are intended, as were the amendments to the Dog Law that precipitated the regulations, to improve the health and welfare of the dogs and puppies that are sold to the general public. There are no mandatory requirements imposed on the general public by the regulation.

Paperwork Requirements

The Department will not have to develop a large array of new application forms or review procedures, but in some cases may want to amend current forms. The Department will have to develop forms related to ventilation calculations.

Effective Date

The proposed rulemaking will be effective 90 days after publication in the *Pennsylvania Bulletin* as final-form rulemaking.

Sunset Date

There is no sunset date for the regulations. The Department will review the efficacy of this regulations on an ongoing basis.

Public Comment Period

Interested persons are invited to submit written comments regarding the proposed regulations within 45 days following publication in the *Pennsylvania Bulletin*. These comments are public documents that will be posted on the Independent Regulatory Review Commission (IRRC) web site. The comments may be mailed to the Canine Health Board, c/o Department of Agriculture, Bureau of Dog Law Enforcement, 2301 North Cameron Street, Room 102, Harrisburg, PA 17110. The Bureau will forward the comments to the Board.

Regulatory Review

The Department submitted a copy of the proposed regulations to Independent Regulatory Review Act (IRRC) and to the House and Senate Standing Committees (Committees) on Agriculture and Rural Affairs on September 1, 2009, in accordance with section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)). The Department also provided IRRC and the Committees with a detailed Regulatory Analysis Form prepared by the Department in compliance with Executive Order 1996-1, "Regulatory Review and Promulgation." A copy of this material is available to the public upon request.

If IRRC has an objection to any portion of the proposed regulations, it must so notify the Department within 30 days of the close of the public comment period.

The notification must specify the regulatory criteria that have not been met by that portion. The Regulatory Review Act sets forth detailed procedures for review of these objections by the Department, the General Assembly and the Governor prior to the final publication of the proposed regulation.

DENNIS C WOLFF,
Secretary

(*Editor's Note:* Effective _____ (The blank refers to a date 90 days after the publication of the final-form rulemaking in the *Pennsylvania Bulletin*, §§ 28.1—28.3 will be rescinded and deleted form the *Pennsylvania Code*.)

Fiscal Note: 2-170. (1) General Fund; (2) Implementing Year 2009-10 is $94,775; (3) 1st Succeeding Year 2010-11 is $675; 2nd Succeeding Year 2011-12 is $675; 3rd Succeeding Year 2012-13 is $675; 4th Succeeding Year 2013-14 is $675; 5th Succeeding Year 2014-15 is $675; (4) 2008-09 Program—$0; 2007-08 Program—$0; 2006-07 Program—$0; (7) Dog Law Restricted Account; (8) recommends adoption.

Annex A

TITLE 7. DEPARTMENT OF AGRICULTURE
PART II. DOG LAW ENFORCEMENT BUREAU
CHAPTER 28. (Reserved)

§§ 28.1—28.3. (Reserved).

CHAPTER 28a. CANINE HEALTH BOARD STANDARDS FOR COMMERCIAL KENNELS
GENERAL PROVISIONS

Sec.
28a.1. Definitions.
28a.2. Ventilation.
28a.3. Lighting.
28a.4. Flooring.

§ 28a.1. Definitions.

The following words and terms, when used in this chapter have the following meanings, unless the context clearly indicated otherwise.

ANSI/U.L. Standard 2034 and IAS 6-96—Independent laboratory testing standards for carbon monoxide detectors.

Excessive light—Direct, undiffused light, from either the sun or a lighting fixture placed in a manner that the light is shining directly into a primary enclosure of a dog.

Mechanical ventilation—Ventilation produced by operation of a machine. So long as its operation results in compliance with the standards established in this chapter, a mechanical ventilation system may range from very basic, such as an exhaust fan, to more sophisticated systems such as a HVAC system with temperature and humidity controls.

Primary enclosure—

(i) The primary structure that restricts a dog's ability to move in a limited amount of space, such as a room, cage or compartment.

(ii) The term does not include a run described in section 207(i)(6) of the act (3 P. S. § 459-207(i)(6)).

§ 28a.2. Ventilation.

Proper ventilation helps ensure that dogs are healthy and not stressed. Each area of the kennel where dogs are present must utilize a functional, mechanical ventilation system that provides ventilation to satisfy the requirements of this section. The following standards shall be met at all times that a dog is present in the facility:

(1) When the ambient air temperature is 85° F, a form of mechanical ventilation capable of reducing air temperature shall be utilized to reduce air temperature where dogs are present. If the ambient air temperature in any portion of the facility is 86° F or higher, despite mechanical ventilation utilized, dogs may not be present in those portions of the facility. This paragraph does not apply to outdoor exercise areas.

(2) When the temperature is 50—75° F, the relative humidity shall be in the range of 40—60%. The relative humidity shall be measured at standing shoulder level of 10% of the dogs in the kennel, randomly selected from all rooms. Relative humidity may not be measured in a primary enclosure within 30 minutes of the completion of active cleaning of that primary enclosure.

(3) When the temperature is above 75° F, the relative humidity shall be 1%—50%. The relative humidity shall be measured at standing shoulder level of 10% of the dogs in the kennel, randomly selected from all rooms. Relative humidity may not be measured in a primary enclosure within 30 minutes of the completion of active cleaning of that primary enclosure.

(4) Ammonia levels must be less than 10 ppm. The ammonia level shall be measured at shoulder level of dogs housed in the primary enclosure of 10% of the dogs in the kennel at standing shoulder height, randomly selected from all rooms, as well as on the floor of the four corners of the housing facility and at least one location on the floor along each wall of the facility. Ammonia in a primary enclosure may not be measured within 30 minutes of the completion of active cleaning of that primary enclosure.

(5) The means of ventilation employed must ensure that carbon monoxide (CO) levels are maintained below detectable levels in all areas of the kennel. Kennels shall install and maintain CO detectors with the ability to monitor the CO level throughout the entire facility. The detectors must meet or exceed the UL standard 2034 or the IAS 6-96 standard, or its successor standards.

(6) In the event of a mechanical system malfunction, the kennel must have windows, doors, skylights, or other openings in the structure that are operable to maintain ventilation. In the event of a mechanical system malfunction, the kennel shall contact the Bureau of Dog Law and consult on the steps to be taken to protect the health and well being of the dogs and take steps to correct the malfunction immediately.

(7) The means of ventilation employed must ensure that particulate matter (PM) from dander, hair, food, bodily fluids, and other sources in a primary enclosure are below 10 milligrams per meter cubed. The PM shall be measured at shoulder level of dogs housed in the primary enclosure of 10% of the dogs in the kennel. The PM may not be measured within 30 minutes of the completion of active cleaning of that primary enclosure.

(8) The following requirements apply to air changes:

(i) The kennel shall provide between 8—20 air changes of 100% fresh air per hour in each room of the facility that houses dogs.

(A) The air changes shall be calculated using the following information supplied by the kennel to the Department:

(I) The volume of the facility.

(II) The linear dimensions of the facility.

(III) The number of primary enclosures.

(IV) The cubic feet occupied by each primary enclosure.

(V) The dimensions of all intake or exhaust vents of any fans as well as their capacity, or other system specifications.

(B) The information shall be submitted to the Department by _____ *(Editor's Note:* The blank refers to a date after the regulations are published as final-form rulemaking in the *Pennsylvania Bulletin*.) and within 90 days of any change to the volume of the facility, the linear dimensions of the facility, the number of primary enclosures, or the dimensions of the opening and exhaust vents of any fans. The information submitted to the Department shall be kept as part of the kennel's records.

(ii) Air velocity measurements will be taken at all intake vents or exhaust vents and at shoulder level of dogs housed in the primary enclosure for 10% of the dogs in the kennel randomly selected from each room.

(iii) The kennel owner shall be in violation if one or more of the following apply:

(A) The computed air change rate based on the data submitted under subparagraph (i) is not 8—20 air changes per hour.

(B) If the air change rate as measured at the vents is not 8—20 air changes per hour, and there is a simultaneous noncompliance with any of the requirements in paragraphs (1)—(7), (9)—(12) or this paragraph.

(C) If the measured velocity reading at standing dog shoulder height does not result in a computation of 8—20 air changes in the primary enclosure and the air change in subparagraph (i) is satisfactory violation will not be issued unless there is a simultaneous noncompliance with any of the requirements in paragraphs (1)—(7), (9)—(12) or this paragraph.

(iv) If a computation or measurement under subparagraph (iii) is not satisfactory, the kennel owner shall take the necessary steps to meet the requirements.

(v) The Department may hire or consult with an engineer to recommend improvements be made to kennels to meet compliance with this paragraph.

(9) Dogs may not exhibit conditions or signs of illness or stress associated with poor ventilation, including the following:

(i) Excessive panting.

(ii) Elevated body temperature.

(iii) Active avoidance of areas of the kennel.

(iv) Shivering.

(v) Huddling of dogs 12 weeks of age or older.

(vi) Mucous dripping from the nose of a dog.

(vii) Redness or crusting of eyes or nose.

(viii) Runny eyes.

(ix) Blindness.

(x) Coughing or sneezing.

(xi) Moist areas of hair.

(xii) Diarrhea.

(xiii) Bloody diarrhea.

(xiv) Vomiting.

(xv) Listlessness.

(xvi) Presence of blood.

(xvii) Death.

(10) The air in the facility may not have excessive dog odor, other noxious odors, stale air, moisture condensation on surfaces, or lack of air flow.

(11) When employing mechanical means of ventilation and recirculating air, the air shall be filtered with small particle, nonozone producing air filters.

(12) All ventilation systems must comply with the latest edition of applicable codes.

§ 28a.3. Lighting.

Natural lighting is important to the development of dogs. Each kennel shall have a mix of natural and artificial light, provided in the following manners:

(1) *Natural light.*

(i) Each dog shall have exposure to light from natural sources passing through external windows, external sky lights or other external openings.

(ii) The minimum combined total of net glazed area of external windows, external sky lights or area of other external openings through which natural light passes within each room where dogs are housed may not be less than 8% of the floor space. All external windows, external skylights and external openings must be transparent and unobstructed to satisfy this section.

(iii) Dogs shall be protected from excessive light.

(iv) Outdoor exercise areas shall provide an area of shade large enough to protect all the dogs utilizing the exercise area from the direct rays of the sun.

(v) If a kennel is granted a waiver for indoor exercise under section 207(i)(6)(x)(B) of the act (3 P. S. § 459-207(i)(6)(x)(B)), the primary enclosure must be configured to allow natural light to come into each primary enclosure.

(vi) If a kennel is granted a waiver for indoor exercise under section 207(i)(6)(x)(B) of the act (3 P. S. § 459-207(i)(6)(x)(B)), full spectrum lighting shall be provided for the entirety of the daytime cycles in areas that house dogs.

(2) *Artificial light.*

(i) Artificial, indoor, daytime lighting must provide full spectrum lighting between 50—80 foot candles at standing shoulder level of the dogs for daytime lighting.

(ii) Night time artificial lighting must be 1—5 foot candles at standing shoulder level of the dogs of lighting.

(iii) Artificial lighting provided must approximately coincide with the natural diurnal cycle.

(iv) Lighting sources may not have a visible flicker.

(v) Light sources, whether their primary purpose is to provide heat or light, shall be provided in a manner that prevents dogs from touching a light, fixture, bulb, switch or cord.

(3) *Applicable codes.* All lighting must comply with the latest edition of applicable codes.

§ 28a.4. Flooring.

Proper flooring is essential for normal behavior and proper orthopedic development of the dogs. For dogs over 12 weeks of age, the flooring must meet the standards in the act or as set forth as follows:

(1) In addition to the flooring already approved in section 207(i)(3) of the act (3 P. S. § 459-207(i)(3)), solid flooring is approved for use.

(2) Solid flooring must be sloped to a drain that is free of debris and in good repair.

(3) Drain covers shall be provided and shall be securely fixed and made of a noncorrosive substance.

(4) Flooring may not be metal nor any other material with high thermal conductance. This does not exclude the use of radiant heat flooring, or a flooring system to cool, provided that a dog has an area to escape the heat if it gets too warm or too cold.

(5) All floors and drains must comply with the latest edition of applicable codes.

(6) The surface of the flooring must provide the dogs with good footing. Examples include sealed concrete, painted concrete, epoxy flooring, sealed wood, textured and sealed tile.

(7) Flooring shall be cleaned in accordance with section 207(h)(14) of the act and may be subject to microbial assessment.

(8) Flooring may not be made of or coated with materials that are toxic to dogs.

[Pa.B. Doc. No. 09-1682. Filed for public inspection September 11, 2009, 9:00 a.m.]

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CHS. 121 AND 129]

Control of NOx Emissions from Glass Melting Furnaces

The Department of Environmental Protection (Department) is soliciting comments on changes it recommends be made to the glass melting furnaces proposed rulemaking published at 38 Pa.B. 1831 (April 19, 2008).

The draft final-form rulemaking establishes in 25 Pa. Code Chapter 129 (relating to standards for sources) NOx emission control requirements, emission limit standards, and emission limitations for glass melting furnaces and related administrative requirements for glass melting furnaces. The draft final-form rulemaking contains definitions of terms in Chapter 121 (relating to general provisions) including "blown glass," "container glass," "fiberglass," "flat glass," "furnace rebuild," "glass melting furnace," "pressed glass," "pull rate," "rebricking," "shutdown" and "start-up." Compliance with the NOx emission limits may be demonstrated on a furnace by furnace basis, facility-wide emissions averaging or by system-wide emissions averaging among glass melting furnaces under common control of the same owner or operator in this Commonwealth. This draft final-form rulemaking to reduce NOx emissions from glass melting furnaces assures that the Commonwealth will continue to experience improved ozone, fine particulate and visibility benefits. NOx is a precursor to ozone and fine particulates, which in turn facilitate the formation of haze. Adoption of NOx emission limits for glass melting furnaces is part of the Commonwealth's strategy, in concert with other Ozone Transport Region (OTR) jurisdictions, to reduce transport of ozone to attain and maintain the health-based 8-hour ozone National Ambient Air Quality Standard (NAAQS). In addition, the adoption of this measure will improve public health and social well being by reducing emissions of NOx and the subsequent formation of ozone, fine particulates and haze and is reasonably necessary to attain and maintain the health-based ozone and fine particulate NAAQS. To the extent that this regulation is more stringent than any corresponding Federal requirements, it is reasonably necessary to achieve and maintain the health-based 8-hour ozone and the fine particulate NAAQS. This draft final-form rulemaking, if adopted as a final-form regulation, will also be submitted to the Environmental Protection Agency (EPA) as a revision to the Pennsylvania State Implementation Plan (SIP).

CDL-1

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TITLE Secretary

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DATE OF APPROVAL

(Deputy General Counsel)
~~(Chief Counsel - Independent Agency)~~
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NOTICE OF FINAL RULEMAKING

Department of Agriculture
7 Pa. Code Chapter 28a.
Commercial Kennel Canine Health Regulation

RULES AND REGULATIONS

Title 7--AGRICULTURE

DEPARTMENT OF AGRICULTURE

[7 PA. CODE CH 28a]

Commercial Kennel Canine Health Regulation

The Pennsylvania Department of Agriculture (Department) hereby creates Chapter 28a (relating to conditions for canine health in commercial kennels) to read as set forth in Annex A.

Statutory Authority

The Department establishes and adopts this final-form rulemaking under the Pennsylvania Dog Law (Act)(3 P.S. § 459-101 *et seq.*) and under the specific authority established by sections 221(g) and 902 of the Act (3 P.S. §§ 459-221(g) and 459-902).

The Canine Health Board (Board), created under section 221 of the Dog Law (3 P.S. § 459-221), issued temporary guidelines which were published at 39 *Pennsylvania Bulletin* 310, on January 17, 2009. As required by section 221(g) of the Act (3 P.S. § 459-221(g), those temporary guidelines were published by the Department as proposed regulations at 39 *Pennsylvania Bulletin* 5315, on September 12, 2009.

More specifically, section 221(f) of the Act (3 P.S. § 459-221(f)), charges the Board and the Department with the duty to determine standards and promulgate regulations to provide for the health and well being of dogs in the specific areas of ventilation, auxiliary ventilation, humidity and ammonia levels, lighting and flooring in commercial kennels, as set forth at sections 207(h)(6), (7) and (8), (i)(3) and 221(f) of the Act (3 P.S. §§ 459-207(h)(6), (7) and (8), (i)(3) and 459-221(f)).

The Department, under its general authority at section 902 of the Act and under the specific duty and authority established at section 221(g) of the Act, hereby creates Chapter 28a (relating to canine health standards for commercial kennels) of Title 7 of the *Pennsylvania Code*.

Purpose of the Final-Form Rulemaking

The final-form rulemaking is required to effectuate the edicts of the Act and the duty of the Board and the Department to determine and establish standards, based on animal husbandry practices, to provide for the welfare of dogs under sections 207(h)(7), 207(h)(8) and 207(i)(3) of the Dog Law (3 P.S. §§ 459-207(h)(7) and (8), (i)(3) and 459-

221(f)). The final-form rulemaking establishes standards for ventilation, auxiliary ventilation, humidity and ammonia levels, delineates lighting requirements for either natural or artificial lighting or both, requires carbon monoxide detectors in some commercial kennels and sets forth the flooring standards required by the Act, as well as, establishing parameters for additional flooring options. The standards are based on consultation, input and verification from experts such as engineers that design and build kennel housing facilities, architects, animal scientists from the Pennsylvania State University and veterinarians from the Board and the Department. The Department also consulted the minutes of the Canine Health Board meetings, did its own research and relied upon animal, including canine, health studies. In addition, the Department met or had discussions with a group of kennel owners from the Pennsylvania Professional Dog Breeders Association and their lobbyist, the President and CEO of the American Canine Association and a senior field representative from the American Kennel Club.

Comment and Response

The final comment and response document is over 400 pages in length. Therefore, the Department has set the comment and response document forth as a separate document, as it would have been impossible to include in the preamble to this final-form regulation. The comment and response document is posted on the Department's website and will be sent to any person upon written request.

Summary of Overall Changes

The major features of and changes to the final-form regulation are summarized as follows:

The Department agrees that the Canine Health Board (Board), crafted guidelines, promulgated as proposed regulations by the Department with the intent to insure the health and welfare of dogs housed in commercial kennels, including that the kennels remained "sufficiently ventilated at all times when dogs are present", to "determine auxiliary ventilation to be provided" if the air temperature reaches or exceeds 85 degrees, provide for proper humidity and ammonia levels, delineate proper lighting ranges and establish dog health criteria for alternative flooring options. However, in the final-form regulation the Department has made changes to the format and substance of the standards established by the Board.

First, the Department has reorganized the final-form regulation by breaking it into sections that reflect specific areas of authority granted by the Act, namely ventilation, auxiliary ventilation, humidity levels, ammonia levels, lighting and flooring. This was done to provide more clarity to the reviewing entities and to provide clarity to the regulated community.

Second, the Department made substantive changes to the ventilation provisions of the final-form regulation. Although based on the work done by the Board, the measurement standards have been amended. In its consultations with engineers and architects – all of whom design kennel facilities – those experts confirmed that mechanical ventilation systems were necessary to assure the proper ventilation levels in kennel facilities. The

proper levels were determined by the research done by the Board and additional research done by the Department in drafting the final-form regulation. The research included additional discussions with engineers and architects that design and build kennel facilities, consultations with animal scientists, a meeting with an AKC senior field representative and information and input from Board and Department veterinarians.

The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Air changes per hour have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsections (b) and (f) of section 28a.2 of the final form regulation.

The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services. Additional, standards related to circulation of the air, minimum fresh air rates and filtration have been established in subsection (f) of the final-form regulation. The provisions of subsection (b) of the final-form regulation now entails information the Department requires of the kennel owner. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established in section 28a.2 and the auxiliary ventilation, humidity and ammonia level provisions established in sections 28a.3, 28a.4 and 28a.5 of the final-form regulation.

Because of the restructuring of the final-form regulation, many of the provisions of section 28a.2 of the proposed regulations have been moved, modified or deleted from the final-form regulation.

In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. Although 100% fresh air circulation is not prohibited by the final-form regulation, the change to the regulation was made after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive and difficult to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The ventilation standards now established in the final-form regulation are more easily measured and verified, continued to account for the health and safety of dogs housed in commercial kennels and require or allow kennel owners to increase or reduce the air circulation in a kennel based on the number of dogs housed in the kennel facility.

There are two general reasons behind these changes. First, CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification from an engineer or architect that installed or inspected the equipment and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will require and allow kennel owners to design their ventilation systems to have the total capacity required to assure circulation of the proper amount of air required by the regulations for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only

that capacity necessary to achieve the required circulation for the number of dogs housed or kept in the kennel facility. In other words, the system will be easier to design, ventilation rates will be more specific and easier to verify and the system will be less costly to operate. While still requiring the system to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility, it will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. This not only lowers operation costs, but sets a proper standard to assure dogs are not subjected to a circulation standard that is too strong or unable to be enforced. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs.

A one time certification, by a professional engineer, of the ventilation, auxiliary ventilation and humidity system to be utilized is required by the final-form regulation. This requirement allows the kennel owner and the Department to assure the required standards can and will be met by the operating system and does not require or rely upon measurements or assessments made by non-engineers such as the kennel owner or State dog wardens.

The illness standards established under the ventilation provisions of the final-form regulation have also been changed from the proposed regulations. Section 28a.2(9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress has been modified in the final-form regulations. The corresponding provisions of the final-form regulation are found at subsection 28a.2(h).

The Department discussed these issues with animal scientists from the Pennsylvania State University, as well as, with Department and Board veterinarians. The number and type of conditions in dogs that may denote poor ventilation has been reduced and are consistent with the suggestions of the experts consulted. In addition, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values and ammonia levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. However, the mere existence of the signs of stress or illness does not in and of itself constitute a violation of these regulations.

The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity, temperature levels or ammonia levels that are too high, as well as, insufficient air circulation or auxiliary ventilation. Paragraph (2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Third, the final-form regulation no longer requires the reduction of ambient temperature levels in commercial kennels. Although the implementation and use of temperature reducing air conditioning systems is still allowed and preferable, the

Department, after viewing the comments submitted by the Office of Attorney General, Independent Regulatory Review Commission and Legislators related to requiring ambient air temperature reduction when kennel housing facilities exceeded 85 degrees Fahrenheit, decided to utilize the absolute authority set forth in the statute to regulate humidity levels and thereby assure a proper environment. The authority to regulate humidity levels is absolute. The humidity levels established in the final-form regulation are based on animal husbandry and scientific information related to dog survivability and safety and heat index levels. The rationale for the approach and support for the levels established in the final-form regulation is set forth in previous answers to comments and hereafter.

With no temperature control, the Department sought to ascertain the proper humidity levels and auxiliary ventilations standards that would assure the health, safety and welfare of dogs confined to kennels when temperatures rise above 85 degrees Fahrenheit. Kennel owners and others have asserted in their comments that their kennel buildings can be made to "feel cooler" through the use of additional air circulation/ventilation or the mere increase of fan speed and the amount of air being pulled through the kennel building. However, science does not support such a comment or conclusion.

The Department, with the assistance of engineers and Department and Board veterinarians and research provided by Dr. Karen Overall of the Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle and equine cool their internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs and swine do not have sweat glands over a majority of their body and do not perspire. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise.

In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index charts, which are attached to the comment and response document, all evidence that value should be set at a maximum heat index of 85 (85 HI).

Finally the Department with the assistance of Board member Dr. Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached to the comment and response document, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by

twenty percent (20%) to assure the welfare and safety of all dogs. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI). The maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values, is 95-98 HI. However, this is tempered by the Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by in 1998 by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine and first published in "Recognizing and Reporting Animal Abuse: A Veterinarian's Guide." This widely-used scale, one of several canine assessment tools focused on consequences for the dog, indicates that, even with water and shade available as in a commercial kennel setting, a potentially unsafe situation develops above a 90 degree F temperature, especially for brachycephalic, obese or elderly dogs, as well as dogs under 6 months of age. Although this regulation is based on heat index, regulates relative humidity rather than temperature, and a temperature of over 90 degrees F would be permitted if combined with a relative humidity that would result in a HI of no more than 90, the inclusion of the TACC Weather Safety Scale as a basis for the regulation emphasizes that the standard being set goes beyond survivability to minimize adverse heat-related consequences for dogs in commercial kennels. The survivability study and the TACC Weather Safety Scale are generally acknowledged to be the only two scholarly resources that give specific heat-related safety guidance applicable to canines.

The Department will be able to monitor and regulate this requirement because of a change to the regulation that requires the Department to provide and install the temperature and humidity recording devices. This takes away the cost to the kennel owner of purchasing such devices, allows the kennel owner to constantly and consistently monitor temperature and humidity levels and removes any inconsistency in the devices utilized to take such readings or the areas of the kennel measured.

In conclusion, the Department's research, consultations and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for temperatures above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

Fourth, the Department reassessed the auxiliary ventilation standards that must be utilized when the temperature within the commercial kennel rises above 85 degrees Fahrenheit. The Department after consultation with engineers and an AKC senior field representative set forth auxiliary ventilation options that are currently being utilized by

kennel owners and that are approved and verified by the engineers as being attainable and, if properly utilized in conjunction with humidity standards, providing appropriate ventilation to address dog health issues when temperatures rise above 85 degrees Fahrenheit.

Fifth, with regard to lighting, the Department, with the assistance of members of the Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species.

The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also between 40-60 footcandles. This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues.

The nighttime lighting provision has been removed from the final-form regulation. However, for clarity purposes the nighttime lighting standard was consistent with studies done that show dogs need a minimum level of nighttime lighting (1-5 footcandles) to allow a natural startle response. The nighttime lighting standard was for the welfare of the dogs. Kennel owners can turn on or add additional light at nighttime if there is a need for them to be in the kennel.

The final-form regulation allows lighting standards to be achieved through the use of either natural or artificial light or both and sets both general and specific standards for each type of lighting. The final-form regulation does not require that a certain area of the kennel facility be devoted to windows or skylights to allow natural light, and utilizes the language of the Animal Welfare Act regulations with regard to the type of coverings for windows and skylights. In addition, the final-form regulation reiterates the language of the Act with regard to excessive light and uniformity of diffusion of such light (which is also consistent with the Federal code of regulations) The Department has also defined excessive light, based on literature provided by a Board veterinarian.

Finally, based on clarity comments set forth by the Independent Regulatory Review Commission, the Department reformatted the flooring section of the final-form regulation. The flooring section now begins by reiterating the standards established by the Act. The last subsection of the flooring section then addresses alternative flooring.

The Board has the authority, but is under no obligation, to address individual

alternative flooring requests or types under section 207(i)(3)(iii) of the Dog Law. That provision clearly states the Board "may" address. The Board is under no obligation to address such requests, either through the regulations or through another avenue such as a public meeting or hearing of the Board (3 P.S. § 459-207(i)(3)(iii)). If the Board chooses to address a particular type of flooring, the Board can determine based on its expertise whether or not that particular type of flooring meets the standards of the Act, set forth at section 207(i)(3)(i) and the animal husbandry and welfare requirements established at section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 221(f)).

To the extent the Board, and hence the Department, did address alternative flooring in the final-form regulation, it did so by establishing requirements that are based on animal husbandry, their expertise as veterinarians and input received during their deliberations on the Guidelines. The Department included the standards set by the Board in the initial guidelines and the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – in the final-form regulations, but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department veterinarians and veterinarians from the Board, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's State dog wardens and veterinarian have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(d)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices. This should add some clarity to the requirements for alternative flooring.

In another attempt to add clarity the Department added subsection 28a.8(e) to the final form regulation. The Dog Law, at section 207(i)(3), creates flooring standards for dogs over 12 weeks of age (3 P.S. § 459-207(i)(3)). However, dogs under 12 weeks of age are not subject to those same requirements and may be housed on flooring meeting the standards of section 207(h)(2)(x) of the Dog Law and the regulations at section 21.24(d) (3 P.S. § 459-207(h)(2)(x)) and (7 Pa.Code § 21.24(d)). These provisions do not account for or contemplate nursing mothers housed with their puppies or for dams or foster dams housed with dogs under 12 weeks of age. Therefore, because of the confusion related to the absence of specific direction in the Act, the Department established a standard for this specific situation and added language to the final form regulation delineating that standard. The final-form regulation, at section 28a.8(e), requires that at least fifty percent (50%) of the flooring of a primary enclosure that contains a nursing mother and her litter or that contains a dam or foster dam and puppies under 12 weeks of age must meet the flooring standards for the adult dog (i.e. those contained at section 207(i)(3) of the Act).

Summary of Major Features

Section 28a.1. Definitions.

This section defines various terms utilized in the body of the regulations to further clarify the regulations. The Department has made significant amendments to the

substantive provisions of the final-form regulation, based on comments received after publication of the proposed rulemaking and on research and input from experts (as set forth above) and industry members. As a result the Department has modified the definition of "Excessive light" and has added definitions to the final-form regulation.

"Excessive light" was modified as a result of comments from the Independent Regulatory Review Commission and others regarding clarity. The term "excessive light" and the prohibition against excessive light is actually contained in section 207(h)(8) of the Act (3 P.S. § 459-207(h)(8)). In addition, the prohibition against excessive light is also contained in the Animal Welfare Act regulations at sections 3.2(c) and 3.3(c) (9 CFR §§ 3.2(c) and 3.3(c)). The regulations merely restate the requirements of the Act with regard to excessive light. However, since the definition was questioned, the Department, with the assistance of Dr. Karen Overall of the Board researched what level of lighting would be considered excessive for canines. The result of that research is the definition set forth in the final-form regulation, which essentially states that direct, undiffused light of an intensity that is twelve footcandles (12fc) or more greater than the maximum footcandles of light (that the dog is raised in) required by the regulations would be considered harmful and therefore "excessive" if it is shining directly into the primary enclosure of a dog.

The following definitions were added and for the following reasons:

"Circulation or circulated air" – This definitions was added to provide clarity to the ventilation provisions of the final-form regulation. As set forth in the general synopsis of changes above, the Department made significant changes to the ventilation requirements of the proposed regulations. The changes were based on input from the engineers consulted. Those engineers also suggested adding this definition and provided and approved the language for the definition.

"Commercial kennel" – The definition from the Act was added just to allow more clarity for both the regulated community and the general public.

"Cubic Feet per Minute or CFM" – As set forth more specifically in the comment and response document, based on input from engineers and animal scientists, the Department changed the ventilation measurement standard in the final-form regulation, from "air exchanges per hour" to cubic feet per minute per dog. In general, the change allows for a more accurate, objective and consistent measurement that is easier to comply with and verify. It also provides economic advantages with regard to the ability to tailor the ventilation system and the rate of air circulation to the number of dogs housed in the commercial kennel facility.

"Diurnal light cycle" – The lighting provisions of the final-form regulation – consistent with the requirement set forth in section 207(h)(8) of the Act – mandates that dogs receive a diurnal light cycle. The proposed regulation did not define what that entailed and commentators requested that the Department more fully define or provide substantive language to provide clarity with regard to what pattern of lighting would be considered a diurnal light cycle. The Department decided to define the phrase. The

Department consulted animal scientists and the Board and Department veterinarians to come up with an appropriate definition. The definition is consistent with normal animal husbandry practices and definitions.

"Fresh Air Ventilation" – As with the definition of "circulation", this definition was added to provide clarity to the ventilation provisions of the final-form regulation. The term was also added because of comment related to the phrase "100% fresh air", which appeared in the proposed regulation. The term now helps to define what percent of the ventilated and circulated air in a kennel facility must be "fresh air ventilation", which is at least 30 CFM of the total ventilated air. The definition was provided and approved by the engineers consulted.

"Full-spectrum lighting" - Numerous commentators suggested the Department should define full-spectrum lighting in the final-form regulation. Full-spectrum lighting is required for commercial kennels that utilize "artificial" light to illuminate their kennel facility. The Department consulted dictionaries and the internet, as spoke with the engineers consulted in establishing the definition of "full-spectrum lighting." Full-spectrum lighting has been available since the 1930's.

"Heat Index (HI) or Temperature and Humidity Index (THI)" – For reasons set forth more fully and specifically in the comment and response document that accompanies the final-form regulation, the final-form regulation does not require a reduction in ambient temperatures inside a commercial kennel facility. Instead the final-form regulation focuses on appropriate humidity levels. Humidity and temperature levels go hand-in-hand in determining the heat index, which is the human-perceived equivalent temperature. High heat and humidity are dangerous to human and animal health. The Department has utilized heat index charts and studies to determine the proper heat index for dogs. The definition is taken from the definition established by the United States National Weather Service.

"Professional engineer" – The definition was taken directly from the Amusement Ride regulations – section 139.2. This definition was inserted to account for and give clarity to a new provision - (28a.2(b)(1)) - that was added to the final-form regulation. The new provision requires certification by a professional engineer that the ventilation system in the commercial kennel meets all the standards and requirements of the regulation. This is a one time requirement and alleviates the necessity for a kennel owner to purchase measurement equipment or attempt to ascertain compliance on his own or to rely on measurements, readings and calculations performed by the Department.

"Ventilation or ventilating" – The engineers consulted suggested the Department define the terms ventilation or ventilating to provide clarity. The Department agreed and utilized a definition supplied by one and approved both engineers.

Section 28a.2. Ventilation.

As set forth above, generally the provisions of the ventilation section of the proposed regulation have been significantly amended, including changing the measurement of

ventilation and air circulation to cubic feet per minute per dog, and provisions related to auxiliary ventilation, humidity and ammonia standards have been reestablished under there own section headings.

The following is information on the specific changes made to the ventilation provisions of the proposed regulation in the final form regulation:

(1) The first sentence of the ventilation provision is not a regulatory standard and has been removed from the final-form regulation.

(2) Section 28a.2(1) regarding the reduction of temperature and removal of dogs once the kennel temperature reaches 85 degrees has been removed from the final-form regulation. As set forth above, the reviewing entities - Office of Attorney General, Agricultural and Rural Affairs Committees of the General Assembly and the Independent Regulatory Review Commission – all questioned the authority of the Department to require the ambient temperature be reduced to or maintained at 85 degrees Fahrenheit in commercial kennels. While temperature reduction is not prohibited and is preferred, the Department utilized its absolute authority and duty to regulate humidity in order to account for the health and welfare of dogs in commercial kennels, once the temperature rises above 85 degrees Fahrenheit.

(3) Sections 28a.2(2) and (3) of the proposed regulations, related to humidity standards, has been deleted. The Department has reestablished humidity standards under section 28a.4 of the final-form regulation. The humidity provisions in the final-form regulation establish separate and distinct humidity levels for when temperatures in the commercial kennel are 85 degrees Fahrenheit and below and for when the temperature in the kennel facility rises above 85 degrees Fahrenheit. The humidity range for temperatures below 85 degrees Fahrenheit has been broadened to 30%-70% and the humidity ranges acceptable when temperatures rise above 85 degrees Fahrenheit are very specific and based on heat index values. The ranges established are based on consultations with engineers, architects, animal scientists and veterinarians, as well as, national weather service information, heat index standards for animals such as swine, poultry, cattle and humans, a survivability study conducted on dogs and the TACC Weather Safety Scale for dogs. The ranges are therefore based on animal science and evidence of heat stress and are consistent with the ranges engineers suggest are utilized in their designed facilities or are proper and attainable in commercial kennels.

(4) Section 28a.2(4) of the proposed regulation related to ammonia levels has been deleted and reestablished at section 28a.5 of the final-form regulation. The ammonia level standards, after consultation and discussions with engineers, architects, animal scientists and veterinarians, as well as, research cited or done by those experts, denoted that 10 parts per million was too low to effectively measure and monitor. The consensus of the experts consulted was that a level of 15 parts per million or lower was acceptable and proper for animal welfare. All agreed that a level of 20 parts per million still caused eye and respiration problems in animals with long term exposure to such levels.

(5) Section 28a.2(5) of the proposed regulations, related to proper levels of carbon monoxide, has been deleted from the final-form regulation. The final-form regulation reestablishes provisions related to carbon monoxide, since animal scientists and veterinarians agree that the colorless and odorless gas can be harmful or deadly to the dogs. However, the new provisions, established at section 28a.6 of the final-form regulation, does not set a carbon monoxide level, but instead requires carbon monoxide

monitors to be installed in any kennel that utilizes a carbon based heating, cooling or ventilating system. This provides the kennel owner with a warning that the dogs and humans in the facility are in danger from high carbon monoxide levels. The expulsion of carbon monoxide and other gases are part of ventilation and regulated under that authority.

(6) Section 28a.2(6) of the proposed regulations related to a malfunction of the mechanical ventilation system has been amended in the final-form regulation – now at 28a.2(g). The kennel owner no longer has to consult with the Department on the steps to be taken and the Department will no longer be required to retain an engineer. Instead, under the new provisions 28a.2(g)(1-4), the kennel owner must immediately take steps to correct the malfunction or failure and if temperatures rise above 85 degrees Fahrenheit, notify the kennel's veterinarian within 4 hours and the Department, after 24 hours, there has been a malfunction. The provision sets forth the time period within which notification must be given and now takes weekends, nights and holidays into consideration. The kennel owner must contact the kennel veterinarian to consult on any dog health issues and again notify the Department when the malfunction has been repaired.

(7) Section 28a.2(7)(related to particulate matter) of the proposed regulation has been deleted from the final-form regulation.

(8) Section 28a.2(8)(related to air changes) of the proposed regulation has been removed from the final-form regulation. The provisions that were contained in that section of the regulation have been replaced in the following manner:

a. The provisions of 28a.2(8)(i) related to air exchanges per hour have been replaced in the final-form regulation with a cubic feet per minute (CFM) per dog standard (see 28a.2(f)(2) and (4) of the final-form regulation). The rate of 100 CFM per dog per minute is standard practice according to the engineers consulted and comports with the information and suggestions of the animal scientists consulted by the Department. In addition, the 100% fresh air requirement has been deleted from the final-form regulation. Now, a minimum of 30 CFM per dog per minute must be fresh air, the rest may be re-circulated. This standard also comports with the standards suggested by the engineers and animal scientists. As set forth more fully in the comment and response document, the change to CFM was made after consultations with engineers and animal scientists and provides for a more objective measurement standard. It will also decrease the cost of compliance and monitoring to both the regulated community and the Department.

b. The provisions of 28a.2(8)(i), (i)(A) and (ii) related to calculating air exchanges per hour have been replaced in the final-form regulation. The final-form regulation now measures ventilation in CFM per dog and certification of the systems by a professional engineer (28a.2(b) and (f)). This includes information regarding the volume and dimensions of the facility and the total number of dogs to be housed in the facility (28a.2(b)). In addition, the Department may take periodic measurements and readings (28a.2(c)(2)).

c. The provisions of 28a.(8)(iii) related to violations have been deleted. The kennel owner will be in violation of any specific section or subsection of the final-form regulation with which he does not comply. The related provisions of 28a.(8)(iv) have also been deleted.

d. Subsection 28a.(8)(v) requiring the Department to hire an engineer if the kennel owner violates a ventilation provision, has been removed from the final-form

regulation. The kennel owner, not the Department is responsible for taking steps to attain and assure compliance and the Department has no authority to require the kennel owner to allow a person who is not an employ of the Department into the kennel.

(9) Section 28a.2(9) of the proposed regulation (related to signs of illness and stress in dogs) has been amended in the final-form regulation (28a.2(h) (related to illness and stress). The number and type of conditions in dogs that may denote poor ventilation has been reduced. In addition, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values and ammonia levels in the area or room of the kennel where those signs exist. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness however, does not in and of itself constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Paragraph (2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

(10) Section 28a.2(10) of the proposed regulation (related to dog odor, stale air, moisture and air flow have been deleted from the final-form regulation. The final-form regulation establishes specific ventilation and ammonia and humidity control mechanisms which if implemented properly will control for all of these factors.

(11) Section 28a.2(11) of the proposed regulation (related to filtering the air with small particle, non-ozone producing air filters has been replaced in the final-form regulation – at section 28a.2(f)(5) – with filtration standards that merely require a common MERV rated filter that can be acquired at any home building supply store. The minimum MERV value is 8. This is standard practice in kennel facilities designed by the engineers consulted.

(12) Section 28a.2(12) of the proposed regulation (related to applicable codes) has been deleted from the final-form regulation. As set forth more fully in the comment and response document, the Department has no authority to regulate the applicable federal, state or local building codes.

(13) New sections of the final-form regulation and reasons for those provisions:

a. Section 28a.2(a) of the final-form regulation amends the introductory language of section 28a.2 of the proposed regulation. The new language still requires a mechanical ventilation system, but adds the word "functional" for more clarity and to denote it must be able to ventilate and circulate air. The system must also be in operation at all times in order to meet the 100 CFM per dog air circulation standards of the section. The 100 CFM per dog standard was set in conjunction with consultations with engineers that design and build kennel facilities and utilize this rate as a standard in those kennel designs; and in response to animal scientists who suggested a CFM rating per dog was

more objective and fair. The CFM rate per dog allows a kennel owner to provide ventilation on a basis that takes into account the number of dogs in the kennel facility.

The final-form regulation also adds language to this section that makes it clear the system must meet the requirements of section 28a.3 (related to auxiliary ventilation), 28a.4 (related to humidity levels), 28a.5 (related to ammonia levels) and 28a.6 (related to carbon monoxide monitoring). These sections are new sections that have been set forth as independent – but related – sections for clarity and form.

b. Subsection 28a.2(b) of the final-form regulation (related to certification of ventilation system) requires written certification, from a professional engineer, attesting they have designed or inspected the system and that the system meets all the standards and requirements of the ventilation, auxiliary ventilation, humidity and ammonia control sections of the regulation and that carbon monoxide monitors are installed where necessary. It also requires the submission of information setting forth the dimensions of the kennel, a description of the mechanical ventilation equipment, including CFM ratings and the humidity control and auxiliary ventilation equipment or system to be utilized, as well as, the highest number of dogs upon which the certification was based. The latter information will allow the Department to assure no changes have been made to the certified system going forward. Engineers must also set forth where the temperature and humidity monitors required by the regulations must be installed. The time line for submission of such certification is established in subsections 28a.2(b)(2) and (3).

The certification requirement as a whole was implemented in response to comments questioning the subjectivity and expense of kennel owners and State dog wardens having to take individual readings on each visit to assure compliance. Commentators wanted a more objective approach that would be less costly and time consuming to both the regulated community and the Department. By requiring a one-time certification (unless recertification is required based on the standards of that provision) the kennel owner and the Department are assured by an independent, professional party, that the system installed – if operated correctly – meets all the requirements of the regulation. In addition, the engineers consulted have verified that they would already be certifying any system they designed or inspected and that there are enough engineers to handle the certification process that would have to take place in Pennsylvania. This process lowers the cost of compliance, allows for a completely objective approach to assuring compliance, interjects a third party chosen by the kennel owner to design or retrofit the kennel to comply with the regulatory standards, and the party must be a licensed professional engineer, who is familiar with the standards of the regulations and can assure the system installed meets all the parameters of the regulations.

c. Subsection 28a.2(c) of the final-form regulation (related to inspection) establishes the general minimum criteria and standards related to the ventilation, auxiliary ventilation and humidity control systems that will be reviewed and checked during each kennel inspection by a State Dog Warden or other employee of the Department.

d. Subsection 28a.2(d) of the final-form regulation (related to recertification) requires a kennel owner to have his ventilation, auxiliary ventilation or humidity control system recertified by a professional engineer if he is found to be in violation of any of the ventilation, auxiliary ventilation, humidity or ammonia level requirements of the regulation.

e. Subsection 28a.2(e) of the final-form regulation (related to ventilation and circulation) sets forth the general standard provided for in the proposed regulation, requiring mechanical ventilation equipment. It sets forth additional objective and clarifying language requiring the system to physically move air, provide ventilation, fresh air exchange, circulation, heating, dehumidification and filtration and gives examples of the type of equipment that may be included. The mechanical system is necessary to provide and meet the cubic feet per minute ventilation requirements of the regulation. The CFM rates are established based on consultations with engineers that design kennel facilities, animal scientists and veterinarians.

f. Subsection 28a.2(f) of the final-form regulation (related to standards) establishes general and specific ventilation rates for the area of kennels and kennel facilities that house dogs.

Part (1) establishes the general criteria that ventilation and circulation, at the required rates, be provided throughout the kennel and kennel housing facility where dogs are housed, kept or present.

Part (2) establishes the circulation rate – at 100 CFM per dog per minute. This rate is consistent with the rates espoused by animal scientists and engineers that design and build kennel housing facilities. The rate will provide proper ventilation and air circulation. The CFM per dog will be required to be increased when temperatures in the kennel and kennel housing facility rise above 85 degrees Fahrenheit and auxiliary ventilation is required.

Part (3) requires the ventilation system to have the capacity to meet the CFM per dog rate established in Part (2), by requiring the capacity to be based on the highest total number of dogs held in the kennel at any one time.

Part (4) no longer requires 100% fresh air, but instead allows air to be recirculated in the kennel. It requires that at least 30 CFM per dog of the circulated air be fresh air (fresh air is defined in the final-form regulation). The engineers and animal scientists consulted, set this standard forth as a common animal husbandry practice and a standard that will protect the health and welfare of the dogs. In addition, the recirculated air standard will allow kennel owners to control humidity and ammonia levels in the kennel facility and reduce heating costs in the winter months.

Part (5) requires a standard air filter meeting at least a MERV 8 efficiency. These filters are standard filters utilized in ventilation and air circulation systems and can be found in most building supply stores. The standard was suggested by and agreed upon by the engineers and animal scientists consulted.

Part (6) establishes the design and placement of the ventilation to assure it provides proper circulation of air to the dogs housed in the kennel facility. The engineers consulted suggested and agreed upon such language.

g. Subsection 28a.2(g) of the final-form regulation (related to malfunctions) establishes general and specific requirements and actions a kennel owner must take in response to a mechanical malfunction or failure of the ventilation system. This section prescribes notice provisions for when the temperature inside the kennel exceeds 85 degrees Fahrenheit and requires the kennel owner to consult with his veterinarian regarding canine health issues. When temperatures in the kennel building exceed 85 degrees during the malfunction or breakdown the kennel owner has a four hour time period to correct the malfunction, after which he must consult his veterinarian regarding dog health issue, this is consistent with the four hour window provided for humidity levels and dog health issues in other parts of the regulation, and begin recording temperature and humidity levels within the kennel facility. The kennel owner must notify the Department of the malfunction if it exceeds 24 hours and temperatures in the kennel are above 85 degrees Fahrenheit.

Section 28a.3. Auxiliary Ventilation.

As set forth in the general changes statements above, the Department added a section specifically related to auxiliary ventilation. This was done to provide more clarity to the final-form regulation, both with regard to notification of specific standards to the regulated community and authority under the statute. The auxiliary ventilation standards were not clearly or specifically set forth in the proposed regulation. The auxiliary ventilation provisions of the final-form regulation are within the mandates of the Act, which requires, at sections 207(h)(7), "...The Canine Health Board shall determine auxiliary ventilation to be provided if the ambient air temperature is 85 degrees F or higher."

The specific changes made to the final-form regulation regarding auxiliary ventilation are summarized as follows:

(1) General. This section sets forth the general standard required by sections 207(h)(6) and (7) of the Act (3 P.S. §§ 459-207(h)6) and (h)(7)), regarding the requirement that auxiliary ventilation be utilized in any part of a kennel facility where dogs are present, housed or kept, when the temperature in the kennel rises above 85 degrees Fahrenheit. It provides the clarity that the auxiliary ventilation is to be provided in addition too (auxiliary), not in place of the required ventilation and humidity standards of the regulation. The kennel must still maintain the ventilation and humidity controls required by the regulation. It also provides that in the event of a malfunction or failure of the primary ventilation system, the auxiliary ventilation system may be utilized.

(2) Types of auxiliary ventilation. This section sets forth some auxiliary ventilation devices and techniques that may be utilized by the kennel owner. They are based on discussions with an AKC Senior Breed Field Representative that has knowledge of techniques currently utilized in breeding kennels and were reviewed and approved by engineers consulted by the Department. These techniques and devices are not the only ones that can be utilized, but the section provides guidance to the regulated community regarding what may be utilized.

Section 28a.4. Humidity Levels.

The Act, at section 207(h)(7) and 221(f) (3 P.S. §§ 459-207(h)(7) and 459-221(f))) confers upon the Canine Health Board and the Department, as the promulgating agency, the authority and the absolute duty to establish humidity levels that account for the health and welfare of dogs housed in commercial kennels. Section 207(h)(7), states, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation....The relative humidity must be maintained at a level that ensures the health and well-being of the dogs housed therein. The appropriate...humidity...ranges shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) Section 221(f), regarding the purpose of the Canine Health Board, states, "The board shall determine the standards based on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)..." (3 P.S. § 459-221(f)).

The standards set forth and established in sections 28a.4(a)(1),(2),(3) and (4) of the final-form regulation are based on discussions with engineers that build and design kennel housing facilities, animal scientists from the Pennsylvania State University and veterinarians from the Board and the Department.

With regard to the standard humidity range established by section 28a.4(a)(1) of the final-form regulation, the humidity range of 30%-70% when temperatures are below 85 degrees Fahrenheit is a standard range utilized in most animal husbandry practices. This is according to the experts consulted. The engineers and some veterinarians believed the range should be tighter (40% - 65%), but the Department chose to utilize the greater range, since the experts consulted did not believe that range would be detrimental to the welfare of the dogs.

With regard to the humidity levels to be established when temperatures in a kennel facility rise above 85 degrees Fahrenheit, the Department utilized the heat index. The heat index combines the effects of temperature and humidity to come up with a heat index value. The heat index value establishes what a certain temperature and humidity combined actually feels like. A heat index does not require the control of temperature. It in fact allows for higher temperatures, so long as humidity is properly controlled. It thereby gives kennel owners more flexibility than the federal regulations and allows the Department to determine the humidity level that must be attained, when temperatures are above 85 degrees Fahrenheit, in order for the kennel facility to be at a value that will account for the welfare of the dogs housed therein.

The science behind controlling humidity to allow for proper animal welfare is that the higher the humidity level, the more water vapor the air is holding or carrying. The more water vapor in the air the harder it is for any animal to cool its internal body temperature, since cooling of the body is not achieved through mere perspiration or panting, but rather through the absorption of the perspiration by the air passing over the skin of an animal or the tongue of the dog. Air containing high levels of humidity can not absorb the perspiration on the skin or water on the dogs tongue and therefore cooling does not occur or is less efficient. That is why high temperatures and high humidity combine to form heat stress dangers. It is also the reason that merely blowing a larger volume of hot, humid air over a dog or any other animal will not allow for additional cooling of the internal body temperature of that animal.

Section 28a.4(a)(2) addresses the humidity range, expressed in a heat index value, that must be achieved when the temperature in any part of the kennel housing facility rises above 85 degrees Fahrenheit. The heat index value of 85 (85 HI), established by this section, is based on heat index charts that apply to other animals, such as swine, cattle and fowl and also on heat index values that apply to humans. In all cases, a heat index that is higher than 85 (85 HI) begins to put these animals into a heat stress danger. Most of these animals have body cooling systems that are more efficient than those of dogs, with humans being the most efficient. Therefore, the Department believes a heat index of 85 (85 HI) for dogs is the most conservative regulatory approach the Department can take and still provide a humidity level that accounts for the welfare of dogs. The engineers, animal scientists and veterinarians consulted agree a heat index value of 85 (85 HI) is appropriate. In addition, the 85 heat index value is consistent with the temperature extremes regulated by the Federal Animal Welfare Act, which requires kennel owners to reduce temperature levels in kennels to 85 degrees Fahrenheit (9 C.F.R. §§ 3.2(a) and 3.3(a)). It allows a four hour window to achieve that temperature. That temperature extreme is consistent with the heat stress indexes referenced above. Furthermore, a survivability study conducted on beagles, entitled "A Temperature/Humidity Tolerance Index for Transporting Beagle dogs in Hot Weather", which was sponsored by the Federal Aviation Administration, supports the heat stress tolerances established by this section, as does the TACC Weather Safety Scale for dogs.

Section 28a.4(a)(3) establishes a window of time, once the temperature in the kennel rises above 85 degrees Fahrenheit, for kennel owners to address humidity levels in order to comply with the 85 heat index requirement of the regulation. The four hour window is consistent with the four hour window established by the Federal Animal Welfare regulations (9 C.F.R. §§ 3.2(a) and 3.3(a)), in which a kennel owner must achieve a temperature of 85 degrees Fahrenheit.

The Department's final-form regulation does not require a temperature reduction, and temperatures in the kennel facility may remain above 85 degrees Fahrenheit, after the four hour period, but the humidity levels within the kennel facility must have been adjusted to comply with and achieve a heat index value of 85. In addition, the four hour window is consistent with the survivability study conducted on beagles entitled, "A Temperature/Humidity Tolerance Index for Transporting Beagle Dogs in Hot Weather", which was sponsored by the Federal Aviation Administration. The study referenced above, as well as the Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine and first published in "Recognizing and Reporting Animal Abuse: A Veterinarian's Guide," form the basis for setting the heat index cap of 90 (90 HI). A kennel facility may never go above a heat index value of 90 and may not exceed that value during the four hour window provided by the regulation. The survivability study and the TACC Weather Safety Scale are generally acknowledged to be the only two scholarly resources that give specific heat-related safety guidance applicable to canines.

The survival study establishes scientific evidence that most breeds of dogs would not survive for more than six hours in conditions where the heat index rose above 95-98 (95-98 HI). The study is a survival study, so it does not mean that conditions of 95-98 HI are

proper or should be sustained for any length of time. An upper cap of 90 HI that may not be crossed was established using both this study and the TACC Weather Safety Scale.

Kennel owners must still utilize auxiliary ventilation immediately upon the temperature reaching 85 degrees Fahrenheit and should begin to immediately take action to decrease humidity levels to assure the 85 HI value required by the regulations is met and maintained. Again, this is the most conservative regulatory approach the Department felt it could take and, based on scientific evidence, still protect the health and welfare of the dogs.

Section 28a.4(a)(4) sets forth how the Heat Index must be calculated and provides an objective standard for both the regulated community and the Department regulator. The Department has attached the heat index chart to the regulation and made it a part thereof. The Department has also provided the website where the heat index calculation can be performed and provided examples of the heat index values.

The Department consulted engineers to assure the humidity levels associated with the heat index values could be achieved and that kennels could be built or retrofitted or employ dehumidification devices that would allow them to meet the standards. The engineers assured the Department such humidity levels could be achieved in commercial kennels and systems could be designed or dehumidification devices placed to assure compliance.

Section 28a.4(a)(5) sets forth a moisture condensation requirement that is consistent with the edict of section 207(h)(7) of the Act, which requires, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and...to prevent moisture condensation..." (3 P.S. § 459-207(h)(7)).

Section 28a.4(b)(1) related to "Measurement and Control Standards" delineates and sets clear and objective standards regarding where and how humidity level readings must be taken. A primary concern throughout the comments was that the regulation establish clear standards, including standards denoting how the regulation would be enforced and the measurement standards to be utilized. This language provides the regulated community and the Department clarity with regard to enforcement of this provision.

Section 28a.4(b)(2) establishes the standards the measuring devices must meet and sets forth the requirement that the Department own and therefore pay for the devices. The Department researched devices on the market to assure they met the standards established by this provision and were readily available. The Department also checked with the engineers to assure the devices met with their approvals. In establishing this particular provision, the Department took into account numerous comments that called for a more objective standard for measuring devices and a standard that would reduce the cost to the regulated industry. This provision accomplishes both goals. There will be only one standard type of measuring device that must meet standards established by the regulation. The Department will pay for and install the devices in accordance with the recommendations of the engineer certifying the kennel. Both the kennel owner and the Department may refer to the devices, the kennel owner to assure he is meeting the standards on an hourly and daily basis and the Department to assure the kennel is complying with the humidity requirements of the regulation. The final standard is completely objective, standardizes the measurement devices and reduces the cost to both

the regulated community and the Department (both equipment costs and the time cost associated with taking measurements utilizing hand-held devices).

Section 28a.4(b)(3) delineates what Department inspectors will look for and what is required to establish some evidence that the kennel can regulate humidity.

Section 28a.4(b)(4) sets an objective cooling capacity requirement IF air conditioning is utilized in the kennel facility. The requirements were established by the engineers consulted.

Sections 28a.4(b)(5) and (6) make it clear that the humidity monitoring devices may not be tampered with or changed in any manner by any person other than a State dog warden or employee of the Department. This will maintain the integrity of the readings and assure the readings are accurate and not able to be manipulated or changed.

Section 28a.4(b)(7) was put into the regulation to address the concerns expressed by some commentators related to proper calibration of measurement devices and the frequency at which measuring devices will be checked to assure proper accuracy.

Section 28a.4(b)(8) establishes enforcement standards related to the monitoring devices.

Section 28a.5. Ammonia Levels.

The Act, at section 207(h)(7) and 221(f) (3 P.S. §§ 459-207(h) and 459-221(f)) confers upon the Canine Health Board and the Department, as the promulgating agency, the authority and the absolute duty to establish ammonia levels that account for the health and welfare of dogs housed in commercial kennels. Section 207(h)(7), states, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels....The appropriate...ammonia ranges shall be determined by the Canine Health Board" (3 P.S. § 459-207(h(7)). Section 221(f), regarding the purpose of the Canine Health Board, states, "The board shall determine the standards based on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)..." (3 P.S. § 459-221(f)).

The level established by section 28a.5(a), was established after consultations with veterinarians and animal scientists. The consensus was that levels of 10 ppm were too low to be accurately measured, but that levels of 20 ppm were too high for long term exposure. Therefore, the agreement was that a level of 15 ppm or lower was the appropriate standard. The 20 ppm decision was based on the expertise of the veterinarians and animal scientists and their experience with animal husbandry and the effects of ammonia levels of 20 ppm on the eyes and respiratory system of agricultural animals. The measurement standards of subpart (b) were established because the science around ammonia establishes that it is a heavy gas that will be found close to the floor of an enclosed building. The consensus of the engineers and the veterinarians was that the readings should therefore be taken at the level of the dogs.

Section 28a.6. Carbon Monoxide Detectors.

The Act, at section 207(h)(7) and 221(f) (3 P.S. §§ 459-207(h) and 459-221(f)) confers upon the Board and the Department, as the promulgating agency, the authority

and the absolute duty to establish proper ventilation rates that account for the health and welfare of dogs housed in commercial kennels. Section 207(h)(7), states, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation...The appropriate...ventilation...ranges shall be determined by the Canine Health Board" (3 P.S. § 459-207(h(7)). Section 221(f), regarding the purpose of the Canine Health Board, states, "The board shall determine the standards based on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)..." (3 P.S. § 459-221(f)). The definition of ventilation set forth in the regulation (meeting the engineers' approval) includes, "...replacing air in any space to control temperature and humidity or remove moisture, odors, smoke, heat, dust, airborne bacteria, carbon monoxide, carbon dioxide, and to replenish oxygen.

The Department after consulting with the engineers, animal scientists and veterinarians from the Board and the Department and reviewing comments, determined that carbon monoxide should be monitored in order to assure the proper ventilation ranges are being achieved and to assure the welfare of the dogs. Carbon monoxide is an odorless and colorless gas that is deadly if there is prolonged exposure to a range that is too high. The persons consulted felt it was absolutely necessary to – while not establishing ranges – at least monitor for the gas. The final form regulation therefore, does not include any set range, but instead requires the installation of common carbon monoxide monitoring devices in those kennels that utilize a carbon monoxide emitting device. The regulations is therefore tailored only to kennels that may have a carbon monoxide build up, sets an objective standard by requiring common detection devices to be installed and does not add a big equipment or monitoring cost to the regulation.

Section 28a.7. Lighting.

The final form regulation delineates lighting standards for both natural and artificial light in accordance with the duty and requirements set forth in section 207(h)(8) of the Act (3 P.S. § 459-207(h)(8)) and conferred upon the Board and the Department.

The Department agreed with the comments that the first sentence was not proper regulatory language and has removed that sentence from the final form regulation. In addition the final form regulation no longer requires natural light or some of the mandates, set forth in the proposed regulation, associated with providing natural light.

The Department has deleted from the final form regulation what was previously sections 28a.3(1)(i)-(vi) of the proposed regulation. Those sections set forth standards related to natural lighting. The Department agrees there is no legal authority to require natural light, when the statute states light shall be provided by natural *or* artificial means.

The provisions that have been deleted from the final form regulation required that: (i) each dog have exposure to natural light through windows, skylights or other external openings; (ii) a total combined minimum amount of the kennel area that must be external openings, such as windows or skylights (8% of the floor space); (iii) the requirement that dogs be protected from excessive light (this requirement is in the Act and has been reinserted in the final form regulation); (iv) a requirement to provide an outdoor area of shade and (v) and (vi) which set requirements that kennels receiving approval to provide

indoor exercise only be required to be configured in a manner that would provide natural light to each primary enclosure and provide full spectrum lighting.

In addition, the proposed regulations set standards, at section 28a.3(2)(i)-(v) that provided requirements for artificial lighting. Those standards have been modified in the final form regulation as set forth below in more detail.

The Department added provisions to the final form regulation that allow for both natural or artificial lighting or both. The final form regulation provides general lighting standards that apply to both natural and artificial lighting and then sets forth specific standards that apply only to natural or artificial lighting.

Section 28a.7(a) of the final form regulation provides the general lighting standards that apply to all lighting no matter if it is provided by natural or artificial means. These general standards – set forth in subsections (1)-(3) and (5) mirror the requirements and standards established in section 207(h)(8) of the Act, which states, "Housing facilities for dogs must be lighted well enough to permit routine inspection and cleaning of the facility and observation of the dogs. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs from excessive light. The appropriate lighting ranges shall be determined by the Canine Health Board" (3 P.S. § 459-207(h)(8))

Subsection 28a.7(a)(1) of the final form regulation relates to the sufficient lighting to allow for observation and maintenance provisions of the Act.

Subsection 28a.7(a)(2) relates to uniform diffusion of the lighting.

Subsection 28a.7(a)(3) sets forth the diurnal lighting cycle language of the Act.

Subsection 28a.7(a)(4) establishes the lighting ranges that shall be provided to carry out the mandates of section 207(h)(8) of the Act. The Department changed these standards in the final form regulation. The changes were based on additional research and consultations undertaken by the Department in response to comments that stated the lighting ranges of the proposed regulations –up to 80 footcandles – were excessive. The standards established in the final form regulation (40-60 footcandles) are based on NIH standards and the fact that exam rooms at the Pennsylvania State University require lighting of 40-60 footcandles. The Department, with the assistance of members of the Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs.

Subsection 28a.7(a)(5) reiterates the exposure to excessive light standard of the Act.

Section 28a.7(b) of the final form regulation establishes additional standards that are specific to natural light and artificial light sources.

With regard to natural light, in section 28a.7(b)(1), the Department followed the language of the Federal Animal Welfare Act in requiring that any window or opening, with the exception of the openings that provide for unfettered access to the exercise area,

which provides natural light shall be covered with a transparent material such as glass or hard plastic and shall remain unobstructed.

With regard to artificial light, the Department made the following changes to the provisions that were set forth at section 28a.3(2) of the proposed regulations (now section 28a.7(b)(2)(i)-(iii) of the final form regulation):

Section 28a.7(b)(2)(i) still requires that artificial lighting be provided by full spectrum lighting. Full spectrum lighting is the only lighting source that nearly approximates the spectrum of light provided by the sun. According to the veterinarians consulted by the Department, natural sunlight is important for the health of dogs housed in kennels – for vitamin D levels and eye development among other issues. Therefore, the lighting to be provided has been determined to be full spectrum, which most closely imitates the spectrum and wavelengths of light received from the sun. The Department did remove the footcandle provisions from this section and set them forth in the general standards of the final-form regulation. In addition, as set forth previously, the footcandle standard was reduced from 50-80 to 40-60 footcandles.

The Department deleted the requirement – contained in section 28a.3(2)(ii) of the proposed regulations regarding providing night time artificial lighting. The purpose of the provision was to provide some low level lighting to allow for the dogs natural startle responses. However, it became apparent from the comments received the provision was causing confusion. The veterinarians consulted agreed the provision could be taken out without harming the welfare of the dogs.

What was Section 28a.3(2)(iii)(relating to diurnal lighting cycle) of the proposed regulation was deleted and similar language was moved to the general provisions of the final form regulation.

The Department amended the language of section 28a.3(2)(iv) of the proposed regulation, now section 28a.7(b)(2)(ii) of the final form regulation. After consulting with the Board members, it became apparent that intent of the provision was to assure the lighting was kept in good repair. The Department removed the language "may not have a visible flicker" and utilized language that brings clarity and objectivity to the provision.

The Department amended the language of what was section 28a.3(2)(v) of the proposed regulations, now section 28a.7(b)(2)(iii) of the final form regulation. The purpose of the provision is to assure the lighting sources are placed and utilized in a manner that will not cause injury to a dog. The new language more clearly expresses the intent and gives examples.

Section 28a.3(3) of the proposed regulations, relating to applicable codes has been deleted from the final form regulation. Local codes vary and are enforced by the local township, borough or municipality. The Department could not know all applicable local codes and has no authority to enforce those code provisions. The kennel owners will be required by local and federal code officials to comply with any such applicable codes.

Section 28a.8. Flooring.

The final form regulation, at the suggestion of the Independent Regulatory Review Commission and other commentators, has been amended to delineate the flooring standards established by the Act and to then set forth alternative flooring standards in a

separate subsection. This should provide the regulated community with more clarity regarding the standards established by the Act and the regulation.

Subsection 28a.8(a)(1) and (2) reiterate the flooring standards set forth at sections 207(h)(9) and 207(i)(3)(i) of the Act.

Subsection 28a.8(b) reiterates the flooring requirements delineated at section 207(i)(3)(ii) of the Act, related to slatted flooring.

Subsection 28a.8(c) sets forth the Board's authority under section 207(i)(3)(iii) of the Act and is inserted to provide clarity to the regulated community.

Subsection 28a.8(d) establishes standards for additional flooring options and maintains most of the standards set forth by the Board in their Guidelines and contained in the proposed regulation.

Section 28a.4(1) of the proposed regulation, was deleted and was combined with the language of section 28a.4(2) of the proposed regulation, to form section 28a.8(d)(1) of the final-form regulation. The Department, in response to comments, added clarifying language to this provision, the clarifying language nearly mirrors the language of the Federal Animal Welfare Act regulations regarding proper drainage.

Section 28a.8(d)(2) of the final form regulation was modified to denote that where a drain is provided it shall have a drain cover. The purpose of a drain cover is to assure no dog's foot, paw or pad will become stuck or be harmed by an open drain.

Section 28a.8(d)(3) of the final form regulation modifies the language of Section 28a.4(4) of the proposed regulation. The modifications were made in response to comments that stated these provisions needed more clarity. The Department has more closely set forth the intent of the provision, which is that materials that may harm the dog, because they become exceptionally hot when exposed to direct rays of the sun or a heating source may not be utilized. The Department also separated the provision related to radiant heat flooring from this provision.

Section 28a.8(d)(4) was added after consultation with the Bureau and with Board veterinarians to address animal husbandry and dog welfare issues not addressed in the proposed regulation. The Board is required to address these issues, under section 221(f) of the Dog Law, when reviewing alternative flooring options. The Bureau has witnessed the foot and pad problems set forth in section 28a.8(d)(4) and these are the very problems and dog welfare issues the Act was intended to rectify. The language of this provision makes it clear that alternative flooring that would continue to cause the problems delineated in the provision is not acceptable.

Section 28a.8(d)(5) was added to specifically address the use of radiant heat flooring or floor cooling systems. Radiant heat floors were addressed in the proposed regulation, but commentators expressed confusion regarding the language and requested more clarity. The modified language is intended to add such clarity and objectivity to this provision.

Section 28a.4(5) of the proposed regulation, related to applicable codes for drains has been deleted from the final form regulation. The Department can not know all the separate applicable local codes, nor does the Department have the authority to enforce local codes. The kennel owners will be required by local and federal code officials to comply with any such applicable codes.

Section 28a.8(d)(6) modifies the language of section 28a.4(6) of the proposed regulation. The modifications were made in response to comments suggesting the

language of the proposed regulation was not clear or objective enough. The new language adds clarity and objectivity to the requirements of this provision. Examples of materials were deleted, because they seemed to cause confusion as to whether they were the only materials allowed and since the new language adds such clarity.

Section 28a.8(d)(7) was modified in the final form regulation to once again add clarity. The new language is consistent with the provisions of the Dog Law and the Department's current regulations and references the applicable provisions. This should add all the clarity and objectivity necessary for compliance and enforcement.

Section 28a.8(d)(8) of the final form regulation was modified in response to comments related to clarity.

Section 28a.8(e) of the final form regulation was added to provide clarity and to harmonize the flooring standards established in the Dog Law that relate to dogs under 12 weeks of age and dogs over 12 weeks of age. The Act does not enumerate a specific standard for flooring in primary enclosures containing nursing mothers and their litters of dams and foster dams with puppies under 12 weeks of age. The standard in these regulations establishes a percentage of flooring that is required to meet the adult dog flooring provisions of section 207(i)(3) of the Dog Law and which the Department believes will allow enough room for the adult dog and puppies to avoid the wire flooring, but also allows an area of wire flooring to address the concerns of the PVMA and other veterinarians related to the puppies' waste not remaining in the primary enclosure, soiling the puppies and resulting in either the puppies or the mother dog eating the feces.

Section 28a.9 Scope and Effective Date. This provision was added to clarify that the regulations pertain only to commercial kennels and to establish the effective date of the regulation.

Fiscal Impact

Commonwealth

The proposed regulations, once published as final-form regulations, would impose additional fiscal impacts upon the Department's Bureau of Dog Law Enforcement (Bureau). As set forth more specifically in the regulatory analysis form, the cost to the Commonwealth, in the first year of the regulations will be approximately $64,825. The general breakdown of those first year costs are $30,000 for computer programming upgrades and changes to existing forms, $16,539 for humidity/temperature data loggers that will be purchased and installed by the Department, $13,000 to equip the kennel inspectors with the necessary light, ammonia and other measurement devices and $5000 for training costs. Those costs will be paid for entirely from the Dog Law Restricted Account. No general fund money will be used. The Department, in the Regulatory Analysis Form that accompanies the proposed regulation, has set forth an estimate of costs to the Bureau to enact and enforce the new regulatory standards that would be imposed by the final regulations.

Political Subdivisions

The addition of mechanical ventilation, additional artificial or natural lighting and flooring changes may require UCC permit and inspections. This should not specifically increase or decrease costs to local governments, however. Documentation from the Center for Local Government Services, Department of Community and Economic Development (DCED), confirms that municipalities are collecting fees to cover the expenses of Pennsylvania Uniform Construction Code (UCC) administration and enforcement, so that these proposed regulations will not have a fiscal impact on municipalities. Any additional workload generated by the regulation would be offset by the fees collected in association with the specific permit.

The enforcement of the regulations will neither increase nor decrease any costs to local governments. Compliance with the ventilation, lighting and additional flooring standards required of Class C kennels standards will be enforced solely by the Department. Local governments will have no role in enforcement or any other area associated with the regulations in the Commonwealth.

Most municipalities do not have commercial kennels. Nearly all are in 10 of the 67 counties—more than half are in Lancaster County. Commercial kennels represent about 6% of the total number of kennels regulated by the Department.

Private Sector

The regulations once published as final-form regulations will impose additional costs, most of which will be imposed for initial compliance, on the regulated community (Class C kennels). Class C kennels will likely have to make changes (some significant depending on the current state of their kennel operation) to comply with the ventilation, humidity, ammonia and lighting provisions of the regulation. The flooring provisions of the regulation actually expand the type of flooring allowed under the act, in section 207(i)(3) and do not impose any new requirement. The costs to the regulated community will be varied, depending on the size and condition of the existing kennel. The Department, in the Regulatory Analysis Form, has provided an estimate of costs for a Commercial Kennel to comply with all of the provisions of the regulation, assuming the kennel does not comply with any of the provisions of the final-form regulation and would not meet current federal regulatory standards. The costs include the cost to install and operate (on a 24/7 basis) the proper ventilation, auxiliary ventilation systems and lighting systems that meet all of the ventilation, humidity, ammonia and lighting standards of the regulation. They also include the cost of any monitoring equipment and the cost of replacing light bulbs and general maintenance. The highest total cost for any kennel in the first year would be approximately $59,000.

The breakdown of costs are based on a 1500 square foot kennel, which could house about 100 dogs, and generally fall into the following categories: 1. Design, installation and certification of the ventilation, auxiliary ventilation, humidity and ammonia systems - $12-$25 per square foot which equals $37,500 at the top end; 2. Yearly operation of the systems set forth previously and cost of lighting and maintenance and replacement bulbs

– estimated at $6400 per year, at the top end; 3. Cost to install and maintain a full spectrum lighting system - $12,000-$13,500 assuming there is no infrastructure or wiring already in place; 4. The cost to install flooring meeting the adult standards of section 207(i)(3) in at least 50% of the floor area in primary enclosures housing nursing mothers or dams and puppies under 12 weeks of age – $39-$210; and 5. Cost to buy all measuring tools (which is not absolutely necessary) of just under $1000. The total high end cost in the first year of the regulation would be approximately $58,610.

That said, 50 of the 111 remaining commercial kennels are currently licensed by the USDA and subject to the Federal Animal Welfare Act and its attendant regulations. Those regulations already require, kennels to be heated to at least 50 degrees Fahrenheit and kennel owners to reduce temperature levels in kennels to 85 degrees Fahrenheit (9 C.F.R. §§ 3.2(a) and 3.3(a)). It allows a four hour window to achieve that temperature. In addition, the Federal Animal Welfare Act regulations currently require licensed kennels to have, "...reliable electric power adequate for heating, cooling, ventilation, and lighting, and for caring out other husbandry requirements in accordance with the regulations in this subpart." (9 C.F.R. § 3.1(d)). Ventilation, under the federal standards may be provided by, "...windows, vents, fans, or air conditioning. Auxiliary ventilation, such as fans, blowers, or air conditioning must be provided when the ambient temperature is 85 degrees F...or higher. The relative humidity must be maintained at a level that ensures the health and well-being of the dogs...housed therein, in accordance with the directions of the attending veterinarian and generally accepted professional and husbandry practices." Therefore, the commercial kennels regulated under these regulations should already be utilizing some type of auxiliary ventilation when temperatures are above 85 degrees F, should be providing appropriate humidity control and should be doing so in accordance with proper animal husbandry practices, as established by a veterinarian. They should therefore be incurring some electrical, cooling and heating costs, and should be incurring lighting costs under the standards established by sections 3.2(c) and 3.3(c) of the federal code of regulations.

The remaining commercial kennels are subject to the Department's current regulatory requirements for lighting, ventilation, auxiliary ventilation and temperature and humidity levels, which are vague, but do require some type of systems to be in place.

The ventilation, humidity and lighting standards of the final-form regulation add the specificity (required by the Act itself) that is not part of the current federal or State regulations. The standards established in the final-form regulations were done in consultation with veterinarians from the Board, who did research into the appropriate ranges and standards required for proper animal husbandry practices and were reviewed and confirmed by Department veterinarians, animal scientists and engineers that build and design kennel housing facilities. The final-form regulations impose specific and objective ranges, as required by the Act itself and those ranges are based on animal husbandry practices, data, research and expert advice.

General Public

The final-form regulations may raise the cost of purchasing a dog and therefore may affect purchasers of dogs. The Department however, has no way to know or calculate if such an increase will occur, how much that increase would be or if it would be

implemented by all commercial kennels. The general public will however benefit from the implementation of the standards in the regulations, as the standards are intended, as were the amendments to the Dog Law that precipitated the regulations, to improve the health and welfare of the dogs and puppies that are sold to the general public. There are no mandatory requirements imposed on the general public by the regulation.

Paperwork Requirements

The Department will not have to develop a large array of new application forms or review procedures, but will have to amend current kennel inspection forms and implement changes to the current computer program related to kennel inspection. The Department has already worked with its IT department to develop and implement these changes. As set forth in the regulatory analysis form the total estimated cost to make such changes is $30,000.

Effective Date

The proposed rulemaking will be effective immediately upon publication in the *Pennsylvania Bulletin* as final-form rulemaking, with an effective or compliance date of July 1, 2011.

Additional Information

Further information is available by contacting the Department of Agriculture, Bureau Dog Law Enforcement, 2301 North Cameron Street, Harrisburg, PA 17110-9408; Attn: Special Deputy Secretary Jessie Smith – (717) 214-3447 or Bureau Director Sue West - (717) 787-4833. A copy of the final-form regulation, preamble to the regulation, regulatory analysis form and the comment and response document can be found at the Department of Agriculture's website at: http://www.agriculture.state.pa.us.

Regulatory review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), the Department submitted a copy of the Notice of Proposed Rulemaking published at 39 *Pennsylvania Bulletin* 5315, on September 12, 2009, to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Agriculture and Rural Affairs Committees (Committees) for review and comment.

In compliance with § 5(b), the Department also provided the Commission and the Committees with copies of all comments received. In preparing this final-form regulation, the Department has considered all comments received from the Commission, the Committees and the public.

This final-form regulation was deemed approved by the House Agriculture and Rural Affairs Government Committee on _____; was deemed approved by the Senate Agriculture and Rural Affairs Committee on _____and was approved by IRRC on _____.

Findings

The Department finds that:

(1) Public notice of intention to adopt this final-form regulation has been given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and their attendant regulations at 1 Pa. Code §§ 7.1 and 7.2.

(2) A public comment period was provided as required by law and all comments received were considered.

(3) Numerous modifications to this regulation in response to comments received were made, however all such modification were within the scope of the original proposed rulemaking and there was no enlargement of the purpose of the proposed regulation published at 39 *Pennsylvania Bulletin* 5315, on September 12, 2009.

(4) The adoption of the regulation in the manner provided in this Order is necessary and appropriate for the administration of the authorizing statute.

Order

The Department, acting under the authorizing statute, orders the following:

(1) The Department of Agriculture adopts the final-form regulation (related to Commercial Kennel canine health) to read as set for in the Annex A.

(2) The Secretary of Agriculture shall submit this order and Annex A to the Office of General Counsel and Office of Attorney General for approval as required by law.

(3) The Secretary of Agriculture shall certify and deposit this order and Annex A with the Legislative Reference Bureau as required by law.

(4) This order shall take effect upon publication in the *Pennsylvania Bulletin.*

RUSSELL C. REDDING,

Secretary

COMMENT AND RESPONSE DOCUMENT
PROPOSED REGULATION
Canine Health Board Standards for Commercial Kennel Regulations
AGR 2-170
7 PA Code, Chapter 28a

Comments of the Independent Regulatory Review Commission Department of Agriculture Regulation #2-170 (IRRC #2785) Canine Health Board Standards for Commercial Kennels November 30, 2009

We submit for your consideration the following comments on the proposed rulemaking published in the September 12, 2009 Pennsylvania Bulletin. Our comments are based on criteria in Section 5.2 of the Regulatory Review Act (71 P.S. § 745.5b). Section 5.1(a) of the Regulatory Review Act (71 P.S. § 745.5a(a)) directs the Department of Agriculture (Department) to respond to all comments received from us or any other source.

Comments: General - Statutory authority; Legislative intent; Fiscal impact; Need; Consistency with statute.

1. Fiscal impact

Several commentators, including legislators, expressed concerns over the fiscal impact of this proposed regulation on both the Department and the regulated community. The Preamble of the proposed regulation provides no cost estimates but it does refer to the Department's estimates in the Regulatory Analysis Form (RAF) that was submitted with this proposed regulation. In item #17 on page five of the RAF, the Department offers a total cost estimate of $12,955 for commercial kennels. In contrast, the Pennsylvania Farm Bureau (PFB) stated that the total costs for the required upgrades could range from $200,000 to over $1 million.

Another aspect of increased costs that is not mentioned in the RAF is kennel staff costs. The statutory requirements for flooring and exercise areas do not allow kennel operators to rely on wire floors to allow for easy removal of dog wastes and fluids. In order to clean and maintain the dogs, and floors or flat surfaces in primary enclosures and exercise areas, there may be a need for additional staff at kennels which will increase costs. The Department needs to include these factors in its cost estimates for commercial kennels.

The feasibility and fiscal impact of certain provisions in the proposed regulation, particularly those in the areas of ventilation and lighting, are of particular concern. As expressed by Representative Michael K. Hanna in his letter dated October 27, 2009, and by Senator Mike Brubaker in his remarks on the Senate floor urging his colleagues to

support the legislation that became Act 119 (see Senate Journal, October 8, 2008, p. 2636), the intent of the 2008 amendments to the Dog Law was that commercial kennels would continue to operate successfully in Pennsylvania. The Department needs to estimate the full economic impact of this proposed regulation.

2. Rulemaking authority

Senator Brubaker, by letter dated October 27,2009, and Representatives Sam Smith, John Maher (Republican Chairman of the House Agriculture and Rural Affairs Committee), Jerry Stern, Sam Rohrer, Scott Hutchinson, Jim Cox, Gordon Denlinger, Mark Keller, David Millard, Tina Pickett, Jeffrey Pyle, Michele Brooks, Michael Fleck, Carl Walker Metzgar, Richard Stevenson and Martin Causer via a joint letter dated October 27,2009, (Representatives' comments) submitted objections and recommendations on the proposed regulation. Both Senator Brubaker and the Representatives' comments expressed concern with the roles of the Department and Canine Health Board (Board) in the development of this proposed regulation and in receiving comments on the rulemaking.

Section 221 (g) of the Dog Law (Law) (3 P.S. § 459-221(g)) gave the Board the task of issuing guidelines. However, it placed the task of issuing the regulation with the Department. Section 902 of the Law gives authority to the Secretary of Agriculture to promulgate rules and regulations to carry out the provisions and intent of the statute. It is clear that the Department is the sole entity with the authority to promulgate and enforce regulations. Unlike some other boards, such as the Environmental Quality Board which is empowered with rulemaking authority by statute, Act 119 did not give such authority to this Board. The Department needs to provide a statement with the final-form regulation that fully explains its authority in rulemaking and the functions of the Board.

3. Public interest

Section 5.2 of the Regulatory Review Act (71 P.S. § 745.5b) directs the Independent Regulatory Review Commission (Commission) to determine whether a regulation is in the public interest. When making this determination, we consider criteria relating to economic or fiscal impact and reasonableness. To make that determination, the Commission must analyze the text of the Preamble and proposed regulation and the reasons for the new or amended language. The Commission also considers the information a promulgating agency is required to provide in the Regulatory Analysis Form pursuant to Section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)). This proposed rulemaking is a comprehensive set of provisions under the Law. The Preamble included with the proposal does not provide an adequate description of the numerous sections of the rulemaking and the rationale behind the language. Without this information, this Commission is unable to determine if the regulation is in the public interest. In the Preamble submitted with the final-form rulemaking, the Department should provide more detailed information, including a description of the language proposed for each section of the regulation and why the language is required.

RESPONSE

1. Fiscal Impact: The Department has fully set forth costs estimates in the regulatory analysis form that accompanies the final-from regulation. The regulatory analysis form provides cost estimates for implementation of the final-form regulation, including estimates received from engineers and architects or firms that design and/or build kennels. The cost estimates are based on the language of the final-form regulations related to ventilation, auxiliary ventilation, humidity, ammonia and carbon monoxide controls and lighting requirements. The Department points out that the Farm Bureau offered no data or other information to substantiate the costs estimates it submitted in its comments. The Department has done that research and set forth what it believes to be the appropriate costs associated with the final form regulations.

The Commission must keep in mind that the majority of costs of redesign and construction were imposed by the Act itself and should not confuse those costs with the costs imposed by the regulations. In fact, the Commissions comment related to wire flooring and additional staff costs imposed because of the prohibition against wire flooring is a condition imposed by the Act itself and not the regulations. All of the flooring requirements are imposed by the Act. The regulations mirror the language of the Act and set forth standard the Canine Health Board will consider when approving any **additional types of flooring** submitted by the regulated community (which would be their choice of flooring – not a choice imposed by the regulations). Therefore, the regulations themselves do not impose additional costs related to the types of flooring that must be utilized in kennels. Sections 207(i)(3)(i) and (ii) of the Dog Law impose those costs, including any additional manpower costs related to cleaning or care of the flooring. In addition, the Act, not the regulations, sets forth the requirements for exercise areas. The regulations do not impose any requirements on or for the exercise areas of the kennel and therefore, impose no costs related to the exercise area of the kennels. Furthermore, many of the conditions and requirements imposed by the regulations (as set forth more fully in responses to questions related to specific provisions of the regulations) are standards with which kennels regulated by the United States Department of Agriculture are already required to comply and therefore, although part of the cost estimates set forth in the regulatory analysis form, those standards, if already being complied with, will not in practice impose any additional costs on those types of kennels.

More specifically with regard to the fiscal impact of the regulations, the final-form regulations have been substantially and substantively changed. As set forth in greater detail to other similar comments, the final-form regulatory analysis form has captured the applicable and reasonable cost of the regulation. The Department has consulted with engineers that build and design kennel housing facilities and they have provided the cost estimates of implementing the regulatory provisions, either with regard to retrofitting an existing kennel or building a new kennel. In addition, the Department has researched once again, the cost of any measurement equipment to be utilized, reviewed training and paperwork costs and other costs estimates required in the regulatory analysis form.

The amendments made to the final-form regulation, besides being based on expert input from engineers and architects that design and build kennel facilities, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and the Department, also reduce the cost of compliance with the regulation in several ways.

The final-form regulation contains no requirement for temperature reduction. Air conditioning or HVAC is allowed but not required. The final form regulation focuses on humidity levels in kennel housing facilities, and expands the range of the humidity level to 30%-70% when temperatures are between 50 and 85 degrees Fahrenheit. The final form regulation requires additional humidity reduction when temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, but allow the kennel owner four hours to reach the humidity level necessary to assure a 85 Heat Index value in the facility. The humidity ranges are based on expert analysis and opinion provided by the engineers consulted (Learned Design, Paragon Engineering Services), animal scientists and Canine Health Board and Department veterinarians, as well as animal heat index charts.

The Department with the assistance of Dr. Overall from the Canine Health Board found and utilized a dog survivability study that pinpoints the upper most range of the heat index that would allow for survival of dogs. The upper most Heat Index value is based on the results and recommendations of a survivability study conducted on beagles. The study entitled "A Temperature/Humidity Tolerance Index for Transporting Beagle Dogs in Hot Weather", was sponsored by the Federal Aviation Administration and authored by Gerald D. Hanneman and James L. Sershon. The document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.

The Heat Index Value is also based on the Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by in 1998 by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine and first published in "Recognizing and Reporting Animal Abuse: A Veterinarian's Guide." This widely-used scale, one of several canine assessment tools focused on consequences for the dog, indicates that, even with water and shade available as in a commercial kennel setting, a potentially unsafe situation develops above a 90 degree F temperature, especially for brachycephalic, obese or elderly dogs, as well as dogs under 6 months of age. Although the regulation is based on heat index, regulates relative humidity rather than temperature, and a temperature of over 90 degrees F would be permitted if combined with a relative humidity that would result in a HI of no more than 90, the inclusion of the TACC Weather Safety Scale as a basis for the regulation emphasizes that the standard being set goes beyond survivability to minimize adverse heat-related consequences for dogs in commercial kennels. The survivability study and the TACC Weather Safety Scale are generally acknowledged to be the only two scholarly resources that give specific heat-related guidance applicable to canines.

The Department will purchase temperature and humidity monitoring devices to be installed in kennels as set forth at subsections 28a.4(b)(4) and (5) of the final-form. regulation. In deciding to purchase the temperature and humidity monitoring devices the Department took into account the comments of kennel owners and other related to the cost to the kennel owners of having to purchase such equipment to monitor their kennels and the issue of standardization of such equipment so that measurements are taken in the same manner and by the same type of equipment. The Department will bear the cost of buying, calibrating, replacing and installing the monitors and kennel owners will be able to continually check the monitors to assure their kennel facility is in compliance with the standards of the regulations.

The ventilation system language and requirements are based on consultations with and were reviewed by engineers – that design and build kennel housing facilities – and

discussions with animal scientists. The humidity levels are based on consultations with animal scientists from the Pennsylvania State University, Canine Health Board and Department veterinarians, scientific research undertaken by Dr. Overall of the Canine Health Board, standards already contained in the Federal Animal Welfare Act and the experience and expertise of engineers that design and build kennel housing facilities.

The final-form regulation implements changes, such as establishing ventilation standards in cubic feet per minute per dog instead of air exchanges per hour. This was done in response to comments from and discussions with the architects, engineers and animal scientists consulted by the Department. This allows the Department to check the CFM or capacity rating on the ventilation and air circulation equipment employed by the kennel owner to assure it meets the required air circulation values. It also allows the kennel owner and engineer or architect to design and base the ventilation system on an objective capacity rating as opposed to a more subjective air exchange rate.

The final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

The final-form regulation also allows up to seventy percent (70%) of the air to be re-circulated, as opposed to 100% fresh air. That change will reduce the necessity to purchase air circulation monitoring equipment and provides an objective measurement of air circulation, while at the same time, reducing the cost of operation to the kennel owner. The changes were contemplated in response to issues set forth in the comments received and were made pursuant to the Department's consultation with animal scientists and engineers – Learned Design and Paragon Engineering Services – that design and build kennel housing facilities.

The cost of the mechanical ventilation system will vary according to the sophistication and complexity of the system the kennel owner decides to install. However, the Department has consulted several engineers and engineering companies that build kennel buildings and asked them to assess the cost of designing and installing a ventilation system that would meet all the ventilation requirements – including auxiliary ventilation and humidity levels - of the final-form regulation. The costs are based on a kennel owner having to retrofit or build from the ground up and include the cost of installing all of the equipment, even though most kennel owners, especially those subject to United States Department of Agriculture regulations, should already have some form of mechanical ventilation, auxiliary ventilation and – in the case of USDA – temperature control devices already installed in the kennel. These estimates do not take into account the fact that kennel owners already had previous existing utility costs. In fact, the Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general)

require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)). Therefore, the costs estimates, which are set forth in the regulatory analysis form that accompanies the final-form regulation will most likely set forth a greater cost than will be necessary for or actually incurred by many kennels.

Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form. The kennel owner may elect to purchase a light meter or ammonia level meter or both. The kennel owner will be able to utilize the Department's temperature and humidity monitoring devices to assure compliance with those standards and capacity or CFM standards for air circulation will be certified by an engineer and can be calculated based on the cubic feet of each area of the kennel housing dogs and the total number of dogs housed in that area of the kennel. The capacity or CFM rating is listed on fans and other forms of mechanical ventilation and the professional engineer, State dog warden and kennel owner can match those standards without buying any monitoring equipment. The kennel owner can adjust the level of the air circulation based on the number of dogs in the kennel at any one time, and no additional equipment or monitoring devices are necessary for such calculations. Standard carbon monoxide monitors, for those kennels that need to install them, will have to be purchased, but actual carbon monoxide level readings will not have to be taken, so no additional devices are necessary.

The Department has no baseline data with regard to a kennel's current utility costs, so it is impossible to project the amount of any increase in such costs. However, the regulatory analysis form accompanying the final-form regulation does estimate the average yearly cost of operating a system that would meet the ventilation, auxiliary ventilation and humidity standards of the regulations. These estimates do not take into account the fact that kennel owners already had previous existing utility costs. Therefore, the estimates set forth in the regulatory analysis form will include those already existing costs. The existing costs for kennels regulated by the USDA will be much less, as those kennels already had to comply with specific heating (50 F) and cooling (85 F) regulations and therefore, should already be operating heating and cooling systems in their kennels. The Federal Animal Welfare Act regulations in fact require the kennel to reduce the temperature to 85 degrees Fahrenheit.

In addition, both the Federal Animal Welfare Act regulations and the Department's current regulations require the use of auxiliary ventilation when temperatures in kennels rise above 85 degrees Fahrenheit, so kennels should already have some form of auxiliary ventilation in place or available.

The lighting should not cost any additional amount, since kennels were already required, by the Department's current regulations and USDA regulations to provide a diurnal lighting cycle and enough light to allow for observation of the dogs and normal animal husbandry practices. The amendments made by Act 119 also require and set forth those same general standards. The new regulations quantify the intensity of the light to be provided and the type of lighting. The regulatory analysis form sets forth the cost estimates to install new full spectrum lighting, if a kennel does not already have such lighting, but there should be no additional cost of operating the lighting, since proper lighting is already required.

In short, the Department consulted with engineers who design and build kennel buildings, to determine the potential cost of the ventilation, auxiliary ventilation, humidity, ammonia and lighting standards of the final-form regulation. The new cost estimates, set forth in the accompanying regulatory analysis form, are based on their input. The final-form regulation, especially the ventilation provisions of the final-form regulation, has reduced the need for some of the measurement equipment that would have been required by the proposed regulation. Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form.

The Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

2. Rulemaking Authority: The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted with the Canine Health Board members, as well as, with Department veterinarians, architects, engineers, a regulated community group and animal scientists, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations. The Canine Health Board did not act in its official capacity and was utilized by the Department for its expertise in veterinary matters, just as other groups were questioned and consulted in their areas of expertise. In general, the Department acted as the promulgating authority throughout the regulatory process and utilized the expertise of – among others – the Canine Health Board to answer questions and concerns expressed by commentators.

3. Public Interest: The language of the preamble to the final-form regulation does reflect the overall language of each section of the regulation and the rationale for that language and any changes made to the original language of the proposed regulation.

Comments: Specific by Section:

1. Section 28a.1. Definitions. - Reasonableness; Possible conflict with other regulations; Implementation procedure; Clarity.

The definition of "excessive light" is vague. There is no indication of what levels and types of light would be excessive or cause harm or discomfort to dogs. The Department needs to clarify the purpose and intent of this definition and its related provision at Section 28a.3(I)(iii). Depending on how this term is defined, interpreted or applied, Sections 28a.3(I)(i) and (ii), relating to dogs' required exposure to natural light, may be in conflict with Section 28a.3(I)(iii) if natural sunlight is determined to be excessive. If the intent is that primary enclosures should provide shade from direct light regardless of whether it is natural or artificial, then such a statement should be included in the final-form regulation and this definition could be deleted.

RESPONSE

The Department has provided a detailed definition of "Excessive light." The added detail is based upon discussions with members of the Canine Health Board (Board) and research undertaken by Dr. Karen Overall (who is a member of the Board). The research and citation is that light of 130-270 lux above the light intensity under which an animal was raised damages retinas in albino rats. Albino rats are actually a good model for dogs because of the genetics of coat color and tapetal color. Dogs, especially those with complex color patterns, do not have the same pigmented retinas that we are accustomed to seeing in humans. The reference for this discussion is: Guide for the Care and Use of Laboratory Animals, Institute of Laboratory animal Resources, Commission on Life Science, National Research Council, National academy Press, Washington, DC, Chapter 2: Animal Environment, Housing, and Management, page 35. (http://www.nap.edu/readingroom/books/labrats/).The original reference is: Semple-Rowland, SL, Dawson WW. 1987. Retinal cyclic light damage threshold for albino rats. Lab. Anim. Sci. 37(3):289-298. Only an abstract, Attached as Exhibit A, is readily available.

Note: The regulations set forth light parameters in footcandles. One footcandle is equal to 10.467 lux. Lux and footcandles are different units of the same quantity and therefore it is perfectly valid to convert footcandles to lux or lux to footcandles. A footcandle conveys the illuminance cast on a surface by a one-candela source one foot away.

2. **Section 28a.2. Ventilation. - Statutory authority; Fiscal impact; Need; Reasonableness; Consistency with statute; Feasibility; Implementation procedure.**

a. Ambient air temperature

(i) Please explain the authority for the Department to require, in Paragraph (1), that the ambient air temperature be kept below 85°F. Section 207(h)(7) of the Law reads: "The Canine Health Board shall determine auxiliary ventilation to be provided if the ambient air temperature is 85 degrees F or higher." Furthermore, Senator Brubaker expresses concern that the definition of "mechanical ventilation" is "subjective enough that an inspector may have the ability to demand air conditioning." While the Department has the authority to require mechanical ventilation when the temperature goes above 85 degrees, the Senator asserts that the Department does not have the authority to require temperature reduction. We agree. Based upon a meeting with Department staff, we understand that air conditioning was not intended to be required by this proposed regulation. This provision should be amended in the final-form regulation to clearly state the Department's intent.

(ii) Also, what is the Department's authority to require dogs to be removed from a facility when the ambient air temperature goes above 85 degrees?

(iii) Finally, numerous commentators assert that there are situations where it is important for the ambient air temperature to be well above 85 degrees in certain portions of a kennel. For instance, numerous commentators indicated that newborn puppies cannot regulate their own body temperature until they are 10-14 days old and need ambient air temperatures in the mid 90s. However, this proposed regulation appears to prohibit the necessary temperatures in this circumstance. The Department should add a provision that would address these concerns.

b. Recirculation of air

Subsection (8)(i) requires a kennel to " ... provide between 8-20 air changes of 100% fresh air per hour .... " (Emphasis added.) However, Subsection (11) requires a specific type of air filter "when employing mechanical means of ventilation and re-circulating air .... " (Emphasis added.) It is unclear how a kennel would be able to re-circulate air, while using 100% fresh air for its air changes. These provisions appear to conflict with one another. The Department should clearly indicate how these provisions work together. If they do conflict, these provisions should be amended in the final-form regulation to reflect the Department's intent with regard to the circulation of air.

In addition, compliance with the requirement for" 100% fresh air" in the air changes could be prohibitively expensive. We question the fiscal impact and feasibility of this requirement.

c. Paragraphs (2) and (3)

Commentators, including the Pennsylvania Veterinary Medical Association, state that the humidity levels established in this proposed regulation are not always attainable, unless the kennel is hermetically sealed. They further state that these humidity levels required by the regulation may not necessarily be the most beneficial to the dogs. The Department should justify how these humidity levels can reasonably be attained and how these are the best levels for the benefit of dogs.

d. Paragraph (4)

Commentators assert that the ammonia levels required in Subsection (4) are too difficult to achieve and the technology for monitoring ammonia at this level does not exist. How did the Department arrive at the 10 ppm requirement for ammonia? How is this level achievable for kennels, in light of commentators' assertions that it is extremely difficult to monitor it at this level?

e. Paragraph (5)

This paragraph establishes requirements with regard to carbon monoxide, including the installation of carbon monoxide detectors. Senator Brubaker and the Representatives' comments both assert that the authority to establish these requirements is lacking and the entire paragraph should be deleted. The Department should set forth its authority to require carbon monoxide monitoring or it should delete these provisions. Similar concerns apply to Paragraphs (7) (relating to particulate matter) and (10) (relating to odor, stale air, moisture condensation or lack of air flow).

f. Paragraph (6)

This paragraph requires the kennel to contact the Bureau of Dog Law "in the event of a mechanical system malfunction." This provision lacks clarity. First, in what time frame should this contact be made? Second, how should a kennel owner contact the Bureau if a malfunction occurs during the night or weekend when the Bureau is not open? Will the Bureau establish a 24-hour contact number? These items should be clarified and set forth in the final-form regulation.

g. Paragraph (8)

The Representatives' comments raised several questions with regard to this paragraph. These questions include calculation methods and several clarity concerns. We will evaluate the Department's response to these questions in our consideration of whether the final-form regulation is in the public interest.

h. Subparagraph (8)(v)

This subparagraph states that the "Department may hire or consult with an engineer to recommend improvements be made to kennels to meet compliance .... " Senator Brubaker and the Representatives' comments both assert that the Department is not authorized to

hire or consult with an engineer to inspect kennels. They further state that only State Dog Wardens and employees of the Department are authorized to inspect kennels and enforce provisions of the Law. The Department should state its authority to allow engineers to inspect a kennel under this subparagraph, or this provision should be deleted.

i. Paragraph (9)

This paragraph lists several conditions that are associated with poor ventilation. However, numerous commentators indicate that poor ventilation is not the only cause of these conditions. The Department should clearly explain why it is appropriate to tie these symptoms to poor ventilation or this subsection should be deleted.

RESPONSES

a. (i) A definition is not a substantive provision of an act or regulation. The definition is only to add clarity to the substantive provisions of an act or regulation. There is no provision within the final-form regulation that requires air conditioning. Air condition is allowed and may be utilized to both cool and dehumidify, but it is not required by any substantive provision of the regulation. Auxiliary ventilation and humidity are the controlled and controlling factors when temperatures in the kennel and kennel housing facility rise above 85 degrees Fahrenheit.

a. (ii) The Department has deleted from the final-form regulation the condition that dogs be removed from a facility when the ambient air temperature goes above 85 degrees.

a. (iii) The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations. The Department does not believe it should set a standard that would be in absolute conflict with the temperature requirements of the Federal Code of Regulations, and in fact would be less stringent than the Federal Code of Regulations. Since it has been asserted by the General Assembly and this Commission, that the Department can not require temperatures within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and

welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C and response c below). The final-form regulation sets standards for humidity based on heat index values and the use of auxiliary ventilation. The auxiliary ventilation techniques are techniques currently employed in kennels. This information was gathered from an AKC Senior Breed Field Representative and the Department and reviewed by engineers. Nothing in the final-form regulation requires the reduction of temperature to a level of 85 degrees Fahrenheit or the use of air conditioning.

b. The final-form regulation no longer requires 100% fresh air circulation. After consultation with architects and engineers – that design and build dog kennels and research kennels - and discussions with veterinarians, including Department and Canine Health Board veterinarians, and discussions with animal scientists, such as Dr. Kephart at The Pennsylvania State University, the Department believes that proper and normal animal husbandry practices for dogs confined in kennels dictates that air can and should be re-circulated and filtered. The discussions led to a general consensus that the proper "minimum" amount of "fresh air" circulation should be thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The use of tunnel ventilation is costly and does not allow for proper control of either temperature or humidity levels. In addition, it would not allow kennels and kennel housing facilities to attain the proper heat index values on hot, humid summer days. Costs estimates on installing and operating the minimal and rudimentary air recirculation/ventilation systems that would be necessary to meet the ventilation, humidity, ammonia and carbon monoxide requirements of the final-form regulations were also obtained from architects and engineers that design and build kennel facilities. Those cost estimates are set forth in the regulatory analysis form that accompanies the final-form regulation.

c. It should be noted that although the PVMA makes the statements and assertions related to humidity levels, it offers no research or justifications for those statements. The PVMA is certainly in the position to have offered the basis for their comments, but no engineering standards or other data were offered to justify the comment that the humidity levels established by the proposed regulations were unattainable. In contrast, the Department has consulted with engineers and architects that build and design kennel buildings for such use as humane societies, boarding kennels and research kennels. Those consultations have led the Department to the conclusion that the humidity levels established by the final-form regulations are in-use, even in buildings with access to outdoor runs, and attainable.

With regard to the levels established for animal health reasons, again in contrast to the unsupported comments, the Department consulted with engineers and architects that design and build dog kennels, had discussions with veterinarians - including Department and Canine Health Board veterinarians - and with animal scientists, such as Dr. Kephart at the Pennsylvania State University.

The results of those discussions were that a humidity range of thirty to seventy percent (30%-70%), when temperatures are at 85 degrees Fahrenheit or below, are normal animal husbandry practices and are proper levels to control for disease and assure the health, safety and welfare of dogs confined in kennels. Many of these experts in fact suggested an even narrower range of humidity levels that would have capped out at sixty percent (60%) humidity. The Department, however, chose to utilize the minimum standards.

In addition, with no temperature control, the Department sought to ascertain the proper humidity levels and auxiliary ventilations standards that would assure the health, safety and welfare of dogs confined to kennels when temperatures rise above 85 degrees Fahrenheit. Kennel owners and others have asserted in their comments that their kennel buildings can be made to "feel cooler" through the use of additional air circulation/ventilation or the mere increase of fan speed and the amount of air being pulled through the kennel building. However, science does not support such a comment or conclusion.

The Department, with the assistance of veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture on the tongue of the dog has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and therefore the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values, is 95-98 HI. However, this is tempered by the

Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by in 1998 by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine and first published in "Recognizing and Reporting Animal Abuse: A Veterinarian's Guide." This widely-used scale, one of several canine assessment tools focused on consequences for the dog, indicates that, even with water and shade available as in a commercial kennel setting, a potentially unsafe situation develops above a 90 degree F temperature, especially for brachycephalic, obese or elderly dogs, as well as dogs under 6 months of age. Although this regulation is based on heat index, regulates relative humidity rather than temperature, and a temperature of over 90 degrees F would be permitted if combined with a relative humidity that would result in a HI of no more than 90, the inclusion of the TACC Weather Safety Scale as a basis for the regulation emphasizes that the standard being set goes beyond survivability to minimize adverse heat-related consequences for dogs in commercial kennels. The survivability study and the TACC Weather Safety Scale are generally acknowledged to be the only two scholarly resources that give specific heat-related guidance applicable to canines.

The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI and consideration of the TACC Weather Safety Scale.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for heat indexes above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

d. The Department consulted with engineers and architects related to the ammonia levels established by the proposed regulation and with regard to the ability to measure ammonia levels. In addition, the Department consulted with veterinarians and animal scientists and did its own research with regard to commonly accepted levels of ammonia in animal operations such as swine operations. The engineers and architects all believed that if kennels were properly ventilated and achieved the air circulation values established in the regulations, then ammonia levels should not be a problem in the kennel.

The Act, however, requires the Department to establish the proper ammonia levels for dogs housed in kennels. Discussions with veterinarians and research done by veterinarians on the Canine Health Board affirm that ammonia levels of 20 part per million or higher will cause respiratory and eye irritation and problems in animals. The veterinarians suggested the levels be set at some point below 20 parts per million and the consensus was that a level of 15 parts per million would both account for proper animal health and welfare and would be measurable.

The Department's research also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel. The Act establishes parameters that do not allow dogs in kennels to be housed in any primary enclosure that is more than 48 inches high for dogs under twelve weeks of age or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department believes ammonia measurements should be taken at the height of the dogs.

e. The Department agrees with the Canine Health Board, that carbon monoxide levels should at the very least be monitored for safety purposes and to assure proper ventilation and air circulation is occurring within a kennel that utilizes a carbon based form of heating or mechanical ventilation. One of the most acutely toxic indoor air contaminants is carbon monoxide (CO), a colorless, odorless gas that is a byproduct of incomplete combustion of fossil fuels. Common sources of carbon monoxide are tobacco smoke, space heaters using fossil fuels, defective central heating furnaces and automobile exhaust. By depriving the brain of oxygen, high levels of carbon monoxide can lead to nausea, unconsciousness and death. According to the American Conference of Governmental Industrial Hygienists (ACGIH), the time-weighted average (TWA) limit for carbon monoxide (630-08-0) is 25 ppm.

The engineers consulted by the Department believe that carbon monoxide levels will take care of themselves if the kennel is properly ventilated and meets the air exchange rate criteria of the regulations. However, the engineers and animal scientists acknowledge and agree that carbon monoxide gas can build up in any enclosed building where carbon based mechanical ventilation or heating equipment is in use. Carbon monoxide is colorless and odorless and is deadly. The regulations only require that carbon monoxide detectors be installed. If carbon monoxide levels rise to the point the detectors are triggered the kennel has a problem with ventilation or air exchange in that part of the kennel housing facility and needs to take action to assure the health, safety and welfare of the dogs housed in that area of the kennel. Section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)) states in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and prevent moisture condensation ...the appropriate ventilation...ranges shall be determined by the Canine Health Board. One of the purposes of ventilation is to exchange or re-circulate air in a manner that removes pathogens, including carbon monoxide and replenishes oxygen. The regulatory requirement is inexpensive and necessary to assure the health, safety and welfare of dogs housed in kennels, which is the

general overall duty and authority of the Canine Health Board under section 221(f) of the Act (3 P.S. § 459-221(f)).

While the Department believes the Canine Health Board had and the Department has the authority and ability to regulate air flow, stale air, odor and certainly moisture content – all of which are part of ventilation or humidity control – the Department believes these issues have been addressed in the final-form regulation by setting proper ventilation, humidity and auxiliary ventilation standards. Therefore, the Department has removed the language set forth in subsection 28a.2 (10) from the final-form regulation.

f. The language of paragraph (6) of section 28a.2 of the proposed regulation has been modified in the final-form regulation. The modified language is now set forth in section 28a.2(g) of the final-form regulation and sets forth the duties and requirements of the kennel owner in the event of a mechanical system malfunction. The kennel owner is still required to contact the Department, but the requirements are set forth in specific detail regarding the timing of the contact and the information the kennel owner is required to give to the Department. The kennel owner is no longer required to consult with the department regarding the steps to be taken to correct the problem. The kennel owner is free and required to contact the proper persons to correct the problem in as expedient a manner as possible and must notify the Department of the steps taken to correct the problem.

g. In general, paragraph (8) of section 28a.2 the proposed regulations has been deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsections (b) and (f)(1) and (2) of section 28a.2 of the final form regulation. Additional, standards related to circulation of the air, minimum fresh air rates and filtration have been established by subsections (f)(3)-(6) of the final-form regulation. The provisions of subsection (b) of the final-form regulation now entail information, including certification, the Department requires of the kennel owner. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation. Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and

in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. This was done after consultations with engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility.

h. The requirements set forth in section 28a.2(8)(v) of the proposed regulation – regarding the requirement that the Department – not the kennel owner – consult an engineer and recommend improvement to meet compliance standards has been removed from the final-form regulation. Kennel owners are responsible for compliance and they must take appropriate steps – including contacting the proper experts – if there is a mechanical malfunction or compliance standard issue.

i. Section 28a.2(9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress has been modified in the final-form regulations (See section 28a.2(h) of the final-form regulation. The number and type of conditions in dogs that may denote poor ventilation has been reduced. In addition, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

3. **Section 28a.3. Lighting. - Statutory authority; Fiscal impact; Need; Reasonableness; Consistency with statute; Feasibility; Implementation procedure; Clarity.**

a. Natural light

Senator Brubaker and the Representatives' comments assert that any reference to natural light must be removed from this regulation, including Subparagraphs (l)(i), (ii) and (v). They point out that the Law specifically states, at Section 207(h)(8), that dogs should be provided with natural or artificial light. What is the Department's authority to require a kennel to provide both natural and artificial light to its dogs? Another question is why would it be necessary to have natural light inside the kennels if the dogs have access to outdoor exercise areas? These should be clearly explained in the final-form regulation.

b. Excessive lighting

Subsection (l)(ii) sets a minimum amount of external windows and skylights in order to aid in meeting the lighting standards in this section. However, Subsection (l)(iii) states, "Dogs shall be protected from excessive light" (Emphasis added). Excessive light is defined as "direct, undiffused light, from either the sun or a lighting fixture placed in a manner that the light is shining directly into a primary enclosure of a dog." As noted earlier, it appears that these two provisions conflict with each other. A dog is not to be exposed to "excessive light," yet a kennel will be required to allow sunlight to beam into the rooms where dogs are housed. The Department should clearly explain its intent and amend the regulation accordingly.

c. "Full spectrum lighting"

Senator Brubaker suggests that this term, used in Subsections (l)(vi) and (2)(i), be defined. We agree.

d. Subparagraph (l)(ii)

The first sentence of this subparagraph is long and confusing. There are two questions. First, regarding the phrases "within each room where dogs are housed may not be less than 8% of the floor space," it is unclear which floor space is being referenced. Is it the total floor space of each room or the whole kennel? Second, does the Department intend to apply the "external opening" requirement to existing kennels? If so, the Department should clearly explain its authority to retroactively apply this standard to kennels that were in place and operating prior to the effective date of this regulation. The Department should also examine the fiscal impact of this requirement.

e. Subparagraph (2)(i)

This subsection requires the kennel to provide "full spectrum lighting between 50-80 foot candles" during the daytime. Commentators have expressed concern that this would be too bright for the dogs. Why must lighting be 50-80 foot candles during the day? How did the Department determine this was reasonable? Is this requirement based on animal husbandry practices, as required by the Law?

f. Subparagraph (2)(iv)

Under this subsection, lighting sources "may not have a visible flicker." It is not clear how the elimination of flickering lights will benefit dogs. Further, Senator Brubaker asserts that the prohibition of a "visible flicker" is not in the scope of the Law and should be removed from this regulation. The Department should explain its authority for banning lighting with a "visible flicker" or delete the provision. If the Department does provide adequate statutory authority, it should explain how the prohibition of flickering lights benefits dogs.

RESPONSES

a. The final-form regulation deletes the requirement for kennels to provide both artificial and natural light. The language now mirrors the language of the statute with regard to providing light through natural or artificial light. The final-form regulation sets general standards that apply to lighting whether provided by artificial or natural light and also sets forth standards that apply specifically to either natural or artificially provided light. The final-form regulation does require some natural lighting source in kennels that do not provide outdoor exercise. It requires the light to reach each dog, but does not require the window or skylight to be directly over or in front of the primary enclosure. The Department agrees, from its research into the heat index that such exposure may not only violate the provisions of the lighting section related to "excessive light", but would run the risk of increasing temperatures – on a hot day – within the primary enclosure to levels that would be detrimental to the dogs' health. However, research done by the Canine Health Board indicates the exposure to natural light is vital to the health and welfare of dogs. In addition, this requirement is congruent with the requirement that kennels buildings have operational windows, doors and other openings that can be opened in the event of a mechanical malfunction of the ventilation equipment. It should not be an added burden or cost on the kennel.

b. The final-form regulation no longer sets or requires a minimum amount of external windows and skylights in order to aid in meeting the lighting standards of the regulations. Light may be provided by artificial or natural light, as set forth, in the answer to part a. above. With regard to clarity, excessive light has been further defined. However, it should be understood the standard that light must not be "excessive" and must be "uniformly diffused" is a standard that is set forth in the Act itself (3 P.S. § 459-207(h)(8)) and kennels regulated by the United States Department of Agriculture (USDA) must already comply with under the Animal Welfare Act regulations, sections 3.2 and 3.3 (9 C.F.R. §§ 3.2(c) and 3.3(c)).

Kennel owners are required to uniformly diffuse light throughout the animal facility and primary enclosures must be placed so as to protect the dogs from excessive light. Therefore, these standards are already in operation to protect the health and welfare of dogs in kennels regulated by the USDA. There is no reason the Commonwealth should not employ these same long standing standards. There should be no additional expense involved for any kennel currently regulated by the USDA and the kennel owners should readily understand the requirements to be met. As stated previously, the Department has also further clarified the definition of "excessive light" in the final-form regulation.

c. Full spectrum lighting is a type of lighting system that is available. It is the type of lighting system that most readily mirrors the spectrum of light provided by the sun. The Department has defined full spectrum lighting in the final-form regulation.

d. This requirement has been eliminated from the final-form regulation. The final-form regulation no longer sets or requires a minimum amount of external windows and skylights in order to aid in meeting the lighting standards of the regulations. The sixteen or so kennels that received approval for indoor exercise only, will still most likely provide some light through external doors and openings. Because such external openings must be present in the kennel to allow air flow and ventilation, especially if a ventilation system malfunctions. With regard to authority to require external doors and openings in a kennel building, the Department, in this regulation, requires external openings to allow for ventilation if the mechanical ventilation system fails.

With regard to the fiscal impact of the regulation on those sixteen kennels, the Department is not aware of and does not collect or have data regarding how many kennels may have no external openings. It would be unlikely that there are many, if any, kennels with no external openings, since they are already required to provide proper ventilation under the Department's current regulations. Many kennels currently provide ventilation by merely opening doors and windows and utilizing a fan(s).

e. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with an Engineer who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-

60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

f. The Department has modified the language of this provision to better clarify its intent. The word "flicker" is no longer set forth in the regulation. Instead, the focus is on the lighting being kept in good repair. The language will actually effectuate the intent of the Canine Health Board. In speaking to members of the Canine Health Board, it became clear the intent of the Canine Health Board was to assure the lighting fixtures were kept in good repair and were functioning properly. The reference to a "visible flicker" was important to the veterinarians on the Canine Health Board, because they assert that flickering lights – such as the flickering caused by defective ballast – can result in seizures in some dogs. Therefore, in order to assure the health, safety and welfare of the dogs through proper animal husbandry related to lighting, it is important that artificial lighting sources within the kennel building be kept in good repair and not result in problems such as a "flickering" light source.

4. Section 28a.4. Flooring. - Consistency with statute; Reasonableness; Clarity.

a. Identifiable options for flooring in primary enclosures

Section 207(i)(3) of the Law (3 P.S. § 459-207(i)(3)) provides detailed specifications for the required flooring in primary enclosures. Section 207(i)(3)(iii) states that "additional flooring options that meet the provisions of subparagraph (i) may be approved by the Canine Health Board." Given the statute, the structure and provisions of this section are confusing. In order to clearly delineate the primary enclosure flooring options, the reference to the statutory requirements in Section 207(i)(3) of the Law should be listed by itself in one subsection as the initial flooring option provided by the statute. A second subsection could set forth the requirements for the option of solid flooring. In this format, provisions such as those in Subsections (2) and (3) of this proposed regulation would be moved to be subparagraphs in the second subsection on solid floors.

This section should also include a process and procedure whereby kennels could submit proposals for new flooring options to the Department and Board for review and approval in the future. This would invite technological innovation which could reduce costs while improving the health and welfare of dogs. It would also allow for the full realization of the statutory provision allowing for additional floor options.

b. Vague terms and phrases

i. In Paragraph (4), what is considered "high thermal conductance"? The intent is unclear. Another concern is in Paragraph (6). Who would determine if a floor surface provides "the dogs with good footing"? How will such a standard be measured and enforced? The Department needs to re-write these subsections as requirements that can be easily measured, assessed and enforced, or delete them from the final-form regulation.

ii. Paragraph (7) is also vague and it is unnecessary. The insertion of the words "and may be subject to microbial assessment" serves no purpose because no standard is established. The statutory basis for this vague phrase should be explained. As written, this is non-regulatory language because the regulated community is not notified when a "microbial assessment" will be required, how it will be performed, or what standard will be enforced. This should be set forth in the final-form regulation or this phrase should be deleted.

RESPONSES

a. The Department has taken the Commissions suggestion and restructured the section related to flooring, section 28a.8 of the final-form regulation. In restructuring this section the Department felt it would be even more helpful to the regulated community if all the flooring standards established by the Act, were also delineated in the regulation. Therefore, the Department established two new subsections which reiterate the language contained in sections 207(i)(3)(i)(related to general flooring standards) and (i)(3)(ii)(related to slatted flooring) of the Act (3 P.S. §§ 459-207(i)(3)(i) and (ii)). In addition, the Department had to then modify the language of the proposed regulations which sought to espouse the additional flooring options. In doing so, the Department established subsection 28a.8(c), which sets forth the language of the statute allowing the Canine Health Board to approve additional flooring options, and delineates the authority and duty of the Canine Health Board to assure the additional flooring standards adhere to the general requirements established by section 207(i)(3)(i) of the Act and that additional flooring options, based on proper animal husbandry practices, provide for the health, safety and welfare of the dogs confined to these kennels, as required by section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 459-221(f)). The Department included the standards set by the Canine Health Board in the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department veterinarians and some Canine Health Board veterinarians, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision,

subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices.

b.i. The Department rewrote both subsection (4), which is now subsection (3) in the final-form regulation, and subsection (6) in a manner that further clarifies and adds objectivity to the review. For instance, subsection (3) makes it clear the Department does not allow a flooring type that could be heated through mere exposure to direct sunlight or lighting source to a temperature that would be harmful to the dogs confined to that surface. With regard to subsection (6), the Department added language to define and clarify what was referred to in the proposed regulation as "good footing." That subsection now makes it clear the that the flooring surface must not allow the dog to slip or loose traction, which could then result in injury to the dog.

b.ii. In the final-form regulation, the Department has modified the language of what is now subsection 28a.8(c)(7), which was 28a.4(7) of the proposed regulations, by specifically removing the language "and may be subject to microbial assessment" and replacing that language with clear and distinct language regarding the ability of the flooring to be cleaned and sanitized in concurrence with the Act and current Department regulations.

5. Miscellaneous - Reasonableness; Clarity.

a. Non-regulatory language

i. The first sentences in Sections 28a.2, 28a.3 and 28a.4 are non-regulatory language and should be deleted. For example, the first sentence in Section 28a.2 reads: "Proper ventilation helps ensure that dogs are healthy and not stressed." This is not a prescriptive standard, directive or requirement, and therefore, it serves no purpose in the text of a regulation. It is a supportive statement which belongs in the narrative in the Preamble of a rule making.

ii. The term "satisfactory" in Section 28a.2(8)(iv) also is non-regulatory language and should be amended.

b. Applicable codes

Sections 28a.2(12), 28a.3(3) and 28a.4(5) in this proposed regulation state that the ventilation systems, lighting and floors and drains "must comply with the latest edition of applicable codes." To which codes are these subsections referring? In order to properly notify the regulated community of the standards required for compliance, the final-form regulation should specifically identify the "applicable codes."

RESPONSES

a.i. The Department agrees with the Commissions' comment and has removed the non-regulatory language from those sections of the final-form regulation.

a.ii. The language of that subsection has been removed from the final-form regulation.

b. The Department has removed all language related to "applicable codes" from the final-form regulation. Any applicable Federal, Commonwealth or local codes will be enforced by the agency with such authority. The Department does not have authority to enforce such codes and has removed the reference to those codes from the final-form regulation.

LEGISLATIVE COMMENTS

I. SENATOR MIKE BRUBAKER – 36th DISTRICT

Commentator:

Submitted by: Honorable Mike Brubaker, State Senator, 36th District
Chairman Senate Agriculture & Rural Affairs Committee
The State Capitol
Senate Box 203036
Harrisburg, PA 17120-3036

Comment: General

This letter shall serve as my comments, as Chair of the Senate Agriculture & Rural Affairs Committee, on the Canine Health Board Standards for Commercial Kennels, as published in the Pennsylvania Bulletin on Saturday, September 12, 2009. These comments are general in nature and are not comprehensive. I have not commented on the actual ventilation, humidity, ammonia or lighting ranges established by the Canine Health Board (CHB), as I am not an expert in this area; I would encourage close scrutiny of these portions of the proposed regulation and strong consideration given to technical experts as well as those who have extensive experience operating kennels that have consistently produced healthy dogs.

RESPONSE

In redrafting the final-form regulation and answering comments, the Department, in addition to doing its own research, contacted and replied upon experts in the fields of engineering and architecture, all of whom design or build or both, kennel facilities around the country and in Pennsylvania. In addition, the Department consulted with its own veterinarians and veterinary members of the Canine Health Board, animal scientists from the Pennsylvania State University, a former Senior Breeder Field Representative from the AKC, and met with a group representing the regulated community and received input from their members. The

Department utilized this broad base of expertise and common field knowledge, as well as research done by these experts and the Department itself (some of which is attached to this comment and response document) to draft the final-form regulations.

Comments: Scope of Authority and Clarity

I understand that the CHB was under a tremendous time constraint and is voluntary in nature, and I commend each of the members of the Board for his dedication to the improvement of the lives of dogs kept in breeding operations in the Commonwealth. In numerous sections of the Guidelines, however, the CHB has exceeded their mandate under Act 225 of 1982. In addition, I do not believe the proposed regulations provide the clarity necessary for proper adherence to or enforcement of the law. The following are some of the major concerns I wish to identify:

1. Summary of Major Features:

it is not appropriate for comments on the proposed regulation to be directed to the Canine Health Board as commentators are directed under the *Public Comment Period* section; as it states in section 221 (Canine Health Board) (g) of Act 225 of 1982, " ... the department shall promulgate the temporary guidelines as a regulation concurrently with publication in the Pennsylvania Bulletin." Although the regulation was not published concurrently as a regulation by the department, as was required by the law, it was the legislative intent for the department to be in charge of the regulatory process, to develop the comment response document and to make any and all revisions as necessary to the proposed regulation. The CHB is not a required part of the regulatory process.

2. Section 28a.2, Ventilation:

The first sentence "Proper ventilation helps ensure that dogs are healthy and are not stressed." serves no purpose other than commentary, and should be removed. Further, the section requires mechanical heating and cooling systems in each kennel and while mechanical ventilation is defined, I am concerned that it is subjective enough that an inspector may have the ability to demand air conditioning. Although the CHB has the authority to establish "auxiliary ventilation to be provided if the ambient temperature is 85 degrees F or higher," it does not have the authority to require temperature reduction.

In the writing of this section of the law, the legislative intent was to allow for means of ventilation that did not require the use of air conditioning, and thus the CHB was charged with determining appropriate methods of ventilation to be used when the temperature exceeded 85 degrees F.

3. Section 28a.2(1), Ventilation:

The CHB does not have the authority to establish a maximum temperature. As is established in §207(h)(7) of Act 225, the CHB was to determine "auxiliary ventilation to be provided if the ambient temperature is 85 degrees F or higher" but the law does not require that the temperature be kept below 86 degrees. Further, the CHB does not have the authority to require removal of dogs from a portion of the facility if the ambient temperature rises above 85 degrees. This paragraph should be removed.

4. Section 28a.2(5), Ventilation:

The CHB is not authorized under the law to establish carbon monoxide levels in kennels, nor are they authorized to require the installation and maintenance of carbon monoxide detectors. This paragraph should be removed.

5. Section 28a.2(6), Ventilation:
The requirement that a "kennel contact" the BDLE before acting on a mechanical failure is impractical and not in the best interest of the dogs (ie: what if the failure takes place on a Friday evening?). From a grammatical standpoint, the "kennel" will not contact the bureau. This paragraph should be removed.

6. Section 28a.2(7), Ventilation:
The CHB is not authorized under the law to establish requirements for particulate matter. This paragraph should be removed.

7. Section 28a.2(8)(iv), Ventilation:
This section states "If a computation or measurement under subparagraph 8(iii) *is not satisfactory* the kennel owner shall take the necessary steps to meet the requirements." (emphasis added). The phrase "is not satisfactory" is subjective and should be removed or changed.

8. Section 28a.2(8)(v), Ventilation:
Permits the Department of Agriculture to hire or consult with an engineer to inspect kennels. This is not within the authority granted the CHB and according to §218(a) of Act 225, only State dog wardens and employees of the department are authorized to inspect kennels and enforce the provisions of the Act. This paragraph should be removed.

9. Section 28a.2(9), Ventilation:
The CHB is not authorized under the law to establish conditions or signs that dogs may not exhibit; the conditions listed are very subjective and have numerous causes, only one of the many causes would be poor ventilation. This paragraph should be removed.

10. Section 28a.2(10), Ventilation:
The CHB is not authorized under the law to establish restrictions on odor, stale air, moisture condensation or lack of air flow. Further, it is unclear what is meant by "excessive dog odor, other noxious odors, stale air" and "lack of air flow." These provisions are unenforceable and do not provide clear requirements for kennel owners to comply with. This paragraph should be removed.

11. Section 28a.2(11), Ventilation:
The provision for only one type of filter is unreasonably restrictive. This paragraph should be removed.

12. Section 28a.2(12), Ventilation:
The CHB is not authorized under the law to require the ventilation system be in compliance with "the latest edition of applicable codes" and further, it is unclear what codes are being referenced and whose responsibility it is to ensure that the ventilation system is in compliance. This paragraph should be removed.

13. Section 28a.3, Lighting:
The first sentence of this section: "Natural lighting is important to the development of dogs; each kennel shall have a mix of natural and artificial light, provided in the following means:" is part commentary, is not supported by the law, and should be removed.

14. Section 28a.3(1), Lighting:
The requirement for a natural diurnal light cycle is in direct contradiction to the law at §207(h)(8), which states "Animal areas must be provided a regular diurnal lighting cycle of either natural **or** artificial light" (emphasis added). Any reference to a requirement for natural lighting must be removed from the proposed regulation, including §28a.3(1)(i), (ii) and (v).

15. Section 28a.3(1)(iv), Lighting:
Only "appropriate lighting ranges" for "housing facilities" (§207(h)(8) of Act 225) are to be determined by the CHB; therefore, the requirement for shading of the outdoor exercise area, subsection (iv), area must be removed, as it is outside the scope of the CHB's authority.

16. Section 28a.3(1)(vi), Lighting:
Under (vi), "full spectrum lighting" is required; this term must be defined.

17. Section 28a.3(2)(i), Lighting:
Again, the term "full spectrum lighting" must be defined.

18. Section 28a.3(2)(iv), Lighting:
Prohibiting "a visible flicker" in an artificial light source is-not within the scope of the law, which is to establish "the appropriate lighting ranges .... " This paragraph should be removed.

19. Section 28a.3(2)(v), Lighting:
This provision, which prohibits light sources from being provided in a manner which allows the dog to touch a light, fixture, bulb, switch or cord, is outside the scope of the law, which is to establish "the appropriate lighting ranges .... " This paragraph should be removed.

20. Section 28a.4, Flooring:
The first sentence of this section: "Proper flooring is essential for normal behavior and proper orthopedic development of the dogs." is commentary, not appropriate, and should be removed.

21. Section 28a.4 (1), (2) and (3), Flooring:
The charge under this section of the law was to approve additional flooring options that meet the requirements of the law; solid flooring is approved under (1) and the language regarding drainage in (2) and (3) should be included in (1) so that we know it is in reference to drains in solid floors.

22. Section 28a.4(4), Flooring:
Prohibiting flooring options is not within the charge of the CHB. This paragraph should be removed in its entirety.

23. Section 28a.4(5), Flooring:
It is unclear what codes are being referenced and whose responsibility it is to ensure that the flooring and drains are in compliance.

24. Section 28a.4(6), Flooring:
Under this paragraph, the CHB is requiring that the surface of the flooring provide "good footing"; the term "good footing" is unclear and subjective, and goes beyond the scope of authority of the CHB. If it is the intent of the CHB to describe what types of solid flooring (which it approves under (1)) are appropriate, the description should be included under that same paragraph.

25. Section 28a.4(7), Flooring:
This section establishes cleaning requirements and states that the flooring "may be subject to microbial assessment." This statement is unclear and is beyond the scope of authority of the CHB; cleaning requirements are already established under the law. This paragraph should be removed in its entirety.

RESPONSES

1. The Department was the promulgating agency. As set forth in the Department's response to a similar comment received from the Independent Regulatory Commission, the Department under its authority at section 902 of the Dog law is the promulgating authority (3 P.S. §§ 459-902). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received and reviewed all comments submitted by the public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted with the Canine Health Board members, as well as, with Department veterinarians, architects, engineers, a regulated community group and animal scientists and did its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations. In general, the Department acted as the promulgating authority throughout the regulatory process and utilized the expertise of – among others – the Canine Health Board to answer questions and concerns expressed by commentators.

With regard to the comment that the Department was required to "...promulgate the temporary guidelines as a regulation concurrently with publication in the Pennsylvania Bulletin," the Pennsylvania Professional Dog Breeders Association litigated that very issue and Judge Rambo of the Federal Court for the Middle District of Pennsylvania found in favor of the Department. In order for the language of the statute to be implemented, the language would have had to intend that the Regulatory Review Act and the Commonwealth Documents Law were to be abrogated. In that case, the Guidelines would have been promulgated as regulations, without any public, legislative or Commission comment or review. The Federal Court did not believe that was the intent or plain meaning of the Act.

2. The first sentence of section 28a.2 of the proposed regulations has been removed from the final-form regulations. The definition of mechanical ventilation is not a substantive provision of the regulation. The substantive provisions of the regulation do not require the use of air conditioning and the final-form regulation does not require a reduction in temperature or for dogs to be removed if the temperature in a kennel rises above 85 degrees Fahrenheit. The final-form regulation, allows for air conditioning, but in no manner requires it. The final-form regulation seeks to add clarity to this and other issues by separating sections related to ventilation, auxiliary ventilation, humidity and ammonia levels and carbon monoxide detection. Nothing in any of these sections requires the use of air conditioning. The humidity level standards are based on scientific evidence and will effectively account for the health and safety of dogs housed in kennels. A more in depth response related to the humidity standards is set forth in the Department's answer to the Commission's comments (see Comment 2 - related to section 28a.2 - and the Department's responses to parts a.iii. and c. of that Comment, including the attached literature).

3. The substantive provisions of the regulation do not require the use of air conditioning and the final-form regulation does not require a reduction in temperature or for dogs to be removed if the temperature in a kennel rises above 85 degrees Fahrenheit. The final-form regulation, allows for air conditioning, but in no manner requires it or temperature reduction. The final-form regulation seeks to add clarity to this and other issues by separating sections related to ventilation, auxiliary ventilation, humidity and ammonia levels and carbon monoxide detection. The auxiliary ventilation provisions set forth several means of auxiliary ventilation that do not require air conditioning. The humidity provisions do not require air conditioning or temperature reduction, and are based on scientific studies and application. Nothing in any of these sections requires the use of air conditioning. The humidity level standards are based on scientific research and will effectively account for the health and safety of dogs housed in kennels. A more in depth response related to the humidity standards is set forth in the Department's answer to the Commission's comments (see Comment 2 - related to section 28a.2 - and the Department's responses to parts a.iii. and c. of that Comment, including the attached literature).

4. The common definition of ventilation, which is set forth in the final-form regulation, establishes the purposes for which ventilation is utilized and one of those purposes is to remove gases such as carbon dioxide and carbon monoxide. The Canine Health Board and the Department realize that some kennels heat the kennel with a

equipment that produces carbon monoxide, which is odorless and colorless and therefore is best measured or monitored by a device such as a carbon monoxide detector.

One of the most acutely toxic indoor air contaminants is carbon monoxide (CO), a colorless, odorless gas that is a byproduct of incomplete combustion of fossil fuels. Common sources of carbon monoxide are tobacco smoke, space heaters using fossil fuels, defective central heating furnaces and automobile exhaust. By depriving the brain of oxygen, high levels of carbon monoxide can lead to nausea, unconsciousness and death. According to the American Conference of Governmental Industrial Hygienists (ACGIH), the time-weighted average (TWA) limit for carbon monoxide (630-08-0) is 25 ppm.

The engineers the Department consulted believe that carbon monoxide levels will take care of themselves if the kennel is properly ventilated and meets the air exchange rate criteria of the regulations. However, the engineers and animal scientists consulted acknowledge and agree that carbon monoxide gas can build up in any enclosed building where carbon based mechanical ventilation or heating equipment is in use. Carbon monoxide is colorless and odorless and is deadly.

The final-form regulation only requires that carbon monoxide detectors be installed. If carbon monoxide levels rise to the point the detectors are triggered the kennel has a problem with ventilation or air exchange in that part of the kennel housing facility and needs to take action to assure the health, safety and welfare of the dogs housed in that area of the kennel. Section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)) states in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and prevent moisture condensation ...the appropriate ventilation...ranges shall be determined by the Canine Health Board. One of the purposes of ventilation is to exchange or re-circulate air in a manner that removes pathogens, including carbon monoxide and replenishes oxygen. The regulatory requirement is inexpensive and necessary to assure the health, safety and welfare of dogs housed in kennels, which is the general overall duty and authority of the Canine Health Board under section 221(f) of the Act (3 P.S. § 459-221(f)). The final-form regulation only requires the use of carbon monoxide detectors in kennels that heat with carbon monoxide producing equipment and does not require the measurement or set any specific standard for carbon monoxide levels. The kennel must merely install and maintain functional carbon monoxide detectors. This will account for the health of the dogs and the persons working in the kennel.

5. The final-form regulation addresses the issues set forth in this comment. First, the final-form regulation refers to the kennel "owner" and establishes clear and precise steps to be taken if there is a malfunction of the mechanical ventilation system. Those steps to be taken and the correction of the malfunction are incumbent upon the kennel owner, not the Department. The first step is for the kennel owner to take action to correct the malfunction. There is now clear direction with regard to the time period within which the kennel owner must contact the Department to report the malfunction and with regard to what the kennel owner must report to the Department. In addition, the kennel owner must contact a veterinarian, not the Department, to consult on the proper steps to be taken to protect the health and well being of the dogs during the time period of the malfunction.

6. The Department has removed this provision from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation requirements of the regulations were being met, particulate matter would not pose a problem in the kennel.

7. The language that appeared in subsection 28a.2 (8)(iv), has been removed from the final-form regulation.

8. The language that appeared in subsection 28a.2(8)(v), has been removed from the final-form regulation. Without regulations, the Department can still consult an engineer or other qualified individual if wardens are reporting problems or have issues they believe needs the review of an expert and can make suggestions to a kennel owner. The kennel owner, however, is the person responsible for making any decision to hire an engineer or appropriate expert to remedy any violations or unsatisfactory conditions at the kennel.

9. The language that appeared in subsection 28a.2(9) of the proposed regulations, is now subsection 28a.2(h) in the final form regulation. The Department has modified this provision in the final-form regulation. First, the Department shortened the list of illnesses and second, the Department clearly establishes that the illnesses or stressors are possible signs of poor or improper ventilation, air circulation, auxiliary ventilation or humidity levels. All issues related to and within the authority granted under the Statute. The recourse for finding these illnesses or stress is for the Department to take specific measurements and readings in the area of the kennel where dogs are exhibiting those signs in order to assure the kennel is in compliance with the ventilation and other requirements of the regulations. The illnesses or stresses listed were developed in consultation with veterinarians and are illnesses or stresses that can result from improper ventilation, auxiliary ventilation, air circulation or humidity, ammonia or carbon monoxide levels. For example, fungal and skin disease may denote improper humidity levels, matted eyes improper ammonia levels, heat distress and respiratory distress can be caused by improper ventilation, auxiliary ventilation, air circulation and humidity/heat index levels. The State dog warden would then check to see if such issues existed.

10. While the Department believes the Canine Health Board had and the Department has the authority and ability to regulate air flow, stale air, odor and certainly moisture content – all of which are part of ventilation or humidity control – the Department believes these issues have been addressed in the final-form regulation by setting proper ventilation, humidity and auxiliary ventilation standards. Therefore, the Department has removed the language set forth in subsection 28a.2(10) from the final-form regulation.

11. After consultation with engineers and architects the Department broadened the language of what was subsection 28a.2 (11) of the proposed regulations. The new language appears at subsection 28a.2 (b)(5) of the final-form regulation and simply states any filter must have a minimum MERV value of 8 or higher. The kennel owner can choose a variety of filter types and brands, so long as they meet a MERV value of at least 8.

12. The language that appeared in subsection 28a.2 (12) has been removed from the final-form regulation. In fact, all references to "the latest edition of applicable codes" has been removed from the final-form regulations. As stated in the answer to a similar question from the Independent Regulatory Review Commission, the Department believes "applicable codes" can and will be enforced by the entities that have the specific authority to draft and enforce those codes.

13. The language that was contained in the first sentence of section 28a.3 (related to lighting), which is section 28a.7 of the final-form regulation has been removed from the final-form regulation.

14. The Department has removed the requirement for both natural and artificial light from the final-form regulation, with one exception. In the case of a kennel that has received permission to house the dogs inside the kennel on a permanent basis, including exercising the dogs indoors, the Department still requires there by external openings and doors that provide sunlight and can be opened in the case of a mechanical ventilation malfunction.

In addition, the need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight. The Department does not agree however, that all reference to natural light be removed from the final-form regulation. Natural sunlight is an alternative that is specifically allowed by the Act and can be utilized in conjunction with artificial lighting and thereby lower operation and maintenance costs – both for lighting and heating a kennel. In the final-form regulation the Department has set forth general criteria required of both lighting sources and have set forth specific criteria – that in addition to the general criteria – apply to either natural lighting or artificial lighting.

15. The requirements that were in subsection 28a.3 (i)(iv) related to shading of the outdoor exercise area have been removed from the final-form regulation.

16. The requirement term "Full spectrum lighting" has been defined in the final-form regulation. From the research done by the Department, some form of full spectrum lighting has been available and in use since the 1930's, so it is not a new or novel type of lighting and it is readily available from various manufacturers.

17. The requirement term "Full spectrum lighting" has been defined in the final-form regulation.

18. The Department has modified the language of what was subsection 28a.3 (2)(iv) of the proposed regulation, in a manner to better clarify its intent. The word "flicker" is no longer set forth in the final-form regulation. The modified language appears in subsection 28a.7 (b)(2)(ii) of the final-form regulation. The focus is on the lighting being kept in good repair. The language will actually effectuate the intent of the Canine Health Board. In speaking to members of the Canine Health Board, it became clear the intent of the Canine Health Board was to assure the lighting fixtures were kept in good repair and

were functioning properly. The reference to a "visible flicker" was important to the veterinarians on the Canine Health Board, because they assert that flickering lights – such as the flickering caused by defective ballast – can result in seizures in some dogs. Therefore, in order to assure the health, safety and welfare of the dogs through proper animal husbandry related to lighting, it is important that artificial lighting sources within the kennel building be kept in good repair and not result in problems such as a "flickering" light source. The revised language of the final-form regulation requires lighting to be kept in good repair and sets forth – among other examples - such as emitting irregular bursts of light, as when a ballast is in disrepair.

19. The language contained in subsection 28a.3 (2)(v) of the proposed regulation related to light sources being set or employed in such a manner as to prevent injury to the dog has been modified for clarity, but not removed from the final-form regulation. The modified language is contained at subsection 28a.7(b)(2)(iii). The Department believes it is within the scope of the authority of the Act. Specifically, the Canine Health Board was to establish Guidelines for lighting standards that based on animal husbandry practices provided for the welfare of dogs in kennels. This regulatory requirement, while the Department agrees kennel owners should already be adhering to standards that would prevent such harm and therefore the provision should not be necessary, is essential to assure proper animal husbandry practices with regard to the lighting placement and standards. It merely requires kennel owners to not place or provide artificial lighting in such a manner that it would cause injury to the dogs.

20. The language in the first sentence of what was section 28a.4 (related to flooring) of the proposed regulation, has been deleted from the final-form regulation. The flooring section is now section 28a.8 of the final-form regulation.

21. The Department, upon recommendations suggested by this commentator and the Independent Regulatory Review Commission has reformatted the flooring provisions of the final-form regulation. In restructuring this section, now section 28.8a of the final-form regulations, the Department felt it would be even more helpful to the regulated community if all the flooring standards established by the Act, were also delineated in the regulation. Therefore, the Department established two new subsections which reiterate the language contained in sections 207(i)(3)(i)(related to general flooring standards) and (i)(3)(ii)(related to slatted flooring) of the Act (3 P.S. §§ 459-207(i)(3)(i) and (ii)). In addition, the Department had to then modify the language of the proposed regulations which sought to espouse the additional flooring options. In doing so, the Department established subsection 28a.8(c), which sets forth the language of the statute allowing the Canine Health Board to approve additional flooring options, and delineates the authority and duty of the Canine Health Board to assure the additional flooring standards adhere to the general requirements established by section 207(i)(3)(i) of the Act and be based on proper animal husbandry practices, providing for the health and welfare of the dogs confined to these kennels, as required by section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 459-221(f)). The Department included the standards set by the Canine Health Board in the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department

veterinarians and some Canine Health Board veterinarians, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices

22. The Canine Health Board may approved additional flooring options that meet the general requirements of subparagraph 207(i)(3)(i) of the Dog Law, but also has the authority and duty to assure such additional flooring, based on animal husbandry practices, will account for the welfare of the dogs housed on that flooring, as required by section 221(f) of the Dog Law (3 P.S. § 459-221(f)). The section 221(f) standards are the very reason the flooring alternatives must be reviewed by the Canine Health Board, which is comprised of nine veterinarians. Otherwise, the task would be to merely assure the flooring meets the very general standards of section 207(i)(3)(i), which in and of themselves do not assure or account for the health, safety and welfare of the dogs housed on the flooring. In doing so, the Board and hence the Department has the authority and duty to set forth standards that will account for the welfare of the dog. The standard in subsection 28a.4(4) of the proposed regulations, now subsection 28a.8(c)(3) of the final-form regulation, does not prohibit a flooring type or option, it merely sets a standard for any flooring type presented to the Board for approval. The language has been modified to assure it sets a standard, and does not prohibit any particular type or style of flooring.

23. The language that was contained in subsection 28a.4(5) of the proposed regulations related to applicable codes has been removed from the final-form regulation.

24. The Canine Health Board may approved additional flooring options that meet the general requirements of subparagraph 207(i)(3)(i) of the Dog Law, but also has the authority and duty to assure such additional flooring, based on animal husbandry practices, will account for the welfare of the dogs housed on that flooring, as required by section 221(f) of the Dog Law (3 P.S. § 459-221(f)). The section 221(f) standards are the very reason the flooring alternatives must be reviewed by the Canine Health Board, which is comprised of nine veterinarians. Otherwise, the task would be to merely assure the flooring meets the very general standards of section 207(i)(3)(i), which in and of themselves do not assure or account for the health, safety and welfare of the dogs housed on the flooring. In doing so, the Board and hence the Department has the authority and duty to set forth standards that will account for the welfare of the dog. The standard in subsection 28a.4(6) of the proposed regulations, now subsection 28a.8(c)(6) of the final-form regulation, does not prohibit a flooring type or option, it merely sets a standard for any flooring type presented to the Board for approval. The language has been modified and the wording "good footing" has been replaced with more descriptive language to assure it sets a more objective standard.

25. In the final-form regulation, the Department has modified the language of what is now subsection 28a.8(c)(7), which was 28a.4(7) of the proposed regulations, by specifically removing the language "and may be subject to microbial assessment" and replacing that language with clear and distinct language regarding the ability of the flooring to be cleaned and sanitized in concurrence with the Act and current Department regulations.

Comment: General Summary

I wholeheartedly support a high level of regulatory control of commercial dog breeding in Pennsylvania. However, these regulations must be clearly stated, must be within the confines of the law and must be written so that enforcement is not arbitrary.

RESPONSE

The Department appreciates the support for the regulations and the general concerns expressed by the Honorable Senator Brubaker. The Department has taken these concerns very seriously, as can be seen, in the responses to Senator Brubaker's comments and in the language of the final-form regulation. The final-form regulation is within the scope of authority granted by the Act, is drafted in a manner intended to provide additional clarity and contains language and standards that are objective and measurable.

II. REPRESENTATIVE MICHAEL K. HANNA

Commentator:

Submitted by: Honorable Michael K. Hanna, Member,
Pennsylvania House of Representatives,
Chairman House Agriculture & Rural Affairs Committee
302 Main Capitol
P.O. Box 202076
Harrisburg, PA 17120-2076

Background:

The Pennsylvania Department of Agriculture recently promulgated Regulation 2-170, Canine Health Board Standards for Commercial Kennels, required under the Dog Law as amended by Act 119 of 2008. Since then many individuals and organizations have provided comments in an effort to assist IRRC in its regulatory review.

Comment: General Scope of Authority

As Chairman of the House Agriculture and Rural Affairs Committee, I am pleased to comment on the proposed regulation. The act established the Canine Health Board comprised of veterinarians who, by training and practice, understand the care and treatment of canines. The board was authorized to issue temporary guidelines and regulations specifically regarding appropriate auxiliary ventilation requirements, humidity standards, and ammonia and lighting ranges.

In addition, the board was given discretionary authority to establish additional flooring options and alternatives to accessing exercise areas.

RESPONSE

The Department has scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and done its own further research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is within the scope of authority granted by the Act, is drafted in a manner intended to provide additional clarity and contains language and standards that are objective and measurable.

Comment: Department's duty

I appreciate the efforts of board members who donated their time and expertise in developing the proposed regulation, particularly given the statutory time constraints. As required under the act, the Pennsylvania Department of Agriculture promulgated the board's temporary guidelines as a regulation. Although the department was unable to modify the board's proposed regulation initially, the department is required to respond to comments and may make changes prior to delivering a final-form regulation.

RESPONSE

The Department is the promulgating authority and agrees with the comment submitted by the Honorable Representative Hanna. The Department has taken the comments and concerns expressed in those comments very seriously, as can be seen, in the responses to the comments and in the language of the final-form regulation. As stated above, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and done its own further research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is within the scope of authority granted by the Act, is drafted in a manner intended to provide additional clarity and contains language and standards that are objective and measurable.

Comment: Testimony

Testimony and written comments at the department's recent hearing expressed genuine concern about compliance with the proposed regulation. Specifically, kennel owners suggest the lighting and ventilation standards may be too restrictive due to vague standards or variables beyond the control of kennel owners. Others noted the board's disregard of the explicit authority granted to identify additional flooring options. Recently renovated kennels may have flooring that is not harmful but may not comply with the proposed standard.

RESPONSE

Although the hearing and the testimony are not part of the regulatory review process. The Department once again listened closely. Much of the testimony offered at that hearing was reduced to comments, which the Department has answered in this document. In addition, the Department has made changes in the final-form regulation that address many of the comments. The changes to the final-form regulation are based on

comments and the research done by the Department, as set forth, in the Department's answer to the previous question. The final-form regulation is within the scope of authority granted by the Act, is drafted in a manner intended to provide additional clarity and contains language and standards that are objective and measurable. With regard to alternative flooring samples submitted of the Canine Health Board's review, the Board did take up the matter at a March 31, 2010 public meeting.

Comment:
The act was never intended to eliminate the commercial breeding of dogs in the Commonwealth. I encourage the department to consider the legitimate concerns of responsible dog breeders and revise the proposed regulation to accommodate these concerns.

RESPONSE

As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated above, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own further research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to set standards that are within the scope of authority granted by the Act, and that meet the duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner intended to provide additional clarity and contains language and standards that are objective and measurable.

III. MEMBERS, PENNSYLVANIA HOUSE OF REPRESENTATIVES

Commentators:

Submitted by: Following Members, Pennsylvania House of Representatives:
Honorable Sam Smith, Republican Leader
Honorable Jerry A. Stern, Republican Caucus Secretary
Honorable John A. Maher, Republican Chairman
Honorable Samuel E. Rohrer
Honorable Scott E. Hutchinson
Honorable Jim Cox
Honorable Gordon R. Denlinger
Honorable Mark K. Keller
Honorable David R. Millard
Honorable Tina Pickett
Honorable Jeffrey P. Pyle
Honorable Michele Brooks
Honorable Michael E. Fleck
Honorable Carl Walker Metzgar
Honorable Richard R. Stevenson
Honorable Martin T. Causer

Background:

We appreciate the tremendous amount of time and *effort* expended by the members of the Canine Health Board and understand that their service is voluntary. We recognize that the decisions made by the Canine Health Board were made by majority vote and that not all members of the board agreed with the decisions. We further recognize that several members of the board made repeated attempts to keep the deliberations and decisions made to those which are authorized by law. Unfortunately, the resulting temporary guidelines fail to meet that responsibility. We appreciate the opportunity to *offer* comments. Once again, we emphasize that the comments contained in this correspondence are only highlights of our concerns.

Comment:

Pursuant to the invitation for public comment published with the proposed rulemaking J.D. No. 2-170, Canine Health Board Standards for Commercial Kennels published in the September 12, 2009 *Pennsylvania Bulletin,* we submit the following comments. This proposal is largely unchanged from the Canine Health Board's Temporary Guidelines Standards for Commercial Kennels published in the January 17, 2009 *Pennsylvania Bulletin.* The attached February 13, 2009 letter sent in response to the temporary guidelines highlighted significant departures from statutory authority in the hope that the defects would be cured before the department published a proposed rulemaking. Instead, the current proposal suffers from the same statutory departures and dishonors the legislative authority and intent. Therefore, our collective comments to this proposed rulemaking incorporate the attached letter to the temporary guidelines.

RESPONSE

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

Comment:
We are concerned that public comments are being directed to the Canine Health Board instead of to the Department of Agriculture. The Canine Health Board did nothing with the public comments submitted in response to the temporary guidelines. Section 221(g) of the Dog Law (Act 225 of 1982) clearly requires, and it was the legislative intent for, the Department of Agriculture to promulgate the regulation. We recognize that the department was restricted to promulgating the content of the Temporary Guidelines as developed and published by the Canine Health Board, but it is now the department's responsibility to receive public comments and develop the required comment/response document. Now that the department (agency) has published the proposed rulemaking, the Canine Health Board no longer has a role in this regulatory review process.

RESPONSE

The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted with the Canine Health Board members, as well as, with Department veterinarians, architects, engineers, a regulated community group and animal scientists, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations. The Canine Health Board did not act in its official capacity and was utilized by the Department for its expertise in veterinary matters, just as other groups were questioned and consulted in their areas of expertise. In general, the Department acted as the promulgating authority throughout the regulatory process and utilized the expertise of – among others – the Canine Health Board to answer questions and concerns expressed by commentators.

Comment:
In addition, we are aware that seven of the nine Canine Health Board members have formally recommended to the department that this proposed rulemaking be suspended and that the board reconvene under specific organizational parameters to develop a new set of guidelines, presumably for the department to publish as a proposed rulemaking. Since the proposed rulemaking is such a broad departure from the statutory authority provided, we endorse that sentiment, and encourage the department to develop a proposed regulation that complies with the legislative authority and intent, using whatever resources it finds most appropriate.

RESPONSE

The Department, being the promulgating agency, decided to proceed with the proposed rulemaking realizing that, as with nearly all regulations, changes would most likely have to be made to the final-form regulation. In addition, the Department felt this was the best mechanism to assure a more timely set of regulations and to comply as nearly as possible with the mandate of the Act.

Original comments on the Guidelines – incorporated as requested above

Comments: Fiscal Impact

We recognize that these temporary guidelines, *as such,* will not impose significant additional fiscal impacts to the Bureau of Dog Law Enforcement (Bureau), the regulated community, political subdivisions, or to consumers at large. However, should similar provisions be promulgated *as regulation,* we believe that significant financial burden will be placed on both the Bureau and the regulated community, and additional financial burden will likely be placed on *affected* political subdivisions and the general public. For example:

1. How many of and what specific equipment will be purchased by the Bureau to measure temperature, humidity levels, ammonia levels, carbon monoxide levels, particulate matter, air velocity and foot candles?
2. How much will it cost to train each dog warden to use and calibrate/recalibrate this equipment?
3. How many more dog wardens will need to be employed, since so much additional time will be needed to perform commercial kennel inspections?
4. How much will it cost each commercial kennel owner to acquire/install, and be trained to use, the same equipment?
5. We presume the regulated community will need to take similar measurements to determine initial and continued compliance.
6. How often will an engineer consultant be hired by the Bureau, and at what cost?
7. How much will it cost each commercial kennel to install a mechanical ventilation system?
8. How much will it cost each commercial kennel to install additional windows necessary to "allow each dog an unobstructed view of the outdoor environment"?
9. How much will the utility costs of each commercial kennel increase as a result of the requirements for lighting, ventilation and certain monitoring equipment?
10. The requirements for installation of mechanical ventilation systems, other physical changes to an existing structure, as well as the plans for new commercial kennel structures, will, in many cases, need to be reviewed by a local zoning board or other local body. How much will it cost for a commercial kennel owner to have the appropriate plans developed, submitted and reviewed by the applicable authorities?
11. If a commercial kennel closes as a result of not being able to afford the required upgrades, how much tax revenue loss will that represent to affected taxing bodies?
12. How much financial impact will the closing of a commercial kennel have on the industries that serve such a business?

13. Since most businesses pass on costs of doing business to the consumers they serve, how much more will it cost for a consumer to purchase a dog? We realize that many of these costs will be variable, but they need to be considered nonetheless.

RESPONSES

1. The final-form regulations remove the necessity of the Department to purchase any equipment to measure particulate matter or carbon monoxide levels. Standard carbon monoxide monitors will be required to be installed in kennels that utilize a carbon monoxide producing heating or cooling source, but there is no set level to be measured.

The final-form regulation requires air flow to be measured in cubic feet per minute per dog, as was the suggestion of the architects, engineers and animal scientists consulted by the Department. This allows the Department to check the CFM rating on the ventilation and air circulation equipment employed by the kennel owner to assure it meets the required air circulation values. In addition, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Therefore, the Department will purchase some equipment to measure air circulation, but such equipment will be utilized for spot checks and if the dogs in the kennel exhibit signs of illness or stress that may be associated with ventilation problems, as set forth more fully at subsections 28a.2(c) and (h) of the final form regulations.

The Department will have to purchase ammonia level monitors and will purchase temperature and humidity monitoring devices to be installed in kennels as set forth at subsections 28a.4(b)(4) and (5) of the final-form regulation. In deciding to purchase the temperature and humidity monitoring devices the Department took into account the comments of kennel owners and other related to the cost to the kennel owners of having to purchase such equipment to monitor their kennels and the issue of standardization of such equipment so that measurements are taken in the same manner and by the same type of equipment. The Department will bear the cost of buying, calibrating, replacing and installing the monitors and kennel owners will be able to continually check the monitors to assure their kennel facility is in compliance with the standards of the regulations. regulation.

Finally, light meters will be purchased to assure the lighting in the kennels provides the appropriate footcandle range of lighting.

The total number of all such devices and the costs to buy, calibrate and train wardens in their use is contained in the regulatory analysis form that accompanies the final-form

2. The total number of all such devices and the costs to buy, calibrate and train wardens in their use is contained in the regulatory analysis form that accompanies the final-form

3. The Department did not believe it would have to employ any additional dog wardens to carry out inspections under the proposed regulations. The final-form regulations employ means and mechanisms, as set forth in the answer to question 1 above, which will require less time to monitor, inspect and assure compliance during a kennel inspection. The Department has no plans to employ any additional dog wardens, as it believes the current staff of dog wardens is sufficient to assure at least two kennel inspections each year and to respond to complaints or conduct follow-up inspections of non-compliant kennels.

4. The Department has set forth the cost to kennel owners in the regulatory analysis form that accompanies this final-form regulation.

5. The kennel owner may elect to purchase a light meter or ammonia level meter or both. The kennel owner will be able to utilize the Department's temperature and humidity monitoring devices to assure compliance with those standards and CFM standards for air circulation will be certified by an engineer, for reasons set forth previously, and can be calculated based on the cubic feet of each area of the kennel housing dogs and the total number of dogs housed in that area of the kennel. The CFM rating is listed on fans and other forms of mechanical ventilation and the professional engineer, State dog warden and kennel owner can match those standards without buying any monitoring equipment. The kennel owner can adjust the level of the air circulation based on the number of dogs in the kennel at any one time, and no additional equipment or monitoring devices are necessary for such calculations. Standard carbon monoxide monitors, for those kennels that need to install them, will have to be purchased, but actual carbon monoxide level readings will not have to be taken, so no additional devices are necessary.

6. The final-form regulation, completely eliminates the requirement or necessity for the Department to hire an engineer or other consultant.

7. The cost of the mechanical ventilation system will vary according to the sophistication and complexity of the system the kennel owner decides to install. However, the Department has consulted several engineers/engineering companies that build kennel buildings and asked them to assess the cost of installing a ventilation system that would meet all the ventilation requirements of the final-form regulation. The costs are based on a kennel owner having to purchase and install all of the equipment, even though most kennel owners, especially those subject to United States Department of Agriculture regulations, should already have some form of mechanical ventilation, auxiliary ventilation and – in the case of USDA – temperature control devices already installed in the kennel.

The Department has no baseline data with regard to a kennel's current utility costs, so it is impossible to project the amount of any increase in such costs. However, the regulatory analysis form accompanying the final-form regulation does estimate the average yearly cost of operating a system that would meet the ventilation, auxiliary ventilation and humidity standards of the regulations. However, as pointed out, these estimates do not take into account the fact that kennel owners already have previous existing utility costs. In fact, the Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)) Therefore, the costs estimates, which are set forth in the regulatory analysis form that accompanies the final-form regulation, will set forth costs that are or should already be incurred by USDA regulated kennels. The costs delineated in the regulatory analysis form also delineate the physical costs that could be incurred for a system that would meet the standards of the regulation.

8. The requirement that additional windows be installed, each dog have an unobstructed view or that 8% of the kennel building have windows, skylights or other means to allow natural light into the kennel have been eliminated from the final-form regulation. Kennels that received an exemption from outdoor exercise are the only kennels that will have to provide some amount of natural light and, like all other kennels will be required to have functioning windows, doors or other openings to allow for ventilation in the case of a malfunction of the mechanical ventilation system.

9. First, the Department has no baseline data with regard to a kennel's current utility costs, so it is impossible to project the amount of any increase in such costs. However, the regulatory analysis form accompanying the final-form regulation does estimate the average yearly cost of operating a system that would meet the ventilation, auxiliary ventilation and humidity standards of the regulations. As the commentator points out, these estimates do not take into account the fact that kennel owners already had previous existing utility costs. In fact, the Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)). Therefore, the estimates set forth in the regulatory analysis form will include those already existing costs. The existing costs for kennels regulated by the USDA will be much less, as those kennels already have to comply with heating (50 F) and cooling (85 F) regulations (9 CFR §§ 3.2(a) and 3.3(a)).

Second, the cost to operate the lighting should not cost any additional amount, since kennels are already required, by the Department's current regulations and USDA regulations to provide a diurnal lighting cycle and enough light to allow for observation of the dogs and normal animal husbandry practices. In fact, the Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)) and "Indoor housing facilities for dogs...must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs...and provide sufficient illumination to aid in

maintaining food housekeeping practices, adequate cleaning, and the well-being of the animals (9 CFR § 3.2(c)) The Dog Law sets forth those same standards at section 207(h)(8) (3 P.S. § 459-207(h)(8)). The requirement to and cost of providing adequate lighting is actually established in the Act itself. The regulations merely mirror that language and then set forth a level of lighting as required by the Act.

The new regulations quantify the intensity of the light to be provided and the type of lighting. The regulatory analysis form sets forth the cost estimates to install new lighting, if required, but there should be no additional cost of operating the lighting.

10. This is a question that is impossible for any agency to answer with any accuracy. There are over twenty-six hundred municipalities, boroughs and townships in the Commonwealth. All of the those entities have their own ordinances and zoning regulations and all have their own costs for planning and review. In addition, it would require a review of each kennel, because different kennels will have different needs and therefore different costs. The Department has never been asked or made to answer such a broad and impossible question in any other regulation it has previously promulgated. Any estimates in the regulatory analysis form are subject to all of the variables set forth above.

In addition, it should be noted that the majority of the structural changes necessary for kennel owners to undertake – replacing and expanding primary enclosures, putting in outdoor exercise areas, heating the kennel and employing auxiliary ventilation when temperatures rise above 85 degrees Fahrenheit, are actually imposed by the Act itself.

It is the Act that requires the Department to promulgate regulations setting forth the proper ventilation, humidity and ammonia levels, as well as lighting levels.

The Department, through conversations and consultation with architects, engineers, animal scientists and veterinarians has determined the proper levels for these areas, including proper ventilation levels. The proper ventilation levels, which in turn affect or are necessary to control, ammonia and humidity levels, cannot be consistently achieved through any means other than mechanical ventilation.

Finally, kennel owners regulated by the United Stated Department of Agriculture, under the Animal Welfare Act should already have ventilation, auxiliary ventilation, cooling and heating systems installed and operational. The Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)). Sections 3.2 and 3.3 of the Federal Animal Welfare Act Regulations set forth heating, cooling, ventilation and lighting standards for those kennels (9 CFR. §§ 3.2(a), (b) and (c) and 3.3(a), (b) and (c)).

11. This is a question that would require the Department to have authority to access the tax returns of all individual kennels and the ability to pre-determine which and how many kennels may decide to close solely as a result of the regulations. The Department has neither. Once again, much of the cost and much of the upgrades are required by the Act itself. Some of the comments fail to appreciate that fact, or seem determined to mix the costs and make them all inclusive. The regulations will impose only a portion of the total costs of all upgrades and changes necessary to commercial kennels. Much of the additional cost comes from the Act itself. In addition, the Department is required, by the Act, to promulgate the regulations. All regulations impose additional costs. The question

is not the total cost, but whether the Department has consulted with appropriate experts and done research and taken steps to try to allow choices – where able – and minimize costs. The Department has done extensive research through its consultations with architects, engineers, animal scientists and veterinarians – including the expert veterinarians appointed by the General Assembly and the Governor. The Department has redrafted the final-form regulation to impose standards that, based on the information received, present the minimum level of regulation necessary to carry out its duty to set levels for ventilation, auxiliary ventilation, humidity, ammonia and lighting that will account for the welfare of dogs housed in commercial kennels. It has done so in a manner that it believes gives kennel owners various choices in meeting those standards. Once again, many of the standards and "upgrades" – especially those associated with heating and proper temperature levels are standards already required for USDA regulated kennels and therefore should impose little to no additional costs on those kennels.

12. These comments are outside the scope of any comments the Department has seen associated with any previous regulation. Once again, this may be because to accurately answer the question posed, the Department would have to have the authority to access and review the purchasing records of every individual kennel. It does not. The questions asked in comments 9, 10, 11, 12 and 13 are questions that would require access to records, many of them confidential in nature or related to business practices of individual kennel owners, which the Department has no authority to demand or review. The Department would be happy to review any such records that a representative sample of kennel owners may wish to turn over to the Department to analyze in order to accurately answer comments 9-13.

13. To answer the question posed by this comment the Department would have to know both the additional cost each individual kennel will incur (which depends on how compliant that kennel already is with USDA and other regulations and the structure of each individual kennel, as well as, the system the kennel is going to choose to employ and the contractor the kennel owner will hire to do any "upgrades"), and the business strategy of each individual kennel owner. The Department has no manner, authority or means to make such a prediction. Making an accurate prediction of the sale price of dogs is too subjective for any agency to be required to answer or predict.

Comments: Section 28.1. Ventilation.

1. The requirement for a mechanical ventilation system goes beyond the authority in the law.
2. The only type of ventilation that should be addressed by the Canine Health Board is "auxiliary ventilation" and only "if the ambient air temperature is 85 degrees or higher." (emphasis added; language cited is from Section 207(h)(7) of the act).
3. The responsibility of the Canine Health Board is to determine a ventilation *range,* for limited circumstances.
4. **Paragraph 28.1(2) -** Paragraph (2) limits the temperature in a commercial kennel to a maximum of 86 degrees Fahrenheit and goes beyond the authority of the Canine Health Board. In Section 207(h)(6) of the law, the General Assembly established a temperature range for commercial kennels of 50 to 85 degrees

Fahrenheit, *unless* auxiliary ventilation is provided when the air temperature rises above 85 degrees Fahrenheit. The Canine Health Board has no authority whatsoever to address temperature.

5. **Paragraphs 28.1(3)(4) and (5)** - Are the relative humidity and ammonia ranges prescribed in paragraphs (3) through (5) based on animal husbandry practices, as required by Section 221(f) of the law? While we recognize that little research has been published regarding the appropriate environmental conditions for dogs specifically, we do recognize that human standards should not be applied.

6. **Paragraph 28.1(6)** - Paragraph (6) requires a commercial kennel to install and maintain carbon monoxide detectors. The Canine Health Board has no authority whatsoever to address carbon monoxide levels.

7. **Paragraph 28.1(8)** - Paragraph (8) establishes a limit for particulate matter. The Canine Health Board has no authority whatsoever to address particulate matter.

8. **Paragraph 28.1(9)** - Paragraph (9) addresses both air changes and air velocity. Is the prescribed range of air changes per hour based on animal husbandry practices, as required by Section 221(f) of the law? What is "fresh air"? Are the factors prescribed for making an air change calculation correct? What is the formula for calculating air change? Should the number of air changes vary, based on the size of the facility and number of dogs housed within it? What equipment will be used to measure air changes and air velocity? How will measurements be taken if intake or exhaust vents are at a height that cannot be sufficiently or safely reached by a dog warden?

9. **Paragraph 28.1(9)(iii)** - Is the language at paragraph (9)(iii) construed to require simultaneous noncompliance with *one* of paragraphs (1) through (8) or (10) through (13), or *all* of paragraphs (1) through (8) or (10) through (13)?

10. **Paragraph 28.1(9)(v)** - Under what specific circumstances would the department hire or consult with an engineer, and to what conclusion? The provision at paragraph (9)(v) for an engineer to recommend improvements without requiring a kennel owner to incorporate them is meaningless at the least, and fiscally irresponsible at the most. Furthermore, a commercial kennel operator is under no obligation to permit anyone who is not an employee of the department to enter property or inspect kennels.

11. **Paragraph 28.1(10)** - The list of signs of illness at paragraph (10) could exist in dogs independent of ventilation, and are not necessarily signs of poor ventilation. Many of the factors are subjective. What is "excessive" panting, "elevated" body temperature, "active" avoidance, and "huddling", and will a dog warden be able to properly evaluate and measure these factors, and to what standard? This provision has no basis within the limited authority of the Canine Health Board to establish appropriate ventilation ranges.

12. **Paragraph 28.1(11)** - What standards are defined and measurable in paragraph (11), which prohibits "excessive dog odor, other noxious odors, stale air, moisture condensation on surfaces [and] lack of air flow"? Again, this provision has no basis within the limited authority of the Canine Health Board to establish appropriate ventilation ranges.

13. **Paragraph 28.1(12)** - The requirements of paragraph (12) related to re-circulated air seem to contradict the requirement in paragraph (9)(i) for fresh air

changes. Further, the limited authority of the Canine Health Board to establish appropriate ventilation *ranges* does not include the authority to require air filters.

14. **Paragraph 28.1(13)** - Paragraph (13) is not clear. What are "applicable codes"? Regardless, the Canine Health Board does not have the authority to establish this provision.

15. **Paragraph 28.1(14)** - Paragraph (14) is vague. What is "the higher end of the applicable temperature range"? What is the "applicable temperature range'? Regardless, the Canine Health Board has no authority whatsoever to address temperature.

RESPONSES

1. The Canine Health Board and hence the Department as the promulgating agency has the absolute authority, under section 207(h)(8) of the Dog Law (3 P.S. § 459-207(h)(7)) to set and establish proper ventilation, humidity and ammonia levels. The Board also has the authority to set auxiliary ventilation standards when the temperature in the kennel housing facility rises above 85 degrees Fahrenheit. Section 207(h)(7) reads, "...The relative humidity must be maintained at a level that ensures the health and well-being of the dogs housed therein. The appropriate ventilation, humidity and ammonia ranges shall be determined by the Board." This provision is in addition too, not a modification of the auxiliary ventilation authority. Under the authority set forth at section 221(f) of the Dog Law (3 P.S. 459-221(f)) these standards have to be and are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels. As set forth in answers to previous comments, the Department researched and consulted with engineers and architects that build and design kennel buildings, animal scientists from the Pennsylvania State University and department and Canine Health Board veterinarians in establishing the proper ventilation, humidity and ammonia ranges. It was determined by the engineers and architects consulted, that the proper rates of ventilation could not be achieved or properly maintained without a mechanical means of air circulation. Various factors, including wind, wind direction and inverse convection to name a few, make it impossible for any kennel building to be designed in a manner that would allow it to obtain the proper ventilation levels, on a consistent and necessary basis, without mechanical means.

2. The Department agrees that section 207(h)(7) establishes the authority for the Department to address auxiliary ventilation and that such ventilation can only be required to be employed when the temperature in the kennel goes above 85 degrees Fahrenheit (3 P.S. § 459-207(h)(7)). However, the word "auxiliary" itself implies or means additional or extra ventilation. That along with the express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases

on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-207(h)(7)) The language is very clear and precise. The Board and the Department have the authority to set "at all times" the proper ventilation, humidity and ammonia standards in commercial kennels. This authority is in addition too, not a modification of the auxiliary ventilation authority and makes it perfectly clear the Department has absolute and specific authority to address proper ventilation, at all times, in commercial kennels.

3. The responsibility of the Canine Health Board and the Department is to assure proper ranges of relative humidity, ventilation and ammonia levels and to set forth auxiliary ventilation standards when the temperature in a kennel rises above 85 degrees Fahrenheit (3 P.S. § 459-207(h)(7)). That same section requires that, "Housing facilities for dogs must be sufficiently ventilated at all time when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-207(h)(7)) The language is very clear and precise. The Board and the Department have the authority to set "at all times" the proper ventilation, humidity and ammonia standards in commercial kennels.

4. The final-form regulation does not require the use of air conditioning and the final-form regulation does not require a reduction in temperature or for dogs to be removed if the temperature in a kennel rises above 85 degrees Fahrenheit. The final-form regulation, allows for air conditioning, but in no manner requires it or temperature reduction. The final-form regulation seeks to add clarity to this and other issues by separating sections related to ventilation, auxiliary ventilation, humidity and ammonia levels and carbon monoxide detection. The auxiliary ventilation provisions set forth several means of auxiliary ventilation that do not require air conditioning. The humidity provisions do not require air conditioning or temperature reduction, and are based on scientific studies and application. Nothing in any of these sections requires the use of air conditioning. The humidity level standards are based on scientific research and will effectively account for the health and safety of dogs housed in kennels. A more in depth response related to the humidity standards is set forth in the Department's answer to the Independent Regulatory Review Commission's comments (see Comment 2 - related to section 28a.2 - and the Department's responses to parts a.iii. and c. of that Comment, including the attached literature).

5. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations. The Department does not believe it should set a standard that would be in absolute conflict with the temperature requirements of the Federal Code of Regulations, and in fact would be less stringent than the Federal Code of Regulations. Since it has

been asserted by the General Assembly and this Commission, that the Department can not require temperatures within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. The Department has the authority to regulate humidity and may also set auxiliary ventilation standards when temperatures in the kennel housing facility rise above 85 degrees Fahrenheit (3 P.S. §§ 459-207(h)(7) and 459-221(f)). The standards in the final-form regulation are based on the Department's consultations and research as set forth previously. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive and remain safe with heat index values in excess of 90 HI for more than six hours (See Exhibit C and TACC Weather Safety Scale). The final-form regulation sets standards for humidity based on heat index values and the use of auxiliary ventilation. The auxiliary ventilation techniques are techniques currently employed in kennels. This information was gathered from an AKC Senior Breed Field Representative and the Department and reviewed by engineers. Nothing in the final-form regulation requires the reduction of temperature to a level of 85 degrees Fahrenheit or the use of air conditioning.

The ammonia level established in the final-form regulation is based on consultations and discussions with animal scientists from the Pennsylvania State University, engineers and architects and Department veterinarians. These experts came to a conclusion, based on animal husbandry practices and studies done on captive animals, such as swine, that ammonia levels of 15 parts per million were appropriate to assure there were no ill effects – such as respiratory and eye problems – on the well-being of dogs housed in commercial kennels. The Department consulted with engineers and architects related to the ammonia levels established by the proposed regulation and with regard to the ability to measure ammonia levels. In addition, the Department consulted with veterinarians and animal scientists and did its own research with regard to commonly accepted levels of ammonia in animal operations such as swine operations. The engineers and architects all believed that if kennels were properly ventilated and achieved the air circulation values established in the regulations, then ammonia levels should not be a problem in the kennel. The Act, however, requires the Department to establish the proper ammonia levels for dogs housed in kennels. Discussions with veterinarians and research done by veterinarians on the Canine Health Board affirm that ammonia levels of 20 part per million or higher will cause respiratory and eye irritation and problems in animals. The veterinarians suggested the levels be set at some point below 20 parts per million and the consensus was that a level of 15 parts per million would both account for proper animal health and welfare and would be measurable. Ammonia levels are measured in the swine industry and can be accurately measured at levels of 15 parts per million. The Department's research also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel. That Act establishes parameters that do not allow dogs in kennels to be housed in any primary

enclosure that is more than 48 inches high for dogs under twelve weeks of age or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department believes ammonia measurements should be taken at the height of the dogs.

6. The common definition of ventilation, which is set forth in the final-form regulation, establishes the purposes for which ventilation is utilized and one of those purposes is to remove gases such as carbon dioxide and carbon monoxide. The Canine Health Board and the Department realize that some kennels heat the kennel with a equipment that produces carbon monoxide, which is odorless and colorless and therefore is best measured or monitored by a device such as a carbon monoxide detector. The final-form regulation only requires the use of carbon monoxide detectors in kennels that heat with carbon monoxide producing equipment and does not require the measurement or set any specific standard for carbon monoxide levels. The kennel must merely install and maintain functional carbon monoxide detectors. This will account for the health of the dogs and the persons working in the kennel. The Department agrees with the Canine Health Board, that carbon monoxide levels should at the very least be monitored for safety purposes and to assure proper ventilation and air circulation is occurring within a kennel that utilizes a carbon based form of heating or mechanical ventilation. The engineer consulted by the Department believes that carbon monoxide levels will take care of themselves if the kennel is properly ventilated and meets the air exchange rate criteria of the regulations. However, the engineers and animal scientists consulted acknowledge and agree, carbon monoxide gas can build up in any enclosed building where carbon based mechanical ventilation or heating equipment is in use. Carbon monoxide is colorless and odorless and is deadly. The regulations only require that carbon monoxide detectors be installed. If carbon monoxide levels rise to the point the detectors are triggered the kennel has a problem with ventilation or air exchange in that part of the kennel housing facility and needs to take action to assure the health, safety and welfare of thedogs housed in that area of the kennel. Section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)) states in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and prevent moisture condensation ...the appropriate ventilation...ranges shall be determined by the Canine Health Board. One of the purposes of ventilation is to exchange or re-circulate air in a manner that removes pathogens, including carbon monoxide and replenishes oxygen. The regulatory requirement is inexpensive and necessary to assure the health, safety and welfare of dogs housed in kennels, which is the general overall duty and authority of the Canine Health Board under section 221(f) of the Act (3 P.S. § 459-221(f)).

7. The Department has removed this provision from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation requirements of the regulations were being met, particulate matter would not pose a problem in the kennel.

8. The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. In general, paragraph (8) of section 28a.2 the proposed regulations has been

deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsections (b) and (f)(1) and (2) of section 28a.2 of the final form regulation. Additional, standards related to circulation of the air, minimum fresh air rates and filtration have been established by subsections (f)(3)-(6) of the final-form regulation. The provisions of subsection (b) of the final-form regulation now entail information, including certification, the Department requires of the kennel owner. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. This was done after consultations with an engineer and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultation with engineer Scott Learned and Animal Scientist, Dr. Ken Kephart of the Pennsylvania State University and consultations with other engineers that design or build kennel facilities.

9. The paragraph referred to has been removed and significantly modified in the final-form regulation. Therefore, the issues that arose regarding the clarity and enforcement provisions of that section no longer exist in the final-form regulation.

10. The paragraph and provision referred to has been removed from the final-form regulation. The Department is no longer required to hire or consult with an engineer. Kennel owners are free to consult with whomever they deem appropriate and necessary to solve any compliance issue with their kennel.

11. The Department discussed these issues with Dr. Mikesell and Dr. Kephart of the Pennsylvania State University, as well as, with Department and Canine Health Board veterinarians. In response to those discussions, section 28a.2(9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress has been modified in the final-form regulation (see 28a.2(h) of the final-form regulation). The number and type of conditions in dogs that may denote poor ventilation has been reduced and are consistent with the suggestions of the experts consulted, including Dr. Mikesell. In addition, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) of the final form regulation sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

12. While the Department believes the Canine Health Board had and the Department has the authority and ability to regulate air flow, stale air, odor and certainly moisture content – all of which are part of ventilation or humidity control – the Department believes these issues have been addressed in the final-form regulation by setting proper ventilation, humidity and auxiliary ventilation standards. Therefore, the Department has removed the language set forth in subsection 28a.2 (10) from the final-form regulation.

13. After consultation with engineers and architects the Department broadened the language of what was subsection 28a.2 (11) of the proposed regulations. The new language appears at subsection 28a.2 (b)(5) of the final-form regulation and simply states any filter must have a minimum MERV value of 8 or higher. The kennel owner can choose a variety of filter types and brands, so long as they meet a MERV value of at least 8. The Canine Health Board and the Department have the authority and the duty to set ventilation ranges and standards that are based on animal husbandry practices and protect the welfare of dogs housed in the kennels. Proper ventilation, for the well-being of the dogs housed in the kennels requires that air be filtered in some manner, when air is re-circulated. The final-form regulations no longer require 100% fresh air, but instead allow for up to 70% of the air in a kennel to be re-circulated.

14. The language that appeared in subsection 28a.2 (12) has been removed from the final-form regulation. In fact, all references to "the latest edition of applicable codes" has been removed from the final-form regulations. As stated in the answer to a similar question from the Independent Regulatory Review Commission, the Department believes "applicable codes" can and will be enforced by the entities that have the specific authority to draft and enforce those codes.

15. Paragraph 28a.1(14) which is referred to in this comment may have been part of the Guidelines drafted by the Canine Health Board, but the language does not appear in the proposed or final-form regulation.

Comments: Section 28.2. Lighting.

Section 207(h)(8) of the act establishes lighting requirements for commercial kennels, which authorizes either natural or artificial light. The only responsibility of the Canine Health Board is to establish "appropriate lighting ranges" for housing facilities of dogs.

1. **Paragraph 28.2(1)** - The provisions in paragraph (1) go beyond the authority of the Canine Health Board.
2. **Paragraph 28.2(1)** - The provisions of paragraph (2) also go beyond the authority of the Canine Health Board, except for the lighting ranges established in subparagraphs (i) and (ii). However, the provisions in subparagraphs (i) and (ii) are unclear, and we therefore question their enforceability.
3. **Paragraph 28.2(3)** - Paragraph (3) is unclear and furthermore, goes beyond the authority of the Canine Health Board to establish appropriate lighting ranges for housing facilities of dogs in commercial kennels.

RESPONSES

1. The final-form regulation no longer contains the language of what was section 28a.3(1) of the proposed regulation (now section 28a.7 of the final-form regulation). The final-form regulation now allows for either natural or artificial light or for a combination of both. It sets general standards for all lighting and establishes specific standards that in addition to the general standards, apply to either type of lighting. What was subparagraph (1) of the proposed regulation is now contained in a provision that relates only to natural light. Natural light is no longer required. What were subparagraphs (1)(ii)-(1)(vi), have been removed from the final-form regulation. The new language, regarding general lighting standards, mirrors the language of the Act and is consistent with existing USDA standards. In addition, the final form regulations, at section 28a.7(a)(5), sets a lighting range of 40-60 foot candles. The range was modified and established based on expert opinions – as set forth more fully in answers to similar comments posed by the Honorable Senator Brubaker and the Independent Regulatory Review Commission.

2. Paragraph (2) is now subsection 28a.7(b)(2) and the language has been significantly amended. The new subsection is now specific to artificial lighting standards and eliminates what were subparagraphs (2)(ii) and (2)(iii). Other provisions of the proposed regulations have been modified to allow for more clarity. There is no longer a requirement that lighting does not "flicker." In speaking with Board members it became apparent they intended that wording to mean the lighting had to be kept in good repair and that lights could not "flicker" or emit irregular bursts of light – such as when a ballast

is going bad in a light. The reasoning is that bursts of light or strobe like effects can cause seizures in dogs. The language has been changed to reflect that intent. With regard to authority, the Canine Health Board and hence the Department have the authority to set appropriate lighting ranges, but the duty to assure the lighting standards account for the welfare of the dogs (3 P.S. § 459-221(f)). Full spectrum lighting is the only lighting that even closely simulates the wavelengths of natural sunlight. As set forth in previous answers to comments from the Honorable Senator Brubaker and the Independent Regulatory Review Commission, natural sunlight is important for the health of dogs housed in kennels – for vitamin D levels and eye development among other issues. In addition, the Department has the duty and authority to enforce and clarify the lighting standards in the Act. The final-form regulations set forth the language of the Act and clarifying standards. The language of the Act requires, "Housing facilities for dogs must be lighted well enough to permit for routine inspection and cleaning of the facility and observation of the dogs. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs from excessive light..." Commentators in fact asked that at least some of these standards be defined in the regulation and clarified. The regulation does add clarity for the regulated community.

3. Paragraph (3) of the proposed regulations referred to applicable codes. This provision has been deleted from the final-form regulation.

Comment: Section 28.3. Flooring.
Section 207(i)(3)(iii) of the law permits the Canine Health Board to approve flooring options that meet the specifications of Section 207(i)(3)(i) of the law. The Canine Health Board chose to exercise this permission and approve solid flooring for primary enclosures in commercial kennels. We note that approval of this type of flooring by the Canine Health Board is not a prerequisite for use by a commercial kennel. We further assert that solid flooring does not meet the provisions of Section 207(i)(3)(i).

RESPONSE

Although the flooring options language of the final-form regulation has been modified for among other reasons clarity purposes, the Department does not agree with the assertion that solid flooring is some how prohibited by the Act and does not meet the requirements of section 207(i)(3)(i) of the Dog Law. The plain reading of the language of the Act would not support that contention and furthermore, it could not have been the intent of the General Assembly to outlaw the ability of commercial kennels to place their dogs on a solid surface, such as concrete or tile. Solid surfaces that support the full size of the foot/paw of the dog cause fewer medical problems, such as splaying of the foot or ulceration of the pads of the dog and are a much more natural surface for dogs to walk or be housed on than is a metal strand or wire floor.

IV. REPRESENTATIVE JAMES E. CASORIO, JR.

Commentator:

Submitted by: Honorable James E. Casorio, Jr., Member,
Pennsylvania House of Representatives,
P.O. Box 202056
Harrisburg, PA 17120-2056

Comment:

As the prime sponsor of House Bill 2525, which was signed into law as Act 119 of 2008, I want to express my support for the Canine Health Board's recommended regulations pertaining to lighting, temperature control, ventilation, humidity and ammonia levels in Pennsylvania's large-scale dog breeding facilities.

RESPONSE

The Department and the Board appreciate the support for the regulations and the authority to address lighting, temperature control, ventilation, humidity and ammonia levels in commercial kennels.

Comment:

Act 119 gives the Canine Health Board the authority to implement regulations in these areas to ensure the safety, health and well-being of dogs in breeder kennels, and these regulations should be put into effect as soon as possible.

RESPONSE

The Department has made amendments to the final-form regulations based on comments received and on consultation and input from experts in the field, such as engineers and architects that build commercial kennel buildings, animal scientists from the Pennsylvania State University, AKC specialist in auxiliary ventilation techniques utilized in the field and veterinarians from the Canine Health Board and the Department. The Department has endeavored to gather the information, revise the proposed regulation, format and answer all comments received and draft a new regulatory analysis form in as complete and swift a manner as possible.

Comment:

Already, Pennsylvania has been able to save many dogs, shut down several non-compliant kennels, and improve conditions for thousands of dogs in Pennsylvania because of the health, safety and enforcement provisions in Act 119 that are already in place. Passing the regulations recommended by the Canine Health Board represents the final step in fully implementing Act 119 and finalizing the work that I and others in the General Assembly did - and that thousands of people in Pennsylvania support - to end the suffering and inhumane treatment of dogs throughout Pennsylvania.
Please do not delay any further the relief these dogs have waited so long to receive, and expedite the passage of the regulations as soon as possible.

RESPONSE

The Department has made amendments to the final-form regulations based the comments received and on consultation and input from experts in the field, such as engineers and architects that build commercial kennel buildings, animal scientists from the Pennsylvania State University, AKC specialist in auxiliary ventilation techniques utilized in the field and veterinarians from the Canine Health Board and the Department. The Department believes the final-form regulations protect the health and welfare of dogs housed in kennels, while staying within the authority of the Dog Law. The Department has endeavored to gather the information, revise the proposed regulation, format and answer all comments received and draft a new regulatory analysis form in as complete and swift a manner as possible.

V. REPRESENTATIVE JENNIFER L. MANN

Commentator:

Submitted by: Honorable Jennifer L. Mann, Member
Pennsylvania House of Representatives,
Majority Caucus Secretary,
132nd Legislative District
333 Main Capitol
P.O. Box 202132
Harrisburg, PA 17120-2132

Background:

As you know, the Pennsylvania Dog Law was amended with the passage of Act 119 of 2008, requiring the Canine Health Board to create regulations regarding the lighting, ventilation, and flooring requirements for commercial dog kennels. I was proud to support this legislation when it passed overwhelmingly in the House of Representatives.

Comment:

The Canine Health Board has proposed the required regulations, with the goal of promoting ethical treatment of animals and consumer protection, as well as not placing financial burdens on local government. I believe the facets of each regulation accomplish each of these goals.

RESPONSE

The Department and the Canine Health Board appreciate the support for the proposed regulations. The Department has made amendments to the final-form regulations based the comments received and on consultation and input from experts in the field, such as engineers and architects that build commercial kennel buildings, animal scientists from the Pennsylvania State University, AKC specialist in auxiliary ventilation techniques utilized in the field and veterinarians from the Canine Health Board and the Department. The Department believes the final-form regulations protect the health and welfare of dogs housed in kennels, while staying within the authority of the Dog Law. In addition, the final-form regulations impose no duty on local governments and should

present no financial burdens on local governments. The Department has endeavored to gather the information, revise the proposed regulation, format and answer all comments received and draft a new regulatory analysis form in as complete and swift a manner as possible.

Comment:
The standards will improve the conditions under which dogs are housed and raised, allowing for healthier animals and more suitable environments. By promoting healthier animals, consumers will also be better protected, by ensuring healthier pets from the time of purchase.

RESPONSE

The Department agrees with this comment and has crafted regulations that it believes will improve the conditions under which dogs in commercial kennels are raised.

Comment:
Local governments will not experience any change in costs - compliance with the proposed standards will be enforced solely by the Department of Agriculture's Bureau of Dog Law Enforcement.

RESPONSE

The Department agrees with this comment. The final-form regulation imposes no duty or enforcement requirements on local government. Local government is free to enforce its own ordinances and regulations, but none are imposed by the Department's regulations.

Comment:
Enforcement at the state level will not be supported by tax dollars, but by the Dog Law Restricted Account, which is funded mostly by license fees.

RESPONSE

The Department agrees with this comment and appreciates that the Honorable Representative Mann has addressed that issue.

Comment:
As a State Representative, I understand the need for the regulations proposed by the Canine Health Board, and remain a strong supporter for the ethical, moral, and humane treatment of dogs in commercial kennels. I support these regulations and look forward to their implementation within the Commonwealth.

RESPONSE

The Department and the Canine Health Board appreciate the support for the proposed regulations. The Department has made amendments to the final-form regulations based the comments received and on consultation and input from experts in the field, such as engineers and architects that build commercial kennel buildings, animal scientists from the Pennsylvania State University, AKC specialist in auxiliary ventilation

techniques utilized in the field and veterinarians from the Canine Health Board and the Department. The Department believes the final-form regulations protect the health and welfare of dogs housed in kennels, while staying within the authority of the Dog Law. In addition, the final-form regulations impose no duty on local governments and should present no financial burdens on local governments. The Department has endeavored to gather the information, revise the proposed regulation, format and answer all comments received and draft a new regulatory analysis form in as complete and swift a manner as possible.

ARCHITECTS, ENGINEERS AND BIOLOGY AND LAW SCHOOL PROFESSORS COMMENTS

I. ARQ Architects – Comments-General

Commentator:

Submitted by: Lucinda A. Schlaffer, AIA, LEED AP, Partner- ARQ Architects

1 Government Street, Suite 2 and 34 East 25th Street
Kittery, ME 03904 Baltimore, MD 21218

General Comments:

Comment:

As architects working nationally on animal care projects, we have witnessed a change over the last decade in housing constructed to benefit the health and well-being of dogs. Providing air, light and making good material selections are essential in the design of dog housing spaces whether a commercial kennel or shelter environment.

RESPONSE

The Department agrees that proper housing criteria, such as air, ventilation and lighting are important to assure the welfare of dogs housed in all types of kennels. The Department has the authority to regulate these areas in the field of commercial kennels and has endeavored to set forth standards that are based on animal husbandry practices, science and expert opinion. The Department consulted with this commentator after reviewing the comments received and delineating issues related to ventilation, humidity and ammonia levels, particulate matter and carbon monoxide, as well as lighting and flooring concerns. The Department incorporated some of the ideas and expert analysis received from this commentator into the final-form regulations. We very much appreciate the time and expertise this commentator was willing to give to the Department.

Comment: Ventilation, Natural Light and Flooring

An animal's behavior is affected by his/her surroundings, When a dog is confined in a small space where he cannot turn without touching his nose and tail, he will exhibit negative behaviors such as pacing, jumping, digging and barking, It follows that in commercial kennels the design and construction of the housing itself is critical to breeding dogs that will be both physically and medically healthy. To that end, we support the inclusion of the natural light criteria, the ventilation rates identified and the use of solid flooring as part of the regulation of Commercial Kennel design, all three elements work together to provide a healthy space for dogs to thrive.

RESPONSE

The Department very much appreciates this commentator's expert opinion and has endeavored with the assistance of this commentator and other experts to draft a final-form regulation that effectuates standards that are within the authority of the Act and provide for the health and welfare of dogs housed in commercial kennels. To that end, the Department consulted with and utilized some of the ideas and expert advice received from this commentator in crafting ventilation and lighting criteria for the final-form regulation. With regard to lighting, the Department agrees – and veterinarians support – the statement that natural light is very important to the health and safety of dogs housed in kennels. Therefore, the Department has required full-spectrum artificial lighting (which most closely simulates the spectrum of light received from natural sunlight) to be utilized in kennels and in kennels where dogs have no access to an outdoor exercise area and thus no access to natural light, has required that some natural light be provided through windows and other openings.

Section 28a.3 Lighting

Comments: Lighting

1. It is our standard of care to provide natural light as well as the ability to turn off artificial light to allow the animal to know day and night. It is widely agreed that lack of exposure to the diurnal cycle in humans contributes to increased sickness and stress in work settings where shifts make it difficult to experience the natural day/night cycle.

2. Providing windows to allow natural light to enter dog areas supports this needed biological stimulus for healthy wake and rest periods over a 24-hour cycle.

3. Day lighting is also a sustainable practice in allowing the sun to offset the amount of electrical lighting demand in space design.

4. Ultra-violet rays from the sun naturally assist in deterring the growth of surface mold and bacteria,

RESPONSES

1. The regulations do not require natural light in all kennels. However, dogs will have access to natural light, through unfettered access to outdoor exercise areas. In kennels where no such access is provided the regulations, based on expert comments such as provided herein and consultation with veterinarians, require some natural light be

introduced into the kennel housing facility through windows, skylights or other openings. In addition, artificial light must be provided through full spectrum lighting, which is the type of lighting that most closely imitates the spectrum and wavelengths of light receive from the sun. The regulations and the Act require that dogs be given a diurnal cycle of light and thereby allows for the health rest periods over a 24-hour cycle.

2. The Department hopes that most kennels will provide some form of natural light to allow for needed biological stimulus and more natural wake and rest periods. However, the Act, as pointed out by several members of the General Assembly allows kennel owners to choose between providing natural or artificial light. The regulations and the Act require that dogs be given a diurnal cycle of light and thereby allows for the health rest periods over a 24-hour cycle.

3. Kennel owners have expressed concern about the cost of the regulations, but have also opposed any imposition or requirement of natural light. The Department hopes the potential cost savings associated with providing natural light will result in most kennels providing such light.

4. Kennel owners are required to clean and sanitize their kennels. The Department agrees that natural sunlight can assist in preventing surface mold and bacteria and hope that this will result in most kennel owners providing natural light in their kennel housing facilities.

Section 28a.2 Ventilation

Comment: Ventilation

Ventilation rates and minimizing recirculation of air greatly reduces airborne disease as well as removes odors from chemical products used for cleaning or from kennel area waste prior to regular clean up.

RESPONSE

The Department appreciates this comment and agrees that proper ventilation includes the circulation of air in such a manner and at proper rates to reduce airborne diseases and impurities and remove odors – such as those associated with ammonia – from the kennel. The ventilation provisions and rates set forth in the final-form regulations are based on input from architects, such as the commentator, engineers, who design and build kennel buildings and animal scientists. The rates and techniques set forth in the final-form regulation are based on that input will provide for the health and welfare of the dogs housed in the kennels.

Section 28a.4 Flooring

Comments: Flooring

1. In our practice, we utilize solid flooring for all dog areas. We have concerns about wood products for flooring given they may splinter and should not be pressure-treated type wood. Sealed wood is more likely to deteriorate than the other products suggested as good flooring alternates.

2. Any floor material that is going to experience water regularly during cleaning should be smooth and impervious so that the surface can be easily cleaned and sanitized.

3. Some products such as epoxy are durable enough for kennel use, but if a dog becomes stressed and starts to "dig" the epoxy top layer can be broken into and create a hole. Dense materials such as hard-troweled sealed concrete, terrazzo and porcelain tiles are particularly suitable as they are hard to destruct by a dog and easily cleaned. Utilizing non-slip coatings and textures provide sure footing.

RESPONSES

1, 2 and 3. The Department, in consultation with veterinarians from the Department and the Canine Health Board has incorporated many of the requirements suggested by this commentator. In addition to removing other examples, the Department has eliminated the example of wood flooring from the final-form regulation. Instead, the final-form regulation states, the flooring must impervious to water (as already required by the Act) and must be able to be cleaned and sanitized in the manner required by the Act. Furthermore, the final-form regulation requires that the flooring must provide proper traction for the dogs and provides the examples set forth by this commentator.

Summary General Comment

Comment: In summary, we support the inclusion of the design standards to provide adequate light, air and solid floor surfacing in the regulation section Chapter 28a. These standards will contribute greatly to the health and well-being of dogs in the Commercial Kennel setting.

RESPONSE

The Department appreciates the supportive statement offered by this commentator, who is an expert in the field of the latest architectural designs and techniques necessary to provide proper animal husbandry practices that provide for the health and welfare of dogs housed in kennels. Many of the ideas and much of the expert advice given by this commentator has been incorporated into the ventilation, lighting and flooring provisions of the final-form regulations.

II. JACKSON & RYAN ARCHITECTS - Comments-General

Commentator:

Submitted by: Martha T. Seng, PAIA, Principal
2370 Rice Blvd, Suite 210
Houston, TX 77005

Background:

I am an architect who specializes in animal care design, and I have a great deal of experience with this building type. I have reviewed the Canine Health Board Standards for Commercial Kennel Regulations - IRRC Number 2785, of the Pennsylvania Department of Agriculture, Bureau of Dog Law Enforcement.

Comment: Cost Analysis

The Cost Impact Analysis of the Canine Health Board Standards for Commercial Kennel Regulations that appears under Question #17 on Page 5 appears to be in order. While there are many variations of ventilation equipment with quite a range in pricing, the approximated costs quoted in this regulation would fall within the range. I would also venture to say that the requirements stipulated in this regulation could be met by kennel operators without any extraordinary hardship.

RESPONSE

The Department very much appreciates the cost analysis undertaken by the commentator – who builds and designs kennel buildings. As set forth by the commentator there are many variations of ventilation equipment with quite a range in pricing. In addition, the final-form regulations leave open a range of techniques and manners by which the overall ventilation, humidity, auxiliary ventilation and ammonia levels can be achieved. The Department has therefore again consulted with engineers and architects to establish the price ranges set forth in the regulatory analysis form to the final-form regulation. We appreciate the assistance of these experts in coming to a final estimate.

Comment: Ventilation

Proper ventilation in animal environments is crucial to ensure good health and limit the spread of disease. I congratulate the state of Pennsylvania for recognizing this fact and taking appropriate action to set these operational standards.

RESPONSE

The Department appreciates this comment and agrees that proper ventilation includes the circulation of air in such a manner and at proper rates to reduce airborne diseases and impurities and remove odors – such as those associated with ammonia – from the kennel. The ventilation provisions and rates set forth in the final-form regulations are based on input from architects, such as the commentator, engineers, who design and build kennel buildings and animal scientists. The rates and techniques set forth in the final-form regulation are based on that input and will provide for the health and welfare of the dogs housed in the kennels.

III. DESIGN LEARNED, INC. - Comments- Specific as to sections

Commentator:

Submitted by: C. Scott Learned, PE, LEED AP
Pennsylvania PE#053213-E
116 Main Street
Norwich, CT 063360

Background:

We have reviewed the proposed regulation and provide the following comments. Ours is the leading firm in the country for animal care facility mechanical, electrical, plumbing, fire protection and noise control engineering.

Section 28a.2 Ventilation

Comments: Ventilation

1. 8 to 20 air: changes per hour should be clarified as "fresh air changes per hour" or "total circulated air changes per hour".
2. 8 to 20 air: changes per hour is too broad. A properly designed air: system by our standards will have 12 to 18 air: changes per hour total circulated air: of which 4 to 6 air changes (or about one-third) is fresh air.
3. Paragraph 28a.2(8) is unrealistic. 8 to 20 air changes of 100% outside air is extremely expensive to heat and cool. Typically 30% outside air: coupled with properly filtered and dehumidified return air will produce an odor free facility.
4. Paragraph 28a.2(7) should be developed to include the type and location of filtration for re-circulated air. Typically return grilles should have course filters and equipment filters should be MERV 8 (medium efficiency level) and impregnated with carbon for odor control. Finally some form of duct mounted ionization or UV -C with ionization/oxidation capability is essential.
5. Humidity levels were properly specified.
6. Humidity ranges indicated are appropriate
7. Temperature levels should be in a range from 60 deg F to 80 deg F. A temperature range of 50 degrees is probably too low for some dogs.

RESPONSES

1. and 2. Based on comments 1 and 2 and additional correspondence, including phone conversations and written materials, the Department redrafted much of the language in the ventilation provisions of the regulation. In addition to the correspondence with Mr. Learned, the Department reviewed similar comments submitted by Dr. Kephart of the Pennsylvania State University and corresponded with Dr. Kephart regarding ventilation issues. The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on certification from a professional engineer and CFM information on the ventilation equipment, and information supplied by the kennel owner and verified in the certification, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

3. Based on this comment and additional correspondence with Mr. Learned and other architects, the Department agrees that 100% fresh air exchange would be too costly to require in a State with the climate of Pennsylvania. In addition, 100% fresh air exchange would make it impossible to control, humidity levels and the temperatures – especially to assure compliance with the low temperature standard of 50 degree established by the Act. Therefore, the Department allows for and encourages the recirculation of air within kennel housing facilities. The exchange ratio of at least 30% fresh air is based on the expertise and common animal husbandry practices espoused by Mr. Learned, other architects consulted, Dr. Ken Kephart of the Pennsylvania State University and veterinarians from the Canine Health Board and the Department. In addition, the recirculation of air also addresses concerns expressed by many commentators, including kennel owners, the Pennsylvania Farm Bureau, the Pennsylvania Professional Dog Breeders Association and the Pennsylvania Veterinary Medical Association related to the cost of operating ventilation systems that would require a 100% fresh air exchange. The recirculation of air standard and rate are based on rates currently utilized in the design and operation of kennels. Finally, as set forth in the comment and in further correspondence with Mr. Learned, proper recirculation of air will address other areas of concern, such as odors and particulate matter (which are no longer part of the final-form regulation) and issues such as ammonia and carbon monoxide levels. In addition, it will reduce heating costs and allow for humidity control in the kennel housing facility.

4. The Department agrees with the expert analysis of Mr. Learned regarding the necessity to filter air that is recirculated. The Department has also addressed comments submitted by other commentators, such as the Honorable Senator Brubaker regarding specifying one type or form of filter. The final-form regulation now sets forth a very general standard that relates to many different brands of common filters that can be found in farm and home and garden stores, as well as, common chain stores such as Lowes and Home Depot. In further conversations and correspondence with Mr. Learned the Department was able to have Mr. Learned set forth the minimum filtration necessary. Therefore, the final-form regulation does not address UV -C with ionization/oxidation capability. In addition, the Department did not address location of filters since that is a design criteria and function and the Department wanted to assure the broadest leeway for kennel owners to design and install systems that meet the basic ranges and levels established by the regulations.

5. and 6. The Department, after consultation with Animal Scientists and veterinarians from the Department and the Canine Health Board, along with additional conversations with Mr. Learned, has determined that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit. As more fully set forth in the Department's Responses to the Independent Regulatory Review Commissions Comments a.(iii) and (c), humidity levels must be altered when temperatures rise above 85 degrees Fahrenheit in order to properly account for and protect the health, safety and welfare of dogs housed in commercial kennels.

7. The Department appreciates this comment, but has no ability to set forth such requirements in the regulations. The temperatures noted are similar to the temperatures the Department's research and consultations with Department and Canine Health Board veterinarians show is the healthiest temperature ranges for captive animals. It is the Act however that establishes the low temperature at 50 degrees Fahrenheit. In addition, it is

the Act that dictates the Department's authority to regulate high temperatures. The Act allows for auxiliary ventilation when temperatures rise above 85 degrees Fahrenheit. The Act also specifically establishes the Department's authority to regulate humidity. Based on consultations and research – as more fully set forth in the Department's Responses to the Independent Regulatory Review Commissions Comments a.(iii) and (c)- the Department has established such humidity levels for a range of temperatures, including temperatures above 85 degrees Fahrenheit, in the final-form regulation.

Section 28a.3 Lighting

Comment: Lighting

Levels of 60 foot candles, minimum, at the floor is necessary for proper cleaning.

RESPONSE

The Department agrees with this comment, which is supported by comments received from other commentators to this regulation and is also supported by consultations, discussions and research undertaken by the Department. As stated previously, the Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with an Engineer who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

Section 28a.4 Flooring

Comment: Flooring

Flooring should be specified as impervious flooring with coved edges and proper drainage. The fact that flooring is solid does not make it impervious. Good flooring options such as epoxy, acrylic, sealed concrete, tile with epoxy grout and agricultural rubber flooring can all be chemically cleaned and sanitized.

RESPONSE

The Act, at section 207(h)(9) of the Act (3 P.S. § 459-207(h)(9)) requires "The floors and walls of primary enclosures must be impervious to moisture..." However, it is appropriate to restate such a requirement in the regulations for clarity to the regulated community. The Department has set forth that requirement, as well as listed some of the examples set forth in this comment, in subsections 28a.8(c)(7) and (8) of the final-form regulation.

General Comment

Comment:

The regulations are silent on cleaning systems. Proper solid waste disposal and chemical cleaning systems (preferably pressure washing) are essential to cleanliness and the mitigation of odor and disease. There should be some requirement for cleaning systems and waste disposal.

RESPONSE

The cleaning and sanitation provisions are contained in the Act and in the Department's current regulations. The Department can cite to the appropriate sections of the Act and current regulations and may require compliance with those cleaning and sanitation standards, but has no authority to establish any new cleaning or sanitation requirements in this final-form regulation.

IV. PROFESSOR OF BIOLOGY UNIVERSITY OF PENNSYLVANIA

Commentator:

Submitted by: Arthur E. Dunham, Ph.D., Professor and Associate Chair,
Department of Biology
University of Pennsylvania
433 South University Ave.
Philadelphia, PA 19104-6018

Background:

I am writing to strongly endorse the regulations created and propose by the Canine Health Board. I testified as an expert on vertebrate environmental physiology before the Canine health Board on the conditions necessary to ensure that dogs kept in kennel conditions are free of environmentally induced physiological stress.

Comment:

The regulations adopted by the Canine Health Board, if followed by kennels, will largely accomplish this critical goal. Any kind of kenneling which allows exposure to environmental conditions that result in physiological stress are inhumane and are not allowed by federal regulation in colonies that maintain animals (including dogs) that are used in laboratory research. We should at least provide dogs destined to be pets with an equivalent standard of care.

RESPONSE

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

Comment:

The regulations as written by the Canine health board are based in scientific research and on advice provided by scientific experts. These regulations will ensure that any commercially bred dog will be given adequate light, air, ventilation, air quality, flooring, and social exposure and interaction to minimize environmentally induced physiological stress. These essential factors that were all omitted from the recently enacted dog law so it is critical that these additional regulations go into effect.

RESPONSE

The final-form regulation incorporated many of the same ideas and scientific research based requirements set forth in the proposed regulation. The final-form regulation restructured the proposed regulation to add clarity and changed or modified some of the ideas and concepts based on statutory authority and additional research and input from engineers, architects, animal scientists and veterinarians from the Canine Health Board and the Department.

Comments:

I strongly support the regulations for the following reasons:

1. Pennsylvania's reputation has been tarnished by being branded a "puppy mill" capital which allows dogs to be raised inhumane conditions.

2. For the first time, commercially bred puppies and dogs will have guarantee of an environment that will promote – not hinder – behavioral and physical health and which will help protect dogs and the ultimate owners from the often tragic consequences of an inadequate and stressful kennel environment.

3. It is time that Pennsylvania was a leader in humane care of animals, rather than always appearing in the news for the numerous abuses that occur here. This regulation will ensure humane care.

4. The Canine health Board received testimony from dozens of experts which informed the current regulations which are some of the first truly scientifically informed canine breeding regulations in the USA. The commonwealth received this extensive expertise at no cost simply because experts believe that the scientific data mandated that we change how we treat commercially bred dogs. The regulations as written by the Canine Health Board are a road map for doing so.

RESPONSES

1. The final-form regulations impose new standards, many of them consistent with current USDA standards of care for dogs housed in kennels and all of them based on input from experts and/or people with experience in the field of kennel construction and design and actual practices, as well as, expert advice from animal scientists and veterinarians. Upon implementation the regulations will provide for a higher level of care for dogs housed in Pennsylvania's commercial kennels. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

2. The Department agrees with this comment and has set forth a final-form regulation that will account for the health and welfare of dogs housed in commercial kennels and will reduce the stress of the environment in which they are bred and raised.

3. The Department agrees and believes that with the Governor's leadership in passing the new legislation and with the implementation of these regulation, Pennsylvania will ensure the humane care of dogs housed in commercial kennels.

4. The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department utilized the expertise of the Canine Health Board and the persons utilized by the Canine Health Board to construct the final-form regulation. The Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable. These experts have continued to provide their time, knowledge, experience and expertise to the Department free of charge. The Department very much appreciates the contributions of all of those willing to consult with and provide information to the Department with regard to this regulation.

Comment:

The Canine Health Board is to be commended for reaching out into the scientific community and allowing its members to contribute to this important process. I was impressed by the caliber of questions asked by members of the Canine Health Board during my testimony who, I understand are all veterinarians and members of the PVMA. I am also impressed by the use of the scientific information provided by the experts by the Canine Health Board in formulating these regulations. It is unfortunate that the legislative committee of the PVMA did not avail themselves of the opportunity to become educated on these critical issues that affect animal welfare.

RESPONSE

The Department appreciates the hard work done by the Canine Health Board in crafting the initial Guidelines and its members continued input of time, expertise and knowledge as the Department crafted the final-form regulation. As stated previously, the Department consulted many of the experts and persons utilized by the Canine Health Board in finding answers to questions posed by commentators and ultimately drafting the final-form regulation. The Department very much appreciates the contributions of all of those willing to consult with and provide information to the Department with regard to this regulation

V. SENIOR INSTRUCTOR AND FACULTY MEMBER DEPARTMENT OF DAIRY AND ANIMAL SCIENCE PENN STATE UNIVERSITY

Comments General and Specific

Commentator:

Submitted by: Robert Mikesell, PhD
Senior Instructor
Department of Dairy and Animal Science
The Pennsylvania State University

Background:

My name is Dr. Robert Mikesell, Senior Instructor and faculty member in the Department of Dairy and Animal Science at Penn State. My background is in livestock production and I have over 20 years of experience in managing confined animals. My PhD research was in the field of livestock odors, odorous compounds, and management strategies to reduce odors from livestock farms. Within the past two years, I played a large role in developing the regulations for the odor section of the Act 38 Nutrient Management Regulations in cooperation with the State Conservation Commission. Given my practical background and research interest in animal housing and ventilation in relation to odors and gasses, I was asked to participate in the early stages of the Pennsylvania Dog Law regulatory process, specifically on the ventilation section. This testimony is intended to offer some scientific and practical comments on the promulgated regulatory package.

Comments: Section 28a.2. Ventilation

1. Subsections 1, 2,and 3 are well worded, easily measured, and would ensure adequate ventilation for confined dogs in nearly all cases.

2. Section 4. Field-based ammonia testing is not inexpensive nor is it terribly accurate. Three general categories of ammonia measurement options exist[1]:
[1]Wheeler, E. F., R.W.J. Weiss, and E. Weidenboerner. 2000. Evaluation of instrumentation for measuring aerial ammonia in poultry houses. J. Appl. Poultry Res. 9:443-452.

a. Passive diffusion tubes (the least expensive measuring device) cost approximately $4-$6 each and are not reusable. For most accurate results, tubes should be in place for 10 hours. Accuracy is generally +/- 20%.
b. Pull tube equipment is much faster, but requires a $380 handheld sample pump plus a $4-$6 tube for each sample collected. Accuracy is +/- 25%.
c. Electrochemical handheld devices must be calibrated periodically and cost more than $1500 each, but may be reused. Accuracy is +/- 9 ppm.
d. None of the available ammonia measurement devices exhibit acceptable accuracy when considering a 10 ppm ammonia threshold. In my experience, if temperature and relative humidity are at acceptable levels, ammonia is generally controlled. The threshold ammonia level used for most livestock buildings (and the National Institute for Occupational Health and Safety) is 25 ppm. At 10 ppm, people may or may not notice ammonia odors. I would suggest allowing enforcement officers the discretion of measuring ammonia if they perceive obvious ammonia odor when entering the building, and would suggest using 25 ppm as the regulatory threshold.

3. Section 6. The intent of requiring an emergency ventilation backup system is excellent. However, I would suggest including an electrical generator as a viable option in addition to the listed building openings.

4. Section 7. The practical measurement of particulate matter is somewhat similar to that of ammonia. Expensive equipment would be required, the process would be complex and time consuming, and results would be difficult to repeat. Again, in my experience if temperature and relative humidity are acceptable, particulate matter (dust) should not cause air quality problems.

5. Section 8. The measurement of air exchanges is, in my opinion, untenable from an enforcement officer's perspective. The calculations are cumbersome, complicated, and not repeatable because of changes in fan capacity in response to changing temperatures (for mechanically ventilated buildings) or wind speed (for naturally ventilated buildings). Additionally, if sections 1,2, and 3 are in compliance, Section 8 will be in compliance as well.

6. Section 9. The list of conditions "associated with poor air quality" could easily be a result of other factors. For example, the presence of blood may be a result of whelping. As written, the regulations would prohibit any sickness or physical abnormality, whether ventilation-related or not. I would suggest eliminating this list or at least condensing it to three symptoms that would strongly suggest poor ventilation:

a. (i.) excessive panting
b. (v.) huddling of dogs 12 weeks of age or older
c. (vii. and viii combined) red or runny eyes

7. Section 10. Again, section 10 is redundant and is covered adequately in sections 1-3.

RESPONSES

1. In general, paragraphs (1), (2), (3) and (8) of section 28a.2 the proposed regulations has been extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f) (1) through (6) of section 28a.2 of the final form regulation. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineer Scott Learned of Learned Design. Additional, standards related to circulation of the air, minimum fresh air rates and filtration have been established by subsection (f)(3)-(6) of the final-form regulation. The provisions of subsection (b) of the final-form regulation now entail information the Department requires of the kennel owner to verify the standards of the regulations are met. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established in the final form regulation.

Because of the restructuring of this section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. This was done after consultations with an engineer and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would

make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The ventilation standards now established in the final-form regulation are more easily measured and verified, continued to account for the health and safety of dogs housed in commercial kennels and allow kennel owners to increase or reduce the air circulation in a kennel based on the number of dogs housed in the kennel facility. This is a more equitable and proper manner by which to regulate ventilation.

With regard to humidity levels, the Department again consulted with both Dr. Mikesell and Dr. Kephart, as well as, engineer Scott Learned and veterinarians from the Canine Health Board and the Department. With regard to the humidity levels established the Department consulted with engineers and architects that design and build dog kennels, had discussions with veterinarians - including Department and Canine Health Board veterinarians - and with animal scientists, such as Dr. Kephart and Dr. Mikesell at the Pennsylvania State University. The results of those discussions were that a humidity range of thirty to seventy percent (30%-70%), when temperatures are at 85 degrees Fahrenheit or below, are normal animal husbandry practices and are proper levels to control for disease and assure the health, safety and welfare of dogs confined in kennels. Many of these experts in fact suggested an even narrower range of humidity levels that would have capped out at sixty percent (60%) humidity. The Department, however, chose to utilize the minimum standards suggested by a majority of the experts consulted.

In addition, with no temperature control, the Department sought to ascertain the proper humidity levels and auxiliary ventilations standards that would assure the health, safety and welfare of dogs confined to kennels when temperatures rise above 85 degrees Fahrenheit. Kennel owners and others have asserted in their comments that their kennel buildings can be made to "feel cooler" through the use of additional air circulation/ventilation or the mere increase of fan speed and the amount of air being pulled through the kennel building. However, science does not support such a comment or conclusion.

The Department, with the assistance of veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture on the tongue of the dog has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and therefore the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat

index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for heat indexes above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

2. a. b. c. and d. First the Department appreciates the information and cost data related to the types of ammonia level measuring devices on the market and will utilize that data in researching tools to be utilized by the Department and to establish a cost estimate in the final-form regulatory analysis document. Second, the Department, partially in response to this comment, consulted with engineers and architects related to the ammonia levels established by the proposed regulation and with regard to the ability to measure ammonia levels. In addition, the Department consulted with veterinarians and animal scientists, Dr. Mikesell and Dr. Kephart, and did its own research with regard to commonly accepted levels of ammonia in animal operations such as swine operations. The engineers and architects all believed that if kennels were properly ventilated and achieved the air circulation values established in the regulations, then ammonia levels should not be a problem in the kennel. The Act, however, requires the Department to establish the proper ammonia levels for dogs housed in kennels. Discussions with veterinarians and research done by veterinarians on the Canine Health Board affirm that ammonia levels of 20 part per million or higher will cause respiratory and eye irritation and problems in animals. The veterinarians suggested the levels be set at some point below 20 parts per million and the consensus was that a level of 15 parts per million would both account for proper animal health and welfare and would be measurable. Ammonia levels are measured in the swine industry and can be accurately measured at

levels of 15 parts per million. The Department's research also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel. That Act establishes parameters that do not allow dogs in kennels to be housed in any primary enclosure that is more than 48 inches high for dogs under twelve weeks of age or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department believes ammonia measurements should be taken at the height of the dogs.

3. The Department appreciates the comment. The Department has amended the requirements for kennels to report ventilation system failures in the final-form regulation. Kennel owners must report and immediately take actions to fix such failures. In addition, mechanical system failures should be rare and should be the exception and not the norm. If failures become significant or are not rare, then the Department will revisit the regulation and require a specific type of backup ventilation system.

4. This comment is consistent with the comments and direction the Department has received from other engineers and architects it consulted in drafting this document and the final-form regulation. The Department has therefore removed the provision related to particulate matter from the final-form regulation.

5. The Department finds this comment to be consistent with other comments submitted by Scott Learned of Learned Design and Dr. Ken Kephart of the Pennsylvania State University. Therefore, as more fully detailed in the Department's answer to Dr. Mikesell's first comment –set forth above – the Department made various changes to the ventilation requirements of the final-form regulation, including changing the measurement tool to cubic feet per minute per dog.

6. The Department discussed these issues with Dr. Mikesell and Dr. Kephart, as well as, with Department and Canine Health Board veterinarians. In response to those discussions, section 28a.2(9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress has been modified in the final-form regulation (see Section 28a.2(h) of the final-form regulation). The number and type of conditions in dogs that may denote poor ventilation has been reduced and are consistent with the suggestions of the experts consulted, including Dr. Mikesell. In addition, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with

high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

7. What was subsection 28a.2(10) of the proposed regulation, has been eliminated from the final-form regulation.

Comment:

In summary, it seems that the regulation authors included all possible approaches to measure air quality without regard to regulatory cost, complexity, accuracy or practicality. The requirements in sections 7, 8, 9, and 10 are simply redundant and, in some cases, overly intricate methods of establishing that kennel air quality is acceptable. Sections 1-3 could easily stand alone to establish acceptable air quality in dog kennels. Please review the suggested changes and give thoughtful consideration to eliminating the requirements in sections 7, 8, 9, and 10. I would be happy to answer any questions at 814-865-2987 or rem9@psu.edu.

RESPONSE

The sections set forth in the comment above have been either eliminated from or significantly amended in the final-form regulation. In addition, the final-form regulation no longer measures air exchanges per hour, but instead, based partially on the suggestions of Dr. Mikesell among others, measures air circulation in CMF per dog. As set forth previously, in general, paragraph (8) of section 28a.2 the proposed regulations has been deleted or its provisions extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f) (1) through (6) of section 28a.2 of the final form regulation. Specific, standards related to circulation of the air, minimum fresh air rates and filtration have been established by subsection (f)(3)-(6) of the final-form regulation. The provisions of subsection (b) of the final-form regulation now entails information the Department requires of the kennel owner, including certification of the system by a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. This was done after consultations with an engineer and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility.

VI. PROFESSOR OF ANIMAL SCIENCE, COLLEGE OF AGRICULTURAL SCIENCES, DEPARTMENT OF DAIRY AND ANIMAL SCIENCE, THE PENNSYLVANIA STATE UNIVERSITY

Submitted by: Kenneth B. Kephart
Professor of Animal Science
Department of Dairy and Animal Science
The Pennsylvania State University

Background:

I appreciate your efforts to develop specific guidelines for ventilation and lighting. In the past, these two components of the dog law were a source of frustration for both commercial kennel operators as well as dog wardens because of the difficulty in interpreting the rules. Certain elements of the proposed standards make good sense, while other sections, I believe, require significant revision. My comments are listed below.

Comments: Section 28a.2 Ventilation

1. Rule: "When the ambient air temperature is 85 degrees Fahrenheit or higher, a form of mechanical ventilation capable of reducing air temperature shall be utilized to reduce air temperature where dogs are present."

   Comment: *Keeping air temperature at or below 85 degrees F is not necessary for maintaining the health and productivity of the dogs. In this country we house millions of farm animals (dairy cattle, swine, and poultry) throughout the summer months in temperatures that often exceed 85 degrees F, yet they are both healthy and productive. We do this by providing adequate ventilation rate for the facility and appropriate air movement at pen level. In the case of canine housing, if a commercial kennel operator chooses to provide air conditioning to lower the temperature, that is certainly acceptable, but not necessary. Also, I am assuming that "ambient" refers to the air temperature inside the living space for the animals. Ambient usually refers to outdoor temperature or the temperature of the surroundings. That should be clarified.*

RESPONSE

Ambient does refer to the air temperature inside the kennel housing facility. The final-form regulation talks about temperature inside the kennel housing facility. With regard to temperatures exceeding 85 degrees Fahrenheit, the final-form regulation does not require air conditioning to cool the kennel facility temperature back down to 85

degrees Fahrenheit, although it is not prohibited and is certainly acceptable. The research of the Department and consultation with veterinarians and engineers and architects that build and design kennel buildings and account for normal animal husbandry practices as they relate to dogs shows that dogs do not dissipate heat in the same manner or as effectively as the other animals mentioned in the comment. In addition, as set forth more fully in this response, the Department, with the assistance of Dr. Karen Overall, found a study relating to the survivability of dogs at various temperatures and humidity levels – i.e. heat index values. The study clearly illustrates that dogs can not survive for more than six hours at certain heat index values. That study and heat index values associated with other animals, including swine, cattle, poultry and humans were also researched and form the basis of the Department's final-form regulation, which requires humidity levels to be adjusted to maintain heat index values that will not be detrimental to the health and welfare of dogs housed in commercial kennels. The research also evidences that merely blowing high temperature and high humidity air at a faster rate over the dogs is not effective and will not assure their survivability let alone their health and welfare. A more detailed response is set forth below.

With no temperature control, but with the overall duty to protect the health and welfare of dogs and the specific duty to regulate humidity, the Department sought to ascertain the proper humidity levels and auxiliary ventilations standards that would assure the health, safety and welfare of dogs confined to kennels when temperatures rise above 85 degrees Fahrenheit. Kennel owners and others have asserted in their comments that their kennel buildings can be made to "feel cooler" through the use of additional air circulation/ventilation or the mere increase of fan speed and the amount of air being pulled through the kennel building. However, science does not support such a comment or conclusion.

The Department, with the assistance of veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture on the tongue of the dog has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and therefore the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study

that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for heat indexes above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

2. Rule: "When the temperature is 50-75 degrees Fahrenheit the relative humidity shall be in the range of 40-60%."

   Comment: *A relative humidity range of 40-60% is appropriate when temperatures range from 50-75 degrees. It is possible under conditions of low outdoor temperatures that operators may be tempted to reduce ventilation rate in an effort to save on energy costs associated with heating the facility. Under those conditions, the body heat of the animals may be sufficient to keep the facility within the appropriate temperature range, but relative humidity could approach 80-90%. The high relative humidity, in this case, would not be a concern for animal health, but under these conditions of low ventilation rate, there may be high concentrations of pathogens, aerosols, dust, and endotoxins that could be unhealthy for both animals and people.*

RESPONSE

In further research regarding the humidity levels established by the Department in the final-form regulation the Department consulted with engineers and architects that design and build dog kennels, had discussions with veterinarians - including Department and Canine Health Board veterinarians - and with animal scientists, such as Dr. Kephart and Dr. Mikesell at the Pennsylvania State University. As a result of those discussions the Department determined that common animal husbandry practices would allow for a humidity range of thirty to seventy percent (30%-70%), when temperatures are at 85

degrees Fahrenheit or below. This range encompasses normal animal husbandry practices and establishes proper levels to control for disease and assure the health, safety and welfare of dogs confined in kennels. Many of these experts in fact suggested an even narrower range of humidity levels that would have capped out at sixty percent (60%) humidity. The Department, however, chose to utilize the minimum standards suggested by a majority of the experts consulted. The final-form regulation standards are consistent with Dr. Kephart's comment.

3. Rule: "When the temperature is above 75 degrees Fahrenheit the relative humidity shall be 1-50%."

   Comment: *A relative humidity range of 1-50% is not appropriate when temperatures are above 75 degrees. During times of high temperature and humidity, it is very difficult to maintain relative humidity levels below 50% even with air conditioning and/or dehumidification. As stated above, high relative humidity is not independently problematic. Admittedly, high relative humidity can contribute to animal discomfort, particularly when ventilation rate or air movement is low. But with a well functioning ventilation system, animal comfort can be maintained during times of high relative humidity. Note that there are different methods for measuring relative humidity. The recommended method should be specified.*

RESPONSE

The Department greatly appreciates the expertise and experience of Dr. Kephart. However, in this case, based on the Department's research, the survivability study supplied by Dr. Karen Overall, heat index values for animals including swine, cattle, poultry and humans and discussions with veterinarians from the Canine Health Board and the Department, we do not agree with the conclusion that high relative humidity, combined with high temperature do not negatively impact the health and welfare of dogs. Nor do we agree, based on the research set forth above that such issues can be addressed merely by increasing the amount or velocity of air circulation. Furthermore, our consultations with engineers contradicts the statement that humidity levels can not be lowered during times of high temperatures, even with air conditioning. This may be true if only tunnel ventilation is being utilized. However, based on the research and information received and more specifically set forth in answers to the Independent Regulatory Review Commission and Dr. Kepart's first comment, tunnel ventilation is not effective and should not be utilized in times of high heat and high humidity if it can not assure a humidity level and appropriate heat index value.

4. Rule: "Ammonia levels shall be less than 10 ppm."

   Comment: *We generally consider 25 ppm as a safe maximum for livestock facilities. However, the animal density in those facilities is much higher than that of commercial kennels, therefore, I would regard 10 ppm as an appropriate value for this application.*

RESPONSE

The Department agrees that 10ppm would be an appropriate ammonia level to protect the health and welfare of dogs housed in kennel facilities. However, based on a comment from Dr. Mikesell and consultation with others, the Department believes current ammonia level monitors may not be able to accurately measure ammonia at those levels. In addition, additional consultation with Dr. Kephart, Dr. Mikesell and Department and Canine Health Board veterinarians, the Department believes that ammonia levels of 20 ppm of ammonia are still problematic to the health and welfare of most animals, including dogs. Therefore, the consensus was that ammonia levels should be set at 15 ppm. Such a level is measurable and will assure the health and welfare of dogs housed in kennel facilities.

5. Rule: "The means of ventilation employed shall ensure that carbon monoxide shall be maintained below detectable levels."

   Comment: *Many of these kennels will use direct fired, non-vented LP gas heaters. These heaters are appropriate when combined with an effective ventilation system. However, there may be trace amounts of carbon monoxide produced, and because the heaters are non-vented, these trace amounts may be detectable if the instrumentation is sufficiently sensitive. I would suggest that you delete the first sentence of this rule, and leave the remaining wording intact.*

RESPONSE

The Department agrees with Dr. Kephart's analysis, which is also supported by discussions with engineers that build kennel facilities. The final-form regulation imposes the very least stringent requirement that will help to assure the health and welfare of dogs housed in kennels. The Department agrees that carbon monoxide levels should at the very least be monitored for safety purposes and to assure proper ventilation and air circulation is occurring within a kennel that utilizes a carbon based form of heating or mechanical ventilation. Carbon monoxide gas can build up in any enclosed building where carbon based mechanical ventilation or heating equipment is in use. Carbon monoxide is colorless and odorless and is deadly. The regulations only require that carbon monoxide detectors be installed. If carbon monoxide levels rise to the point the detectors are triggered the kennel has a problem with ventilation or air exchange in that part of the kennel housing facility and needs to take action to assure the health, safety and welfare of the dogs housed in that area of the kennel. Section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)) states in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and prevent moisture condensation ...the appropriate ventilation...ranges shall be determined by the Canine Health Board. One of the purposes of ventilation is to exchange or re-circulate air in a manner that removes pathogens, including carbon monoxide and replenishes oxygen. The regulatory requirement is inexpensive and necessary to assure the health, safety and welfare of dogs housed in kennels, which is the general overall duty and authority of the Canine Health Board under section 221(f) of the Act (3 P.S. § 459-221(f)).

One of the most acutely toxic indoor air contaminants is carbon monoxide (CO), a colorless, odorless gas that is a byproduct of incomplete combustion of fossil fuels. Common sources of carbon monoxide are tobacco smoke, space heaters using fossil fuels, defective central heating furnaces and automobile exhaust. Improvements in indoor levels of CO are systematically improving from increasing numbers of smoke-free restaurants and other legislated non-smoking buildings. By depriving the brain of oxygen, high levels of carbon monoxide can lead to nausea, unconsciousness and death. According to the American Conference of Governmental Industrial Hygienists (ACGIH), the time-weighted average (TWA) limit for carbon monoxide (630-08-0) is 25 ppm.

6. Rule: "In the event of a mechanical system malfunction the kennel must have windows, doors, skylights, or other openings in the structure shall be operable to maintain ventilation."

   Comment: *This rule is appropriate.*

RESPONSE

The Department appreciates the support for this provision. It is included in the final-form regulation.

7. Rule: "The means of ventilation employed shall ensure that particulate matter from dander, hair, food, bodily fluids, and other sources in a primary enclosure shall be below 10 milligrams per meter cubed."

   Comment: *This rule is requires clarification. Are you referring to aerial particulate matter? If so, that needs to be clearly stated. Also, there is no reference as to how these aerial dust concentrations should be measured. A value of 10 mg/m3 is not unreasonable, but it is a relatively low concentration and I am concerned that the dust concentrations could be measured incorrectly. Also, if the low relative humidity values required in rule 3 stand, the resulting dry air could contribute to higher the dust concentrations in the facility.*

RESPONSE

This comment, with regard to proper ventilation controlling particulate matter, is consistent with the comments and direction the Department has received from other engineers and architects it consulted in drafting this document and the final-form regulation. The Department has therefore removed the provision related to particulate matter from the final-form regulation.

8. Rule: Air changes.

   Comment: *Most of what is included in this rule will contribute to confusion for both the operator and the persons responsible for measuring and enforcing air changes. In my comments (dated February 12, 2007) on the Dog Law revisions, I had suggested developing a table that would provide ventilation requirements for various body weights of dogs:*

Recommended ventilation rates for dogs, cfm/animal
(Example)

Body Wt, lb	*Cold Weather*	*Warm Weather*	*Hot Weather*
5-10	*4*	*8*	*15*
11-25	*5*	*20*	*30*
26-50	*6*	*30*	*50*
51-100	*8*	*35*	*75*
> 100	*10*	*50*	*100*

Using a table as proposed above ensures that the animals will be comfortable under both cold and hot weather conditions. In addition, by using these ventilation rates as the standard, much of the other criteria that you list (relatively humidity, aerial dust concentrations, ammonia concentrations) will automatically fall within appropriate parameters, eliminating the need for additional measurement and enforcement. Using guidelines for temperature and ventilation rates would, in my view, be sufficient to ensure that the animals within the facility have fresh air at all times.

RESPONSE

The comments related to measurability and enforcement of air exchange per hour rates are consistent with comments received from engineers and architects that design kennel buildings and who comments on this regulation. In addition, the suggestion to change the measurement to CFM per minute per dog is consistent with the suggestions of architects and engineers that were consulted. Therefore, in general, subsections (1), (2), (3) and (8) of section 28a.2 the proposed regulations has been deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection 28a.2(f) (1) through (6) of the final form regulation. The change to CFM per dog is consistent with this comment and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineer Scott Learned of Learned Design. Specific standards related to circulation of the air, minimum fresh air rates and filtration have been established by paragraphs (3)-(6) of subsection 28a.2(f) of the final-form regulation. The provisions of paragraph (b) of the final-form regulation now entail information the Department requires of the kennel owner including certification by a professional engineer.. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken

and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. This was done after consultations with an engineer and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The ventilation standards now established in the final-form regulation are more easily measured and verified, continued to account for the health and safety of dogs housed in commercial kennels and allow kennel owners to increase or reduce the air circulation in a kennel based on the number of dogs housed in the kennel facility. This is a more equitable and proper manner by which to regulate ventilation. Dog weights were not considered as this measurement would have been nearly impossible to calculate and enforce.

9. Rule: "Dogs shall not exhibit conditions or signs of illness or stress association with poor ventilation, these include:"

   Comment: *It is clearly important that the operator diligently observe the dogs at least daily for the signs that are listed in this rule. What is not clear is how the persons responsible for enforcement can determine that the presence of these signs of is an indicator of poor ventilation. In reality, making that determination requires expertise, possibly diagnostic laboratory work-ups, and veterinary assistance.*

RESPONSE

The Department had further discussions with Dr. Mikesell and Dr. Kephart, as well as, with Department and Canine Health Board veterinarians related to this issue. In response to those discussions, section 28a.2(9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress has been modified in the final-form regulation (See 28a.2(h) of the final-form regulation). The number and type of conditions in dogs that may denote poor ventilation has been reduced and are consistent with the suggestions of the experts consulted, including Dr. Mikesell. In addition, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that veterinarians have asserted can result from poor

ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

10. Rule: "The air in the facility shall not have excessive dog odor, other noxious odors, stale air, moisture condensation on surfaces, or lack of air flow."

Comment: *With exception of moisture condensation on surfaces, nothing in this rule can be objectively interpreted or enforced.*

RESPONSE

Except for the moisture condensation, which is a requirement of the Act itself, the Department has removed all provisions regarding the regulation of dog odor, noxious odors and stale air from the final-form regulation.

11. Rule: "When employing mechanical means of ventilation and recirculating air, it shall be filtered with small particle, non-ozone producing air filters."

Comment: *This rule is confusing. Does it mean that any mechanical ventilation system must provide a means of filtration, or only when the system recirculates air? If it refers only to recirculation systems, I would support the use of filtration.*

RESPONSE

The rule refers to recirculation systems.

Comments: Section 28a.3 Lighting

1. Rule: Natural light.

Comment: *I support the guidelines in this rule.*

RESPONSE

The Department appreciates the support and believes, based on input from veterinarians that natural light is essential to dog health, welfare and proper development. The final-form regulations however, only now requires some form of natural lighting for kennels that do not provide access to outdoor exercise. All other kennels have the choice of providing the proper level of lighting either by natural or artificial lighting or both.

2. Rule: Artificial light.

(i) "Artificial light, indoor daytime lighting shall provide full spectrum lighting between 50-80 foot candles at standing shoulder level of the dogs for daytime lighting."

Comment: *First, will everyone understand what is meant by "full spectrum lighting?" For example, the spectrum provided by incandescent lighting will differ from that of fluorescent lighting. Are either of lighting systems these "full spectrum?" Will someone measure the light wavelengths in these facilities? Second, according the Penn State's Office of Physical Plant classrooms are required to have 50 foot candles. Do dogs really need more light than this? If we provide less than 50 foot candles for the dogs, how will their health or welfare be affected?*

RESPONSE

Full spectrum lighting is now defined in the final-form regulation. In addition, it is not a new form of lighting. Some type of full spectrum lighting has been in use and available since the 1930s. Full spectrum lighting is the only lighting that even closely simulates the wavelengths of natural sunlight. As set forth in previous answers to comments from the Honorable Senator Brubaker and the Independent Regulatory Review Commission, natural sunlight is important for the health of dogs housed in kennels – for vitamin D levels and eye development among other issues.

As stated previously, the Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with an Engineer who designs kennel buildings. The consensus, consistent with the 50 footcandles set forth in the comment, was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for offic and administration areas and Penn State University's standards for class room lighting, which are 50 footcandles as set forth in the comment. This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

(ii) "Night time artificial light shall be 1-5 foot candles at standing shoulder level of the dogs of lighting"

Comment: *If we provide less than* 1-5 *foot candles, how will the dogs' health or welfare be affected?*

RESPONSE

This provisions has been removed from the final-form regulation.

(iii) "Artificial light provided shall approximately coincide with the natural diurnal cycle."

Comment: *What is the purpose of this rule? Would there be a problem/or the dogs if the operator chose to provide approximately* 12 *hours 0/ light year round?*

RESPONSE

The Act requires that a diurnal light cycle be provided for dogs housed in kennels. No, there is no adverse effect of a 12 hour cycle and in fact the definition of a diurnal cycle is 12 hours on and 12 hours off. That definition is included in the final-form regulation.

Comment: Section 28a.4 Flooring

I have just one general comment regarding the flooring already approved in the Dog Law [3 P.S. Section 207(i)(3)]. As I understand, that rule forbids the use of vinyl-coated wire. I believe there are vinyl or plastic coated products that can be used with dogs that would actually provide a cleaner, more comfortable environment than either slats or solid surfaces.

RESPONSE

Section 207(i)(3)(i) of the Dog Law prohibits the use of metal strand flooring, whether coated or not (3 P.S. § 459-207(i)(3)(i)). The final-form regulation has been modified to elaborate the flooring requirements of the Act and thereby add clarity to some of the provisions related to alternative flooring requirements.

VII. VERNE R. SMITH, ESQUIRE – Comments General and Legal Commentator:

Submitted by: Verne R. Smith, Esquire
Professor of Law, Animal Law and Commercial Business Transactions

Comment:

In my considered opinion, viewed through my many years of experience as a law Professor teaching Animal Law and Commercial Business Transactions, I conclude that the Regulation faithfully and fairly fulfills the General Assembly's mandate to the Canine Health Board ("the Board") to articulate, define, and determine appropriate ventilation, humidity, ammonia, and lighting ranges and

standards for commercial (Class C) dog kennels. I therefore recommend the issuance of this Regulation in its final form.

RESPONSE

The Department very much appreciates the support set forth in this comment. The Department has consulted with engineers, architects, animal scientists and veterinarians from the Canine Health Board and the Department in making revisions to the final rulemaking. The final-form regulation, although changed, keeps many of the concepts of the proposed regulation. It amends some provisions – such as air changes per hour to CFM per dog – to give the regulation clarity and add a more objective measure that can be more easily and consistently enforced. In addition, the Department has reorganized some provisions and created additional section headings to add clarity to the final-form regulation. In doing so much to the original language was changed, but many of the overall concepts of the proposed regulation relating to ventilation, lighting and flooring were kept.

Comment:

A fundamental principle of statutory interpretation is to look first to the plain meaning of the subject statute. If the plain meaning of the statute is clear, no further construction of the statute is necessary. In this case, the plain meaning of the Statute is indeed clear. The Pennsylvania General Assembly unambiguously charged the Board with "*determining* auxiliary ventilation to be provided *if the ambient air temperature is 85 degrees or higher.*" It summarized the Board's mandate in clear, unambiguous language, as follows: "The appropriate ventilation, humidity and ammonia ranges *shall be determined* by the Canine Health Board." Finally, it specifically defined the "Purpose" of the Board in broad, general terms by instructing it to "*determine the standards* based on animal husbandry practices to provide for the welfare of dogs..." (Italics added). Two observations immediately emerge from the cited statutory language.

1. The multiple uses of the word "determine" in the Statute is significant and dispositive. The word "determine" has the following meanings: "to fix conclusively or authoritatively; to settle a question or controversy; to settle or decide by choice of alternatives or possibilities" (Webster's Third New International Dictionary of the English Language). The use of this term in multiple contexts throughout the Statute to delineate the Board's authority plainly illustrates that the Board *is and shall be* the duly constituted and appropriate body to articulate and prescribe (i.e. "to settle or decide by choice of alternatives or possibilities") all requisite standards and ranges to ensure that the temperature, ventilation, humidity, and ammonia categories specifically enumerated in the Statute are measurable, quantifiable, and enforceable. The Regulation does precisely this. Indeed, had the Board done anything less than prescribe the specific standards and ranges it did in the Regulation, it arguably would *not* have fulfilled its statutory mandate, and could have been subject to challenge for that. Thus, it is my opinion that the Regulation precisely conforms to the statutory mandate of "determining" the appropriate standards and ranges for ventilation, humidity, and ammonia in commercial dog kennels, and therefore should be issued as written in its final form.

2. The General Assembly clearly recognized the overlapping nature of ventilation and ambient air temperature in the dog kennels regulated by the Statute by specifically linking the two concepts in its twin directives to the Board to ensure that the kennels remain "sufficiently ventilated at all times when dogs are present" and to "determine auxiliary ventilation to be provided" if the air temperature reaches or exceeds 85 degrees. This in fact is precisely what the Board did in its Regulation. First, the Board *determined* that only a functional, mechanical ventilation system with specific characteristics to reduce air temperature would meet the statutory requirement of ensuring that the kennels remained "sufficiently ventilated"; and second, it *determined* that if the temperature in the kennels meets or exceeds 85 degrees, specific auxiliary ventilation standards would need to be provided if the kennel operator chooses to permit the dogs to remain in the kennel facility. Thus, the Regulation clearly, plainly, and faithfully tracks the language set forth by the General Assembly in the Statute. Nothing in the plain language or intent of the Statute contravenes the Board's determinations. Rather, everything in the Statute supports the Board's determinations as articulated in the Regulation.

3. The same conclusion holds true for the Board's standards pertaining to ammonia, particulates, and lighting levels. Regarding lighting, the Statute gives very specific and unambiguous authority to the Board: "The appropriate lighting ranges *shall be determined* by the Canine Health Board" (italics added). Again, the Board's Regulation fully, fairly, and faithfully discharges this mandate by determining and articulating specific foot-candle ranges and the appropriate mix of natural and artificial light standards. Regarding ammonia levels, the Statute clearly recognizes the close interrelationship between ammonia levels and ventilation in section 207(7). The ventilation standards prescribed in the Regulation ensure that the dogs are not harmed by the "ammonia levels" specifically referenced in the Statute, and thus discharge the Board's statutory mandate to provide for the welfare of the dogs by determining and articulating appropriate measures to address ammonia levels in Class C kennels. Likewise, the Board's regulation of particulates clearly falls within the ambit of its statutory authority to determine adequate and sufficient ventilation.

RESPONSES

1. The Department agrees that the proposed regulation conforms to the statutory mandate of "determining" the appropriate standards and ranges for ventilation, humidity, and ammonia in commercial dog kennels. However, many of the commentators had questions that went to clarity, as well as, authority and some stated the Canine Health Board went beyond the setting of standards and ranges. The Department has answered those comments and believes the final-form regulation conforms with the Board's and the Department's statutory authority. In addition, as stated previously, the Department did reorganize the final-form regulation and add additional section headings and definitions, as well as, more precise language and more objective standards to the final-form regulation.

2. The Department agrees that the Canine Health Board, crafted guidelines, promulgated as proposed regulations by the Department with the intent to ensure that the kennels remained "sufficiently ventilated at all times when dogs are present" and to "determine auxiliary ventilation to be provided" if the air temperature reaches or exceeds 85 degrees. The Department, in its consultations with engineers and architects – all of whom design kennel facilities – confirmed that mechanical ventilation systems were necessary to assure the proper ventilation levels in kennel facilities. The proper levels were determined by the research done by the Canine Health Board and additional research done by the Department in drafting the final-form regulation. The research included additional discussions with engineers and architects that design and build kennel facilities, consultations with animal scientists, a meeting with an AKC senior field representative and information and input from Canine Health Board and Department veterinarians.

The Department however, after viewing the comments submitted by the Independent Regulatory Review Commissions and Legislators related to requiring temperature reduction through the use of air conditioning units when kennels exceeded 85 degrees Fahrenheit decided to utilize the absolute authority set forth in the statute to regulate humidity levels and assure a proper environment, based on animal husbandry and scientific information related to dog survivability and safety and heat index levels. The rationale for the approach and support for the levels established in the final-form regulation is set forth in previous answers to comments from the Independent Regulatory Review Commission, the Honorable Senator Brubaker and Members of the Republican House Agricultural and Rural Affairs Committee.

3. The Department appreciates the support and believes, based on input from veterinarians that natural light is essential to dog health, welfare and proper development. The final-form regulations however, only now requires some form of natural lighting for kennels that do not provide access to outdoor exercise. All other kennels have the choice of providing the proper level of lighting either by natural or artificial lighting or both.

Full spectrum lighting is now defined in the final-form regulation. In addition, it is not a new form of lighting. Some type of full spectrum lighting has been in use and available since the 1930s. Full spectrum lighting is the only lighting that even closely simulates the wavelengths of natural sunlight. As set forth in previous answers to comments from the Honorable Senator Brubaker and the Independent Regulatory Review Commission, natural sunlight is important for the health of dogs housed in kennels – for vitamin D levels and eye development among other issues.

As stated previously, the Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with an Engineer who designs kennel buildings. The consensus, consistent with the 50 footcandles set forth in the comment, was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-

800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for offic and administration areas and Penn State University's standards for class room lighting, which are 50 footcandles as set forth in the comment. This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

Comment:

In conclusion, I see no legal impediment to the issuance of the Regulation in its final form, as written. All available evidence supports the conclusion that the Board acted entirely within the ambit of its statutory mandate and scope of authority to "determine" the appropriate standards and ranges of the statutorily mandated elements of the kennel environment. The Regulation furthermore provides the regulated community with clear and specific standards to guide it as it complies and remains in compliance with the Statute. Issuance of the Regulation in its final form is therefore recommended.

RESPONSE

The Department appreciates the support of this commentator and, as set forth, in its answers to the previous comments has drafted a final-form regulation that it believes fully complies with the statutory authority and mandate established by the Dog Law, adds clarity to certain provisions, creates more objective standards and most importantly will provide for the health and welfare of dogs housed in commercial kennels in this Commonwealth.

HUMANE SOCIETY COMMENTS

I. The American Society for the Prevention of Cruelty to Animals (ASPCA) - Comments-General and Specific Sections

Commentator:

Submitted by: Cori A. Menkin, Esq., Senior Director of Legislative Initiatives, Government Relations, and Lila Miller, DVM, Vice- President Veterinary Outreach and Veterinary Advisor, ASPCA, 520 8th Avenue, New York, NY 10018

A. General Comments:

1. Support for the Proposed Regulation:

Comment: On behalf of the over 100,000 members of The American Society for the Prevention of Cruelty to Animals (ASPCA) who are Pennsylvania residents, I respectfully submit the following comment in support of the Department of Agriculture's proposed regulations to the Dog Law regulations

regarding standards for commercial kennels. The notice was published in the September 12, 2009 issue of the Pennsylvania Bulletin (Vol. 39, No. 37). Based on the following comments, the ASPCA supports the proposed regulatory package presented by the Department of Agriculture with the recommended changes, and encourages promulgation of the new regulations as expeditiously as possible. Thank you for your time and consideration.

RESPONSE

The Department appreciates the support set forth in the comment. The Department, in drafting the final-form regulation has made changes to the proposed regulation. The changes are based on additional research and consultations undertaken by the Department as part of its duty to answer all comments received and assure the final-form regulation is clear, as objective as possible and meets form and legality standards. As set forth in the answers to other comments, the Department consulted with engineers and architects that design and build kennel facilities, consultations with animal scientists, a meeting with an AKC senior field representative and information and input from Canine Health Board and Department veterinarians. The Department has drafted a final-form regulation that it believes fully complies with the statutory authority and mandate established by the Dog Law, adds clarity to certain provisions, creates more objective standards and most importantly will provide for the health and welfare of dogs housed in commercial kennels in this Commonwealth.

2. Background and Legal Authority:

Comment: The Bureau of Dog Law Enforcement within the Department of Agriculture is charged with implementing and enforcing the Dog Law, which was passed to ensure the humane care and treatment of dogs in the Commonwealth. In 2008, the Pennsylvania legislature passed significant amendments to the Dog Law and created the Canine Health Board to establish appropriate ventilation, humidity, ammonia, and lighting ranges for commercial kennels, as well as consider alternative flooring options to those set forth in the law. The proposed regulations are the result of the Canine Health Board's recommendations for those standards.

Opponents to the proposed regulations have argued that the proposed language is beyond the scope of authority of the Canine Health Board, and therefore not legally permissible. However, it should be noted that it is the Department of Agriculture, and not the Canine Health Board that is proposing these regulations. The Canine Health Board was charged with determining appropriate ranges and standards for commercial kennels. It is, however, the job of the Department of Agriculture to promulgate regulations which demonstrate how licensees are to comply with the Dog Law and regulations. The Department of Agriculture is granted this authority through various sections of the Dog Law (See *e.g.* 3 P.S. § 459-207, 3 P.S. § 459-200, *et. al.*). Therefore, the proposed regulations are well within the scope of authority of the agency setting them forth.

RESPONSE

The Department agrees that the proposed regulation conforms to the statutory mandate of "determining" the appropriate standards and ranges for ventilation, humidity, and ammonia in commercial dog kennels. However, many of the commentators had questions that went to clarity, as well as, authority and some stated the Canine Health Board went beyond the setting of standards and ranges. The Department did reorganize the final-form regulation and add additional section headings and definitions, as well as, more precise language and more objective standards to the final-form regulation. In some areas, the Department made fairly significant changes based on comments and/or additional research and consultation with experts.

For example, although the Department agrees that the Canine Health Board, crafted guidelines, promulgated as proposed regulations by the Department with the intent to ensure that the kennels remained "sufficiently ventilated at all times when dogs are present" and to "determine auxiliary ventilation to be provided" if the air temperature reaches or exceeds 85 degrees. The Department changed the ventilation measurement rate from air exchanges per hour to cubic feet per minute per dog. In its consultations with engineers and architects – all of whom design kennel facilities – confirmed that mechanical ventilation systems were necessary to assure the proper ventilation levels in kennel facilities. The proper levels were determined by the research done by the Canine Health Board and additional research done by the Department in drafting the final-form regulation. The research included additional discussions with engineers and architects that design and build kennel facilities, consultations with animal scientists, a meeting with an AKC senior field representative and information and input from Canine Health Board and Department veterinarians. One result of these consultations was to change the ventilation requirements from air changes per hour to Cubic Feet per Minute per dog, which is a much more objective, measurable, fair and enforceable standard.

An example of changes made with regard to assuring absolute statutory authority, the Department, after viewing the comments submitted by the Independent Regulatory Review Commissions and Legislators related to requiring temperature reduction through the use of air conditioning units when kennels exceeded 85 degrees Fahrenheit decided to utilize the absolute authority set forth in the statute to regulate humidity levels and assure a proper environment, based on animal husbandry and scientific information related to dog survivability and safety and heat index levels. The rationale for the approach and support for the levels established in the final-form regulation is set forth in previous answers to comments from the Independent Regulatory Review Commission, the Honorable Senator Brubaker and Members of the Republican House Agricultural and Rural Affairs Committee.

Comment: Furthermore, even if it were the Canine Health Board promulgating these regulations, the proposed language is not beyond the scope of authority of the Canine Health Board. The proposed language setting specific guidelines for ventilation, humidity, ammonia levels, particulate matter, and temperature simply provide performance standards to help kennel owners meet the guidelines established by the Board. For example, the measure of particulate matter is how an inspector would determine if a kennel owner is within the acceptable ammonia range. The performance standards are in no way beyond the scope of authority of the Board. Temperature, humidity, and ventilation are often influenced by each other. As a

result, it was necessary for the Board to address all of these standards in a comprehensive way that is both able to be implemented and able to be enforced. It would be senseless to mandate that the Board set these ranges but not allow them to provide a way to make the ranges enforceable for inspectors and realistic for kennel owners.

RESPONSE

The Department agrees with the comment. The final-form regulation continues to establish ventilation, auxiliary ventilation, humidity, ammonia level and carbon monoxide detection criteria. Particulate matter, according to the architects and engineers consulted will be taken care of if the ventilation standards, which are now more objectively and easily measured, are followed. The changes made were, in part, to add clarity and establish objective standards that will allow for better and more consistent enforcement. The Department is required by the statute to address all of those standards and to set those standards and measures of enforcement at a level that will protect the health and welfare of the dogs housed in commercial kennels. The Department can not and did not ignore that statutory duty and the Independent Regulatory Review Commission and the Legislature must honor the fact that the Department is required by the statute to set such standards.

B. Specific Comments:

3. Ventilation:

Comment: The proposed regulations require that "ventilation be achieved through a mechanical system that will allow for 8 to 20 air changes per hour, keep consistent moderate humidity, keep the kennel from becoming too hot, keep ammonia levels and particulate matter low, and to keep odor minimized..." While generally, I support these standards, it is well established that a minimum of 10 air changes per hour should be required in all animal spaces. Miller, Lila and Stephen Zawistowski (ed.). Shelter Medicine for Veterinarians and Staff. Blackwell Publishing, 2004, p. 60. As a result, the ASPCA recommends that the required air changes per hour be changed to reflect this standard.

RESPONSE

The Department redrafted much of the language in the ventilation provisions of the regulation. Based on comments and correspondence with engineers and animal scientists related to the appropriate measurement standard for air circulation and ventilation issues, the final-form regulation now measures ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f) (1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions

of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. This was done after consultations with engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility.

There are two general reasons behind these changes. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification from an engineer or architect that installed the equipment and information supplied by the kennel owner and verified by State dog wardens, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have the total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, and while still requiring the system to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility, it will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. This not only lowers operation costs, but sets a proper standard to assure dogs are not subjected to a circulation standard that is too strong or unable to be enforced. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment: Additionally, I commend the Canine Health Board for requiring auxiliary ventilation that is capable of reducing temperature when the temperature is above 85 degrees. The Board was charged with determining what measures must be taken when the temperature rises to that level. The requirement for ventilation that is capable of reducing the temperature is critical to ensure the well-being of dogs in these conditions. Furthermore, a provision should be added to protect dogs from excessive wind generated from natural or artificial means (e.g. air tunnel ventilation system, air change system, etc.).

RESPONSE

As set forth to this commentator's initial comments, as well as, in the responses to comments from the Independent Regulatory Review Commission and many Legislators, including the Honorable Senator Brubaker, the Department made changes to the provisions of the proposed regulation that "required" the temperature inside a kennel housing facility to be reduced to or held at 85 degrees Fahrenheit. With regard to temperatures exceeding 85 degrees Fahrenheit, the final-form regulation does not require air conditioning to cool the kennel facility temperature back down to 85 degrees Fahrenheit, although it is not prohibited and is certainly acceptable.

As set forth in a previous response, the Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations. The Department does not believe it should set a standard that would be in absolute conflict with the temperature requirements of the Federal Code of Regulations, and in fact would be less stringent than the Federal Code of Regulations. However, since it has been asserted by the General Assembly and the Independent Regulatory Review Commission (both of whom must review and authorize the final-form regulation), that the Department can not require temperatures within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. The Department has the absolute authority and duty to regulate humidity and may also set auxiliary ventilation standards when temperatures in the kennel housing facility rise above 85 degrees Fahrenheit (3 P.S. §§ 459-207(h)(7) and 459-221(f)).

The research of the Department and consultation with veterinarians and engineers and architects that build and design kennel buildings and account for normal animal husbandry practices as they relate to dogs shows that dogs do not dissipate heat in the same manner or as effectively as the other animals mentioned in the comment. In addition, as set forth more fully in this response, the Department, with the assistance of Dr. Karen Overall, found a study relating to the survivability of dogs at various temperatures and humidity levels – i.e. heat index values. The study clearly illustrates that dogs can not survive for more than six hours at certain heat index values. That study

and heat index values associated with other animals, including swine, cattle, poultry and humans were also researched and form the basis of the Department's final-form regulation, which requires humidity levels to be adjusted to maintain heat index values that will not be detrimental to the health and welfare of dogs housed in commercial kennels. The research also evidences that merely blowing high temperature and high humidity air at a faster rate over the dogs is not effective and will not assure their survivability let alone their health and welfare. A more detailed response is set forth below.

With no temperature control, but with the overall duty to protect the health and welfare of dogs and the specific duty to regulate humidity, the Department sought to ascertain the proper humidity levels and auxiliary ventilations standards that would assure the health, safety and welfare of dogs confined to kennels when temperatures rise above 85 degrees Fahrenheit. Kennel owners and others have asserted in their comments that their kennel buildings can be made to "feel cooler" through the use of additional air circulation/ventilation or the mere increase of fan speed and the amount of air being pulled through the kennel building. However, science does not support such a comment or conclusion.

The Department, with the assistance of veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture on the tongue of the dog has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and therefore the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must

never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for heat indexes above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

Comment: It is critical to recognize that temperature, humidity, and ventilation are linked to one another and determine the comfort level of the dogs. I commend the Department of Agriculture and the Canine Health Board for recognizing this reality and proposing regulations that address all in a comprehensive way. Requiring that kennels use a mechanical ventilation system that provides ventilation, heating, and cooling is critical to this end. Such a system is imperative to ensure the health and comfort of dogs housed in kennel facilities.

RESPONSE

As set forth in the response to the comment immediately preceding this comment, the Department does recognize the link between temperature, humidity and ventilation and the absolute importance of regulating those parameters properly and as an entire system. The response to the previous comment sets forth in detail the research and science behind the Department's humidity and ventilation requirements in the final-form regulation and the fact the Department realizes that without the ability to set a specific air temperature cap, it must address ventilation and humidity control in a manner that will protect the health of the dogs housed in commercial kennels. The final-form regulation does provide the proper standards – through ventilation and humidity ranges and controls - to assure the health and welfare of the dogs housed in commercial kennels. A mechanical ventilation system is still required in order to meet the ventilation standards of the regulations.

4. Lighting:

Comment: I commend the Department of Agriculture and the Canine Health Board for acknowledging the importance of exposure to natural light and a diurnal cycle for dogs housed in a kennel environment. Once again, this measure was fully within the authority of the Canine Health Board.

RESPONSE

The Department appreciates the support and believes, based on input from veterinarians that natural light is essential to dog health, welfare and proper development. The regulations do not require natural light in all kennels. However, dogs will have access to natural light, through unfettered access to outdoor exercise areas. In kennels where no such access is provided the regulations, based on expert comments such as provided herein and consultation with veterinarians, require some natural light be introduced into the kennel housing facility through windows, skylights or other openings. All other kennels have the choice of providing the proper level of lighting either by natural or artificial lighting or both. In addition, artificial light must be provided through full spectrum lighting, which is the type of lighting that most closely imitates the spectrum and wavelengths of light receive from the sun. The regulations and the Act require that dogs be given a diurnal cycle of light and thereby allows for proper rest periods over a 24-hour cycle.

Full spectrum lighting is now defined in the final-form regulation. In addition, it is not a new form of lighting. Some type of full spectrum lighting has been in use and available since the 1930s. Full spectrum lighting is the only lighting that even closely simulates the wavelengths of natural sunlight. As set forth in previous answers to comments from the Honorable Senator Brubaker and the Independent Regulatory Review Commission, natural sunlight is important for the health of dogs housed in kennels – for vitamin D levels and eye development among other issues.

As stated previously, the Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with an Engineer who designs kennel buildings. The consensus, consistent with the 50 footcandles set forth in the comment, was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are 50 footcandles as set forth in the comment. This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

Comment: The temporary guidelines submitted by the Canine Health Board included a provision requiring that dogs being exercised in indoor runs have visual access to a window. I was disappointed to see this provision removed from the final regulations. The Board was charged with "determining the standards based on animal husbandry practices to provide for the welfare of dogs." Visual stimulation is a critical form of enrichment for dogs housed in kennel environments. As a result, this provision should be reinstated to the regulations. In all other respects, the ASPCA supports the lighting requirements proposed in these regulations.

RESPONSE

Under the authority and parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, which is the authority under which this regulation is promulgated, the Department believed it had no statutory authority to require visual access to windows for dogs housed in kennel facilities that had received an exemption from outdoor exercise. The Department still requires natural light be provided in such kennels and agrees that actual access to windows during exercise is a good idea, but not one that can be mandated by these regulations.

Comment: The temporary guidelines submitted by the Canine Health Board recommended that an area of shade be present in all outdoor exercise runs that is large enough to allow all animals in the enclosure to be in the shaded area simultaneously. It is important that during summer months, all animals have access to a shaded outdoor area. As a result, I recommend that the requirement for a shaded area large enough to cover all dogs simultaneously be reinstated into the regulations.

RESPONSE

Under the authority and parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, which is the authority under which this regulation is promulgated, the Department believed it had no statutory authority to require that an area of shade be provided in the outdoor exercise area. The Department would have liked to have seen this provision inserted in the Act itself and in fact advocated for such language. The Department agrees that providing an area of shade and protection from the weather in the exercise area – and immediately outside the primary enclosure – is a good idea and should be implemented by every kennel owner. However, it can not be mandated by these regulations.

5. Flooring:

Comment: The Canine Health Board was given the authority to approve "additional flooring options that meet the provisions of [the new law]." The newly amended Dog Law requires that flooring "shall not permit the feet of any dog...to pass through any openings, shall not be metal strand whether or not it is coated, shall allow for moderate drainage of fluids, and shall not be sloped more than 0.25 inches per foot." It further provides for acceptable specifications for a slatted flooring system. The proposed regulations list solid flooring as an acceptable system, provided that the flooring meets the specifications set forth in the regulations.

Tenderfoot flooring has been held out as an acceptable form of flooring by many kennel owners. However, Tenderfoot flooring is made of a "plastisol coating" bonded to steel. This is precisely what the statute expressly prohibits, i.e. metal strand (in the form of steel) with a plastic coating. Therefore I urge the Department, Bureau, and Board to reject any recommendations to authorize this type of flooring system as an acceptable floor for use in commercial kennels. http://www.tandemproducts.com/tenderfoot/DekCellent/DekCellent.htm.

RESPONSE

The Board has the ability to address individual alternative flooring requests under section 207(i)(3)(iii) of the Dog Law (3 P.S. § 459-207(i)(3)(iii)). The Board can determine based on its expertise whether or not the flooring at issue in this comment meets the standards of the Act, set forth at section 207(i)(3)(i) and the animal husbandry and welfare requirements established at section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 221(f)).

The Department, in the final-form regulation, has set forth the specific parameters of the Act and the authority of the Board and has established a subsection that delineates specific alternative flooring requirements. These requirements continue to utilize many of the same parameters established in the proposed regulation, but add language that further clarifies and objectifies the standards. Any additional standards are based on discussions and consultations with Canine Health Board and Department veterinarians.

Comment: The ASPCA fully supports the flooring requirements proposed in these regulations.

RESPONSE

The Department appreciates the support and as set forth above has modified this section in a manner to provide more clarification, more objective standards and better enforcement.

C. Veterinarian Comments – Background and General:

Background: I respectfully submit the following comments in support of the Department of Agriculture's proposed regulations to 7 P A code Ch. 28a regarding standards for commercial kennels. I am the Vice President of Veterinary Outreach and Veterinary Advisor to the American Society for the Prevention of Cruelty to Animals (ASPCA)_ I have over 30 years experience working with shelters and developing the field of shelter medicine; I co-edited the only two veterinary textbooks on the subject, *Shelter Medicine for Veterinarians and Staff* (*Miller* and Zawistowski 2004) and *Infectious Disease Management in Animal Shelters* (Miller and Hurley 2009) and teach shelter medicine at Cornell and U Penn and various other colleges, conferences and on the Internet. I am also the recipient of the 2008 American Veterinary Medical Association (AVMA) animal welfare award and the 2005 Hills Animal Welfare and Humane Ethics award from the American Animal Hospital Association (AAHA). I also served on the National Institute of Health (NIH) committee that researched and wrote the 2009 report for the National Research Council (NRC) entitled *The Scientific and Humane Issues in the Use of Random Source Dogs and Cats in Research.*

Comment: Veterinary research is ongoing in the area of animal welfare. It is widely acknowledged that unnecessary pain, stress, distress or suffering should be minimized in research animals, even though controversy may exist over the exact definition of each term (Institute of Laboratory Resources (ILAR). However, controversy or lack of specific research data should not be used as an excuse to justify providing inferior canine husbandry in commercial kennels. Whenever there is uncertainty about

the science regarding a regulatory standard that addresses husbandry, welfare or quality of life, it is not unreasonable to utilize a recommendation similar to the one set forth by the American College of Veterinary Anesthesiologists (ACVA) regarding pain. ACVA states that when unsure, assume that if a procedure is painful to humans, it will also be painful to animals. Advocating for the highest standards for housing dogs in kennels is not only in the best interest of the dogs but industry as well. Animals who are stressed, unhealthy or suffering a poor quality of life are less productive, and maintaining them in poor quality conditions reflects badly on society as well as the managers directly charged with their care.

RESPONSE

The Department agrees with this comment and has endeavored, within the bounds of its statutory authority and utilizing the research, knowledge, experience and expertise of engineers, architects, animal scientists and veterinarians to draft a final-form regulation that does utilize animal husbandry practices and scientific evidence and practices that will account for and assure the health and welfare of dogs in commercial kennels.

D. Veterinarian Comments - Specific:

1. Ventilation - temperature, humidity and air exchange;

Comment: The Five Freedoms that were developed by the Farm Animal Welfare Council in the United Kingdom assert that farm animals should be 1) free from hunger and thirst, 2) free from discomfort, 3) free from pain, injury or disease, 4) free to express normal behavior and 5) free from fear and distress. It is clear that dogs should be given these same considerations and their welfare should receive the highest priority whenever regulations that govern the conditions under which they are housed are being considered. It is imperative to meet the physical, behavioral and mental needs of dogs when evaluating factors that are essential for maintaining their health and well being during confinement in communal or colony kennel environments (Miller and Hurley 2009). When weighing all these factors, the value of providing good ventilation and reducing stress levels cannot be overemphasized.

a. Stress reduction can be correlated with providing animals with comfort. In addition to providing the minimum standard of 8-1 0 air exchanges with fresh air every hour (Miller and Zawistowski, 2004), air must be the appropriate temperature and humidity to ensure the comfort of animals.

b. Even "minor" distress can have a negative effect on an animal's physiological and emotional well-being. Animals who are too hot or cold or subjected to wide fluctuations in temperatures are subject to stress, which also lowers their resistance to disease (Miller and Hurley 2009).

c. It is not sufficient to consider temperature alone, as high humidity levels will increase the actual discomfort the animal feels.

d. The heat index (sometimes called the apparent temperature) is a measure of the contribution that high temperature and high humidity make in reducing the body's ability to cool itself. It is a more accurate measure of how hot it really feels when the effects of humidity are added to high temperature. In order to get a true reading, it is important to measure temperature and humidity levels at the actual level of the animal's body as it may be different from the levels in other

areas of the room.

e. Random sampling of various areas of the facility is also important because of the possibility of variations from room to room.

f. High humidity contributes to environmental conditions that enable certain pathogens such as fungi to proliferate.

These proposed regulations will address these concerns.

RESPONSE

The Department has evaluated and attempted in the final-form regulation to account for all of the issues delineated in parts a.-f. of this comment.

With regard to ventilation levels, the Department redrafted much of the language in the ventilation provisions of the proposed regulation. Based on comments and correspondence with engineers and animal scientists related to the appropriate measurement standard for air circulation and ventilation issues, the final-form regulation now measures ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f) (1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. This was done after consultations with engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would

make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility.

There are two general reasons behind these changes. The standard of CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification from a professional engineer and information supplied by the kennel owner and verified by the professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have the total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, and while still requiring the system to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility, it will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. This not only lowers operation costs, but sets a proper standard to assure dogs are not subjected to a circulation standard that is too strong or unable to be enforced. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

With regard to ventilation and humidity levels in kennel housing facilities, in response to comments from the Independent Regulatory Review Commission and many Legislators, the Department made changes to the provisions of the proposed regulation that "required" the temperature inside a kennel housing facility to be reduced to or held at 85 degrees Fahrenheit. With regard to temperatures exceeding 85 degrees Fahrenheit, the final-form regulation does not require air conditioning to cool the kennel facility temperature back down to 85 degrees Fahrenheit, although it is not prohibited and is certainly acceptable.

As set forth in a previous response, the Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations. The Department does not believe it should set a standard that would be in absolute conflict with the temperature requirements of the Federal Code of Regulations, and in fact would be less stringent than the Federal Code of Regulations. However, since it has been asserted by the General Assembly and the Independent Regulatory Review Commission (both of whom must review and authorize the final-form regulation), that the Department can not require temperatures within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. The Department has the absolute authority and duty to regulate humidity and may also set

auxiliary ventilation standards when temperatures in the kennel housing facility rise above 85 degrees Fahrenheit (3 P.S. §§ 459-207(h)(7) and 459-221(f)).

The research of the Department and consultation with veterinarians and engineers and architects that build and design kennel buildings and account for normal animal husbandry practices as they relate to dogs shows that dogs do not dissipate heat in the same manner or as effectively as the other animals mentioned in the comment. In addition, as set forth more fully in this response, the Department, with the assistance of Dr. Karen Overall, found a study relating to the survivability of dogs at various temperatures and humidity levels – i.e. heat index values. The study clearly illustrates that dogs can not survive for more than six hours at certain heat index values. That study and heat index values associated with other animals, including swine, cattle, poultry and humans were also researched and form the basis of the Department's final-form regulation, which requires humidity levels to be adjusted to maintain heat index values that will not be detrimental to the health and welfare of dogs housed in commercial kennels. The research also evidences that merely blowing high temperature and high humidity air at a faster rate over the dogs is not effective and will not assure their survivability let alone their health and welfare. A more detailed response is set forth below.

With no temperature control, but with the overall duty to protect the health and welfare of dogs and the specific duty to regulate humidity, the Department sought to ascertain the proper humidity levels and auxiliary ventilations standards that would assure the health, safety and welfare of dogs confined to kennels when temperatures rise above 85 degrees Fahrenheit. Kennel owners and others have asserted in their comments that their kennel buildings can be made to "feel cooler" through the use of additional air circulation/ventilation or the mere increase of fan speed and the amount of air being pulled through the kennel building. However, science does not support such a comment or conclusion.

The Department, with the assistance of veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture on the tongue of the dog has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and therefore the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for heat indexes above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

2. Ammonia Levels:

Comment: When assessing air quality, it is also important to maintain ammonia fumes at safe levels. In humans, excessive ammonia levels may be irritating to skin, eyes, throat, and lungs and cause coughing, lacrimation (tearing), a burning sensation, laryngitis, severe pulmonary and gastrointestinal irritation, nausea and vomiting, diarrhea, abdominal pains, pulmonary edema, dyspnea, bronchospasm, chest pain, blisters and cold and clammy skin, etc. In extreme cases, ammonia gas can also cause thermal injury. Exposure to very high concentrations of ammonia produces severe bums of the cornea and upper airway and can even lead to lung damage and death. Much more research has been performed regarding the effects of ammonia levels on swine and humans than for dogs; recent research has shown that to minimize the health risk to both humans and animals, levels should be maintained below 10ppm (Nebraska Swine Report 2000). In the absence of more definitive research specific to dog health and the fact that dogs (and some humans) will be constantly rather than intermittently exposed in kennels, this health standard should be applied.

RESPONSE

The Department agrees that 10ppm would be an appropriate ammonia level to protect the health and welfare of dogs housed in kennel facilities. However, based on a comment from Dr. Mikesell and consultation with others, the Department believes current ammonia level monitors may not be able to accurately measure ammonia at those

levels. In addition, additional consultation with Dr. Kephart, Dr. Mikesell and Department and Canine Health Board veterinarians, the Department believes that ammonia levels of 20 ppm of ammonia are still problematic to the health and welfare of most animals, including dogs. Therefore, the consensus was that ammonia levels should be set at 15 ppm. Such a level is measurable and will assure the health and welfare of dogs housed in kennel facilities. In addition, if dogs do exhibit signs of stress associated with high ammonia levels or poor ventilation, the Department can take measurements to assure the proper levels are being maintained and can issue penalties if a kennel owner is not maintaining the proper ammonia or ventilation levels.

3. Lighting:

Comment: Wellness and stress reduction (and minimization of disease transmission) in animal populations can be aided greatly by providing animals the opportunity to live in comfortable environmental conditions and to engage in normal behaviors as much as possible (Miller and Hurley 2009). Dogs have natural circadian rhythms that generally result in them being awake during the day and asleep at night. Therefore, in order to promote and support natural behavior, reduce stress and maintain health and well being, it is important to provide access to natural or artificial light conditions, as well as darkness. Prolonged exposure to excessive light or darkness or flickering lights should be avoided.

RESPONSE

The Department appreciates the support and believes, based on input from veterinarians that natural light is essential to dog health, welfare and proper development. The regulations do not require natural light in all kennels. However, dogs will have access to natural light, through unfettered access to outdoor exercise areas. In kennels where no such access is provided the regulations, based on expert comments such as provided herein and consultation with veterinarians, require some natural light be introduced into the kennel housing facility through windows, skylights or other openings. All other kennels have the choice of providing the proper level of lighting either by natural or artificial lighting or both. In addition, artificial light must be provided through full spectrum lighting, which is the type of lighting that most closely imitates the spectrum and wavelengths of light receive from the sun. The regulations and the Act require that dogs be given a diurnal cycle of light and thereby allows for proper rest periods over a 24-hour cycle.

Full spectrum lighting is now defined in the final-form regulation. In addition, it is not a new form of lighting. Some type of full spectrum lighting has been in use and available since the 1930s. Full spectrum lighting is the only lighting that even closely simulates the wavelengths of natural sunlight. As set forth in previous answers to comments from the Honorable Senator Brubaker and the Independent Regulatory Review Commission, natural sunlight is important for the health of dogs housed in kennels – for vitamin D levels and eye development among other issues.

As stated previously, the Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with an Engineer who designs kennel buildings. The consensus, consistent with the 50 footcandles set

forth in the comment, was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for offic and administration areas and Penn State University's standards for class room lighting, which are 50 footcandles as set forth in the comment. This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

The regulations now define "excessive light" and include all of the standards established in the Act, including the prohibition against exposure to excessive light and the necessity to evenly diffuse the light throughout the kennel housing facility.

With regard to "flickering" light, the final-form regulation, for clarity purposes, does not utilize that term, instead it requires all lighting to be kept in good repair which includes not allowing ballast or other problems to cause a light source to emit irregular bursts of light.

II. PENNSYLVANIA SOCIETY FOR PREVENTION OF CRUELTY TO ANIMALS –

Comments- General and Specific

Commentators:

Submitted by: Susan Cosby CEO, Pennsylvania SPCA, Liz Williamson Public Relations Associate Pennsylvania Society for the Prevention of Cruelty to Animals Headquartered at: 350 East Erie Avenue, Philadelphia, PA 19134 and Dr. Ravi Murarka, Medical Director, Pennsylvania SPCA

A. General Comments:

Comment: The Pennsylvania SPCA is the largest state-wide organization actively investigating and prosecuting abuse including that which occurs in commercial breeding kennels. We maintain the largest, most effective Humane Law Enforcement operation in the Commonwealth. Our humane officers and veterinarians see the results of the lack of regulations for commercial dog breeders firsthand, and we have been instrumental in closing those with the most egregious complaints filed against them for years. Therefore, we support Act 119 and the power it grants to the Canine Health Board regarding recommended regulations pertaining to lighting, temperature control, ventilation, control of humidity and ammonia levels and exercise. The regulation of each of these environmental factors will significantly impact the health and welfare of the

breeder dogs kept in Pennsylvania's large-scale commercial breeding facilities in a positive way and serves to finalize the Act and the work of the General Assembly.

RESPONSE

The Department agrees with this comment and has endeavored, within the bounds of its statutory authority and utilizing the research, knowledge, experience and expertise of engineers, architects, animal scientists and veterinarians to draft a final-form regulation that does utilize animal husbandry practices and scientific evidence and practices that will account for and assure the health and welfare of dogs in commercial kennels.

The changes made to the final-form regulation related to ventilation measurement standards and removing the requirement that a kennel housing facility not rise above 85 degrees Fahrenheit have been explained in previous responses and are again set forth here.

With regard to ventilation levels, the Department redrafted much of the language in the ventilation provisions of the regulation. Based on comments and correspondence with engineers and animal scientists related to the appropriate measurement standard for air circulation and ventilation issues, the final-form regulation now measures ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f) (1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. This was done after consultations with engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility.

There are two general reasons behind these changes. The standard of CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification from a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have the total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, and while still requiring the system to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility, it will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. This not only lowers operation costs, but sets a proper standard to assure dogs are not subjected to a circulation standard that is too strong or unable to be enforced. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

With regard to ventilation and humidity levels in kennel housing facilities, in response to comments from the Independent Regulatory Review Commission and many Legislators, the Department made changes to the provisions of the proposed regulation that "required" the temperature inside a kennel housing facility to be reduced to or held at 85 degrees Fahrenheit. With regard to temperatures exceeding 85 degrees Fahrenheit, the final-form regulation does not require air conditioning to cool the kennel facility temperature back down to 85 degrees Fahrenheit, although it is not prohibited and is certainly acceptable.

As set forth in a previous response, the Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations. The Department does not believe it should set a standard that would be in absolute conflict with the temperature requirements of the Federal Code of Regulations, and in fact would be less stringent than the Federal Code of Regulations. However, since it has been asserted by the General Assembly and the Independent Regulatory Review Commission (both of whom must review and authorize the final-form regulation), that the Department can not require temperatures within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. The Department has the absolute authority and duty to regulate humidity and may also set auxiliary ventilation standards when temperatures in the kennel housing facility rise above 85 degrees Fahrenheit (3 P.S. §§ 459-207(h)(7) and 459-221(f)).

The research of the Department and consultation with veterinarians and engineers and architects that build and design kennel buildings and account for normal animal husbandry practices as they relate to dogs shows that dogs do not dissipate heat in the same manner or as effectively as the other animals mentioned in the comment. In addition, as set forth more fully in this response, the Department, with the assistance of Dr. Karen Overall, found a study relating to the survivability of dogs at various temperatures and humidity levels – i.e. heat index values. The study clearly illustrates that dogs can not survive for more than six hours at certain heat index values. That study and heat index values associated with other animals, including swine, cattle, poultry and humans were also researched and form the basis of the Department's final-form regulation, which requires humidity levels to be adjusted to maintain heat index values that will not be detrimental to the health and welfare of dogs housed in commercial kennels. The research also evidences that merely blowing high temperature and high humidity air at a faster rate over the dogs is not effective and will not assure their survivability let alone their health and welfare. A more detailed response is set forth below.

With no temperature control, but with the overall duty to protect the health and welfare of dogs and the specific duty to regulate humidity, the Department sought to ascertain the proper humidity levels and auxiliary ventilations standards that would assure the health, safety and welfare of dogs confined to kennels when temperatures rise above 85 degrees Fahrenheit. Kennel owners and others have asserted in their comments that their kennel buildings can be made to "feel cooler" through the use of additional air circulation/ventilation or the mere increase of fan speed and the amount of air being pulled through the kennel building. However, science does not support such a comment or conclusion.

The Department, with the assistance of veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture on the tongue of the dog has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and therefore the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration

and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for heat indexes above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

B. Veterinarian Comments - General:

Comment: As a veterinarian employed by the Pennsylvania SPCA, I am writing today in full support of the proposed regulations for lighting, ventilation, and flooring as proposed by the Canine Health Board under their authority of Act 119 passed last year. As part of our investigations of Pennsylvania's commercial kennels, we witness the horrific suffering and even death that are a direct result of the lack of proper standards. In my opinion, the lack of proper care is all too often driven by the desire to increase profits per animal in commercial breeding facilities. Based upon years of experience as a shelter medicine veterinarian, these proposed regulations will improve the lives of animals in commercial breeding kennels. In fact, many non-profits and smaller organizations comply with these regulations daily, and I see no reason why larger "for-profit" organizations cannot comply with basic standards of care.

RESPONSE

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

Comment: Based upon my experience as a Pennsylvania SPCA veterinarian, the Canine Health Board has met its charge and I fully support the regulations as proposed.

RESPONSE

The Department appreciates the support for the proposed regulations. Any changes to specific sections of the final-form regulation have been set forth in the responses to previous comments and are delineated in the preamble to the final-form rulemaking.

C. Veterinarian Comments – Specific:

1. Ventilation and Temperatures:

Comment: I support the Canine Health Board's proposed regulations pertaining to ventilation and temperature. As a result of poor ventilation, I have witnessed an increased incidence of respiratory illnesses such as kennel cough and even pneumonia.

RESPONSE

The Department appreciates the support. As previously stated, there have been changes made to the ventilation standards in the final-form regulation. The Department has set forth the set forth the reasons and rationale for any changes to the ventilation provisions in it answer to this commentator's early comment related to ventilation, as well as, in the preamble to the final-form regulation. In short, the final-form regulation measure air circulation in cubic feet per minute per dog instead of in air exchanges per hour. In addition, the final-form regulation sets forth the standards for measuring and verifying such air circulation and sets forth a more concise list of illnesses and stress signs that may indicate a ventilation problem in the kennel housing facility. It also establishes strict and precise reporting and action requirements on kennel owners, if the mechanical system malfunctions.

Comment: Dogs do not have sophisticated cooling mechanisms and do not tolerate heat as well as their human counterparts. Animals have higher body temperatures and cannot cool themselves quickly or efficiently.

RESPONSE

The Department agrees with this statement and the research done by the Canine Health Board members and the Department, as well as, discussions with other veterinarians would confirm and support this statement. The final-form regulation does not set a temperature cap in kennels and does not require cooling of the air through the use of an air conditioner. However, the Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels. More specific responses to this issue are also set forth in response to one of this commentator's comments above.

Comment: Temperature control is essential to the well being of the animals There is no number of air changes that can protect a dog if the temperature is in excess of 85F. The federal AWA caps temperature at 85 degrees, and most shelters should be kept at 65- 75F to protect the dogs.

RESPONSE

The Department absolutely agrees with this comment and has set forth the AWA standards in its response to other similar comments. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from this commentator and from the ASPCA, IRRC and Legislators. In short, the Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

Comment: Other groups have argued that the Canine Health Board did not have the authority to regulate temperature, but some forms of ventilation can control temperature, and others do not. Protecting the health and well being of the dogs requires a form of ventilation capable of reducing air temperature not to exceed 85F. Otherwise dogs are at risk of heat stroke or death.

RESPONSE

With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from this commentator and from the ASPCA, IRRC and Legislators. In short, the IRRC and Legislators, both of whom must review and approve the final-form regulation asserted they do not believe the Department has the authority to require a kennel to maintain a temperature of 85 degrees Fahrenheit or less in commercial kennels. However, the Department does have the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

Comment: In animal shelters and kennels the ventilation system chosen is an important way to control disease. At shelters with inadequate air changes, there are higher instances of respiratory and other illnesses. Most animal shelters work with ventilation specialists because it is known that rates of disease transmission increase with inadequate ventilation.

RESPONSE

The final-form regulations set precise ranges or rates for ventilation that are based on expert opinion and input from professionals such as engineers and architects that design kennel buildings, animal scientists and veterinarians from the Canine Health Board and the Department.

2. Flooring:

Comment: As a result of inadequate flooring, I have witnessed significant orthopedic issues with the feet and legs of both the puppies and breeding mothers in Pennsylvania's commercial kennels. I have witnessed feet that are bleeding, splayed, and raw as a result of inadequate flooring. These dogs were suffering each and every time they walked.

RESPONSE

The Department agrees that inadequate flooring can result in significant injuries to dogs. The Department, in the final-form regulation, has set forth the specific parameters of the Act and the authority of the Board and has established a subsection that delineates specific alternative flooring requirements. These requirements continue to utilize many of the same parameters established in the proposed regulation, but add language that further clarifies and objectifies the standards. Any additional standards are based on discussions and consultations with Canine Health Board and Department veterinarians.

Comment: It is also important to note that the orthopedic issues, the pain and suffering, would occur with tenderfoot flooring as well. Tenderfoot flooring is wire flooring with a plastic coating and should not be allowed under any circumstances.

RESPONSE

The Department appreciates the expert opinion and input regarding this particular type of flooring. However, the Canine Health Board has the authority and expertise to address individual alternative flooring requests under section 207(i)(3)(iii) of the Dog Law (3 P.S. § 459-207(i)(3)(iii)). The Board can determine based on its expertise whether or not the flooring at issue in this comment meets the standards of the Act, set forth at section 207(i)(3)(i) and the animal husbandry and welfare requirements established at section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 221(f)).

The Department, in the final-form regulation, has set forth the specific parameters of the Act and the authority of the Board and has established a subsection that delineates specific alternative flooring requirements. These requirements continue to utilize many of the same parameters established in the proposed regulation, but add language that further clarifies and objectifies the standards. Any additional standards are based on discussions and consultations with Canine Health Board and Department veterinarians.

III. HUMANE SOCIETY OF THE UNITED STATES – Comments-General Commentator:

Submitted by: Sarah Speed, Pennsylvania State Director, Humane Society of the United States

A. General Comments:

Comment: On behalf of The Humane Society of the United States, the nation's largest animal protection organization, I thank you for the opportunity to comment on the proposed Canine Health Board Standards for Commercial Kennel Regulations, developed in accordance with Act 119 (IRRC Number 2785). At the request of the Bureau of Dog Law, we have not alerted our membership to the comment process or the development of the proposed regulations. We trust that these comments, submitted on behalf of our more than 671,000 members and supporters in Pennsylvania, will be accorded appropriate weight.

RESPONSE

The Department very much appreciates the expertise associated with these comments, as well as, other comments from professional persons or organizations. The Department, in drafting the final-form regulation has made changes to the proposed regulation. The changes are based on additional research and consultations undertaken by the Department as part of its duty to answer all comments received and assure the final-form regulation is clear, as objective as possible and meets form and legality standards. As set forth in the answers to other comments, the Department consulted with engineers and architects that design and build kennel facilities, consultations with animal scientists, a meeting with an AKC senior field representative and information and input from Canine Health Board and Department veterinarians. The Department has drafted a final-form regulation that it believes fully complies with the statutory authority and mandate established by the Dog Law, adds clarity to certain provisions, creates more objective standards and most importantly will provide for the health and welfare of dogs housed in commercial kennels in this Commonwealth.

Comment: The HSUS greatly appreciates the time, effort and expertise of the Department in developing the proposed regulations. The Department has called on the significant expertise of the Canine Health Board in developing regulations that, in our view, reflect the legislative intent of Act 119.

RESPONSE

The Department appreciates the support and it has worked very hard to perform additional research and consult appropriate experts – including additional input from and research done by members of the Canine Health Board – in drafting this final-form regulation. As stated above, any changes are based on additional research and consultations undertaken by the Department as part of its duty to answer all comments received and assure the final-form regulation is clear, as objective as possible and meets form and legality standards. As set forth in the answers to other comments, the Department consulted with engineers and architects that design and build kennel facilities, consultations with animal scientists, a meeting with an AKC senior field representative and information and input from Canine Health Board and Department veterinarians. The Department has drafted a final-form regulation that it believes fully complies with the statutory authority and mandate established by the Dog Law, adds clarity to certain provisions, creates more objective standards and most importantly will provide for the health and welfare of dogs housed in commercial kennels in this Commonwealth.

Comment: The Department has clearly stated the type and cost of any equipment upgrades that may be necessitated by the proposed regulations.

RESPONSE

Just as with every other issue commented upon, the Department based on the comments – and on changes made to the final-form regulation – consulted with engineers who design and build kennel buildings, to determine the potential cost of the ventilation,

auxiliary ventilation, humidity, ammonia and lighting standards of the final-form regulation. The new cost estimates are based on their input. Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form.

Comment: We appreciate that every kennel operator may not be fully versed in the technical aspects of ventilation systems that will allow them to meet the suggested standards. Fortunately, kennel ventilation systems are readily available, and reasonably priced, that will allow them to meet the proposed requirements regardless of their individual grasp of ammonia levels, humidity levels, etc.

RESPONSE

The Department agrees with this comment. The Department's research and consultation with engineers supports this comment.

B. Specific Comments:

1. Ventilation:

Comment: The accepted standard rate of air exchange for kennels is a minimum of 10 complete air changes per hour. The HSUS regularly recommends this standard to animal sheltering facilities. While there is no federal requirement dictating air exchange rates in commercial kennels, the Office of Laboratory Animal Welfare of the National Institutes of Health states, in its Institutional Animal Care and Use Committee Guidebook, "The range of daily temperature fluctuations should be kept to a minimum (e.g., ± 2 F) to avoid large demands on the animals' metabolic and behavioral processes. Relative humidity should be controlled (e.g., 30% to 70%). In general, an air exchange rate of 10 to 15 changes per hour considered an acceptable standard." For these reasons, we recommend that the regulations be improved to require a minimum of 10 air exchanges per hour. The HSUS supports the remaining proposed regulations as submitted. We are grateful to the legislature and the Department for its dedication to improving the welfare of dogs in commercial kennels, and feel that the proposed regulations with the improved air exchange standards recommended above, will meet that goal.

RESPONSE

The Department thanks the commentator for this supportive statement and although the final-form regulations change the measurement technique for air circulation, it keeps the same general premise of proper air circulation and rate of ventilation.

The Department redrafted much of the language in the ventilation provisions of the regulation. Based on comments and correspondence with engineers and animal scientists related to the appropriate measurement standard for air circulation and ventilation issues, the final-form regulation now measures ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f) (1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. This was done after consultations with engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility.

There are two general reasons behind these changes. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification a professional engineer and information supplied by the kennel owner and verified by the professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have the total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other

words, the system will be easier to design, and while still requiring the system to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility, it will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. This not only lowers operation costs, but sets a proper standard to assure dogs are not subjected to a circulation standard that is too strong or unable to be enforced. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

IV. FEDERATED HUMANE SOCIETIES OF PENNSYLVANIA-Comments-General

Commentator:

Submitted by: Anne Irwin, Legislative Chairman, Federated Humane Societies of PA
Executive Director, Bucks County SPCA

Comment: The Federated Humane Societies of PA supports the aims of providing good air quality for dogs in kennels, comfortable temperatures, safe and secure flooring, and adequate lighting. Our concerns about the regulations as they are written are that they are confusing and because of that they may be difficult and costly to enforce. Regulations serve two primary purposes: to provide a clear, unambiguous guide to the standards required that can be understood by the regulated and the regulators alike, and to provide an effective framework for enforcement if violations occur.

RESPONSE

The Department has received similar comments from the Independent Regulatory Review Commission. The language of the final-form regulation, although based on and still retaining many of the overall ideas and standards of the proposed regulation, has been significantly modified to provide additional clarity, more objective standards and provisions which allow for more effective and uniform enforcement. The final-form regulation contains additional sections that break the regulation down into the basic elements set forth in the statute (ventilation, humidity, auxiliary ventilation, ammonia levels, carbon monoxide, lighting and flooring. In addition, the ventilation provisions measure air circulation in cubic feet per minute per dog (CFM) not in exchanges per hour. This measurement is much easier to check, assess and enforce and allows kennel owners to adjust air circulation levels dependent on the number of dogs housed in the kennel housing facility. A professional engineer will be required to verify the system meets all the ventilation, auxiliary ventilation and humidity control components of ther regulation. The ventilation section also sets forth clear standards and guidance for what constitutes a violation and clear standards and guidance with regard to a kennel owner's duty if a mechanical failure should occur. The humidity section sets forth clear humidity standards that are based on scientific research, data and practices. The auxiliary ventilation provisions make it clear that air conditioning to reduce temperatures may be utilized when temperatures rise above 85 degrees Fahrenheit, but is not required. It also sets forth examples of other techniques that are currently being utilized in kennels. The

ammonia provisions set forth clear levels and measurement standards, all of which are based on consultation with and research by experts (engineers, animal scientist and veterinarians). The lighting provisions now establish clear levels and standards for either natural or artificial lighting or both. Finally, the flooring section is broken down into three subsections. The first two subsections set forth the flooring standards contained in section 207(i)(3)(i) and section 207(i)(3)(ii) of the Dog Law (3 P.S. §§ 459-207(i)(3)(i) and (i)(3)(ii)). The third section delineates the legal authority and the standards for alternative flooring. These changes all incorporate language that is clear and establishes more objective standards.

Comment: The proposed standards are complicated and hard to understand. Unlike other sections of the kennel regulations, they are prescriptive in terms of how inspection is to be done, and that sets up a situation that would make successful prosecution for violations difficult.

RESPONSE

Regulations are not intended to regulate the regulator and therefore, the final-form regulations do not impose inspection standards on the Department. The final-form regulations instead impose more objective and clear standards on the regulated community. The clearer and more objective standards will also aid the Department in effective and uniform enforcement of the regulation.

Comment: We are concerned about the cost both in man hours and equipment that will be required. Special equipment will be needed for every dog warden or team of wardens to measure relative humidity, ammonia levels, particulate matter and air velocity. Such equipment will need to be accurate, reliable, portable and durable for hard use in the field. Is such equipment available and at what cost?

RESPONSE

The final-form regulation, especially the ventilation provisions of the final-form regulation, has reduced the need for some of the measurement equipment that would have been required by the proposed regulation. However, with regard to any equipment that may still be necessary, such as temperature and humidity monitors, ammonia monitors and light meters, the Department has researched the various makes and models available to determine the equipment that will meet its needs and has listed the estimated costs of buying, calibrating and maintaining such equipment in the regulatory analysis form that accompanies the final-form regulation.

Comment: The ventilation section contains specific requirements about temperature, ammonia levels, relative humidity, particulate matter and air exchanges, but then includes a subsection (10), which is vague and subjective concerning dog odor, stale air and lack of air flow. It might make more sense to include general language like this at the beginning of the section on ventilation, moving from a general description to more specific requirements. Then excessive dog odor, noxious odors, condensation on surfaces or apparent lack of air flow

could trigger measurements of specific levels, but otherwise such measurements might not be necessary. In other words if the kennel feels and smells comfortable fewer measurements would be required. Is it the intent of the regulations to require all of the measurements in every kennel inspection?

RESPONSE

Subsection (10) has been removed from the final-form regulation. In addition, the ventilation and humidity standards are now written in a manner that does not always require hand held instruments to measure on every inspection.

Comment: In order to measure ammonia, particulate matter, relative humidity and air exchanges at shoulder level of 10 percent of dogs and at every intake or exhaust vent (is this meant to be intake AND exhaust vent?) wardens will likely need to get into the enclosures with dogs. This creates a new set of potential problems and wear and tear on wardens and equipment. There will be many measurements taken and recorded in a kennel with hundreds of dogs.

a. How is violation computed from those measurements? Are the readings averaged, or will one unacceptable reading among many trigger a violation? This should be clarified.

b. The prescriptive requirements for inspection set the stage for failure in court. What if the warden miscalculates and does not take readings on a full 10 percent of dogs or at shoulder height? Imagine the challenge of taking multiple readings at shoulder height of small dogs.

c. How will the measurements be documented?

RESPONSES

The provisions and standards related to this comment have been removed from the final-form regulation. The changes to the language, especially the language of the ventilation and humidity standards in the final-form regulation have reduced or eliminated the need for such standards. In addition, protocol for inspections or place and amount of measurements to be done by the regulating entity are best set forth in a guidance or policy statement by the agency.

Comment: The standards require that information be provided in order to calculate air exchanges, but do not provide the formula to make the calculation. The regulated community and those enforcing the regulations should have access to the formula that will be used.

RESPONSE

The final-form regulations now measure air circulation in cubic feet per minute and set forth measurements to be provided by the kennel owner. The CFM rating is on the equipment utilized and a professional engineer must certify the rates are being met and the system design meets the ventilation, auxiliary ventilation and humidity and ammonia control standards of the regulation. The information to be provided will also be certified by a professional engineer selected by the kennel owner.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed

regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f) (1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Comment: If the Department hires an engineer or consults with an engineer is the cost to be borne by the Department?

RESPONSE

The final-form regulation no longer imposes such a requirement on the Department. The kennel owner is required to report a mechanical malfunction and to take whatever steps are necessary to correct that malfunction. With regard to a mechanical malfunction or other issues related to compliance with the standards established by the regulations, the kennel owner may hire any person, including an engineer, he believes is necessary to correct the problem.

Comment: The list of prohibited diseases and conditions is baffling in the section on ventilation. In the real world dogs occasionally become ill or injured for a variety of reasons. Disease and injury cannot be prevented by edict. Presence of dogs with these conditions might trigger closer measurement of air quality levels, and many of these conditions should trigger an order for a veterinary examination. Their presence does not necessarily indicate a problem with ventilation.

RESPONSE

Section 28a.2(9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress – now section 28a.2(h) of the final-form regulation - has been modified in the final-form regulations. The number and type of conditions in dogs that may denote poor ventilation has been reduced. In addition, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Comment: The requirement that glass windows and skylights be clear seems at odds with the requirement that dogs shall be protected from excessive light. Translucent glass provides natural light without the direct glare of the sun.

RESPONSE

The final-form regulation eliminates the language set forth in the comment. The final-form language now utilizes the same language as set forth in the Federal Code of Regulations associated with the Animal Welfare Act (9 CFR § 1.1), definition of indoor housing facility, part (3) with regard to the coverings that must be on windows or openings that provide natural sunlight. This section also establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility.

Comment: These comments are meant to be practical and to bring to your attention some of the realities of enforcement in the field, and to assure effective prosecution when necessary. Dog wardens are charged with inspecting all classes of kennels and their inspections help to assure the wellbeing of dogs in kennels. If these questions are addressed it will help assure that their time and resources will be used in the most effective way on behalf of dogs in Pennsylvania.

RESPONSE

The Department appreciates the candid comments and believes the final-form regulation addresses the concerns expressed in the comments.

RESCUE ORGANIZATIONS COMMENTS

I. MAINLINE ANIMAL RESCUE - Comments-General

Commentator:

Submitted by: Bill Smith, Main Line Animal Rescue,
303 West Lancaster Ave.
Wayne, PA 19087

Comment: I am writing at this time to urge the members of the Independent Regulatory Review Commission to approve the Canine Health Board's proposed regulations. Failing to pass the regulations, as submitted by the panel of nine veterinarians, would allow the worst commercial breeders in Pennsylvania to continue allowing their dogs to suffer in dark, ammonia filled barns, straddling wire flooring.

RESPONSE

The Department appreciates the supportive comment and the hard work of the Canine Health Board. The guidelines established by the Canine Health Board, which formed the basis of the proposed regulation, also form the basis of the final-form regulation. The Department, in the final-form regulation, has kept many of the general requirements, specification and ranges set forth in the proposed regulation. Changes were made based on consultations with engineers and architects who design and construct kennel buildings, animal scientists and Canine Health Board and Department veterinarians.

Comment: I would like to address some of the comments made by those who would slow the progress Pennsylvania has made:

(1) I have visited hundreds of Amish and Mennonite dog breeding facilities over the years (some of these were featured on the Oprah Winfrey television program last year) and I have seen hundreds of these "simple" farmers use generators to run their milking operations. Why would it be difficult for the Amish to cool their barns/kennels in the sweltering heat of the summer? It would not be difficult - they use generators in their dairies, why not in their dog breeding facilities?

(2) There are those who will tell you the cost of implementing the proposed regulations has been underestimated. What these people have not considered is the greater cost to Lancaster County's tourist industry. If every effort is not made to help these animals - to do the right thing, at this time - the animal welfare community will continue to denounce Pennsylvania as a haven for some of the worst puppy mills in the country. We will reach out to people in every county throughout the Commonwealth and bring them to our cause. We will tour these facilities with journalists, boycott milk and vegetables produced in Lancaster County, and use the billboards on our highways to tell motorists from other states that Pennsylvania had the opportunity to help its dogs but decided to allow them to continue to suffer. Should the cost to commercial dog breeders be considered? Consider the cost to Pennsylvania's tourist industry and agricultural

community. (3) The leadership of the PVMA will once again try to stall this, the final step, toward improving conditions in PA's larger dog breeding facilities, perhaps even push "tenderfoot" hog flooring as an alternative to solid or slatted floors. It is important to note that when our volunteers called the Humane Society of Harrisburg to ask if their dogs were forced to stand on wire flooring, coated or otherwise, they told us "No, that would be cruel. Our dogs stand on solid flooring." We then asked if they didn't think that wire flooring might be more sanitary, dogs sitting in urine, etc? They said "Well, we don't worry about dogs sitting in feces and urine because we clean every day." And yet, the Vice-President of the Humane Society of Harrisburg Charlene Wandzilak, who also happens to be the Executive Director of the PVMA, has long promoted the use of painful wire flooring in commercial dog breeding facilities. Why would she not want to provide the hundreds of thousands of breeding dogs in Pennsylvania the same safety and comfort she affords the dogs in her own shelter?

(4) All the private clinics and vet hospitals owned by the members of the PVMA's leadership are well lit, have mechanical ventilation systems, and employ fans and/or air conditioning. The dogs in their care also stand on solid flooring to protect their feet and to provide proper support. It is extremely hypocritical of the PVMA to be critical of the standards set forth in the proposed regulations that they themselves have adopted for their private practices.

(5) The leadership of the PVMA has neither polled their members or have informed them of their position regarding the Canine Health Board's proposed regulations. The PVMA shares a lobbyist with some of the worst puppy mill operators in the state - their opinions merely echo that of the commercial breeders, not those of their 1900 members. Why would an organization supposedly in place to promote animal welfare care about the cost of the regulation.

(6) Without proper lighting how can state inspectors determine whether or not a dog is in distress? Without proper air flow/ventilation our rescues will continue to pull dogs from these facilities with ulcers on their eyes and respiratory problems from excessive ammonia/urine build-up. It was more than fair of the Canine Health Board to state a high end temperature of 85 degrees. Imagine sitting in a sweltering barn without a fan in a fur coat. Again, if the Amish can post their puppies for sale on numerous web sites, recharge their cell phones, and receive "economic exemptions" for operating generators in their dairies, they can provide proper ventilation for the dogs in their kennels. Dogs in these kennels should also have access to natural light and windows - imagine staring at the same wall for eight years without any type of stimulus? Little wonder so many of these dogs circle endlessly. Dogs are incredibly intelligent and soon become psychologically damaged when deprived of normal day to day sights and sounds.

(7) Please remember that nine veterinarians agreed unanimously on almost every aspect of the proposed regulations. Dr. Karen Overall provided the board with reams of scientific research and numerous case studies in support of the proposed regulations. The board interviewed experts in various fields as well. Everything was/is based on scientific proof. The board was extremely thorough. Everyone had ample opportunity to voice

their opinions - and everything was approved. The nine vets were selected by both the Democratic and Republican leadership - with one vet representing the PVMA. The proposed regulations should be passed without any hesitation.

RESPONSES

(1) The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels. The regulation applies equally to all commercial kennels in the Commonwealth.

(2) The Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

(3) The Canine Health Board and the Department, under the authority established by sections 207(i)(3)(iii) and 2221(f) of the Dog Law (3 P.S. §§ 459-207(i)(3)(iii) and 221(f)) has addressed and set forth specific standards for alternative flooring in the final-form regulation. The Canine Health Board can address requests for alternative flooring and has voted to set a date for a public meeting at which it will hear comments on five different types of flooring submitted for its review. Tenderfoot/Dek-Cellent flooring is one of the flooring types that was submitted for review and will be considered at a public meeting of the Board.

(4) The final-form regulations do require mechanical ventilation, which according to engineers and architects consulted by the Department is absolutely necessary to assure proper ventilation levels in kennels and assure the health and welfare of the dogs housed in commercial kennel housing facilities. The Department and the Board are required to set appropriate humidity ranges in commercial kennel housing facilities. The final-form regulation establishes humidity ranges based on normal animal husbandry practices and scientific research and data, as well as the science behind the relationship between humidity and temperature which results in the heat index. The humidity levels were established based on research and consultations with experts such as

engineers that design kennel facilities, animal scientists and Canine Health Board and Department veterinarians and Federal Animal Welfare Act standards. Finally, the final-form regulation does address and establish acceptable standards for alternative flooring. Those standards are based on input from engineers that design kennel facilities, animal scientists and Canine Health Board and Department veterinarians, as well as, the Department's own experience related to kennel flooring.

(5) The Department has no information to either support or disprove this comment. The final-form regulation however, is based on expert input, animal husbandry practices and scientific evidence and research, as set forth previously in the responses to many comments.

(6) With regard to ventilation and humidity levels in kennel housing facilities, in response to comments from the Independent Regulatory Review Commission and many Legislators, the Department made changes to the provisions of the proposed regulation that "required" the temperature inside a kennel housing facility to be reduced to or held at 85 degrees Fahrenheit. With regard to temperatures exceeding 85 degrees Fahrenheit, the final-form regulation does not require air conditioning to cool the kennel facility temperature back down to 85 degrees Fahrenheit, although it is not prohibited and is certainly acceptable.

As set forth in a previous response, the Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations. The Department does not believe it should set a standard that would be in absolute conflict with the temperature requirements of the Federal Code of Regulations, and in fact would be less stringent than the Federal Code of Regulations. However, since it has been asserted by the General Assembly and the Independent Regulatory Review Commission (both of whom must review and authorize the final-form regulation), that the Department can not require temperatures within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. The Department has the absolute authority and duty to regulate humidity and may also set auxiliary ventilation standards when temperatures in the kennel housing facility rise above 85 degrees Fahrenheit (3 P.S. §§ 459-207(h)(7) and 459-221(f)).

The research of the Department and consultation with veterinarians and engineers and architects that build and design kennel buildings and account for normal animal husbandry practices as they relate to dogs shows that dogs do not dissipate heat in the same manner or as effectively as the other animals mentioned in the comment. In addition, as set forth more fully in this response, the Department, with the assistance of Dr. Karen Overall, found a study relating to the survivability of dogs at various temperatures and humidity levels – i.e. heat index values. The study clearly illustrates that dogs can not survive for more than six hours at certain heat index values. That study

and heat index values associated with other animals, including swine, cattle, poultry and humans were also researched and form the basis of the Department's final-form regulation, which requires humidity levels to be adjusted to maintain heat index values that will not be detrimental to the health and welfare of dogs housed in commercial kennels. The research also evidences that merely blowing high temperature and high humidity air at a faster rate over the dogs is not effective and will not assure their survivability let alone their health and welfare. A more detailed response is set forth below.

With no temperature control, but with the overall duty to protect the health and welfare of dogs and the specific duty to regulate humidity, the Department sought to ascertain the proper humidity levels and auxiliary ventilations standards that would assure the health, safety and welfare of dogs confined to kennels when temperatures rise above 85 degrees Fahrenheit. Kennel owners and others have asserted in their comments that their kennel buildings can be made to "feel cooler" through the use of additional air circulation/ventilation or the mere increase of fan speed and the amount of air being pulled through the kennel building. However, science does not support such a comment or conclusion.

The Department, with the assistance of veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture on the tongue of the dog has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and therefore the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must

never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for heat indexes above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

With regard to natural light, the Department believes, based on input from veterinarians that natural light is essential to dog health, welfare and proper development. Because the statute allows kennel housing facilities to be illuminated by either natural or artificial light, the regulations do not require natural light in all kennels. However, dogs will have access to natural light, through unfettered access to outdoor exercise areas.

In kennels where no such access is provided the regulations, based on expert comments such as provided herein and consultation with veterinarians, require some natural light be introduced into the kennel housing facility through windows, skylights or other openings. All other kennels have the choice of providing the proper level of lighting either by natural or artificial lighting or both. In addition, artificial light must be provided through full spectrum lighting, which is the type of lighting that most closely imitates the spectrum and wavelengths of light receive from the sun.

Full spectrum lighting is now defined in the final-form regulation. In addition, it is not a new form of lighting. Some type of full spectrum lighting has been in use and available since the 1930s. Full spectrum lighting is the only lighting that even closely simulates the wavelengths of natural sunlight. As set forth in previous answers to comments from the Honorable Senator Brubaker and the Independent Regulatory Review Commission, natural sunlight is important for the health of dogs housed in kennels – for vitamin D levels and eye development among other issues.

As stated previously, the Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with an Engineer who designs kennel buildings. The consensus, consistent with the 50 footcandles set forth in the comment, was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The

veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are 50 footcandles as set forth in the comment. This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

(7) The language of the final-form regulation, although based on and still retaining many of the overall ideas and standards of the proposed regulation, has been significantly modified to provide additional clarity, more objective standards and provisions which allow for more effective and uniform enforcement. The final-form regulation contains additional sections that break the regulation down into the basic elements set forth in the statute (ventilation, humidity, auxiliary ventilation, ammonia levels, carbon monoxide, lighting and flooring. In addition, the ventilation provisions measure air circulation in cubic feet per minute per dog (CFM) not in exchanges per hour. This measurement is much easier to verify, check, assess and enforce and allows kennel owners to adjust air circulation levels dependent on the number of dogs housed in the kennel housing facility. The ventilation section also sets forth clear standards and guidance for what constitutes a violation and clear standards and guidance with regard to a kennel owner's duty if a mechanical failure should occur. The humidity section sets forth clear humidity standards that are based on scientific research, data and practices. The auxiliary ventilation provisions make it clear that air conditioning to reduce temperatures may be utilized when temperatures rise above 85 degrees Fahrenheit, but is not required. It also sets forth examples of other techniques that are currently being utilized in kennels. The ammonia provisions set forth clear levels and measurement standards, all of which are based on consultation with and research by experts (engineers, animal scientist and veterinarians). The lighting provisions now establish clear levels and standards for either natural or artificial lighting or both. Finally, the flooring section is broken down into three subsections. The first two subsections set forth the flooring standards contained in section 207(i)(3)(i) and section 207(i)(3)(ii) of the Dog Law (3 P.S. §§ 459-207(i)(3)(i) and (i)(3)(ii)). The third section delineates the legal authority and the standards for alternative flooring. These changes all incorporate language that is clear and establishes more objective standards.

II. DOGS TRUST - Comments-General

Commentator: Submitted by: Clarissa Baldwin,
OBE, Secretary & Chief Executive
17 Wakley Street, London EC1V 7RQ

Background: Dogs Trust is the largest canine welfare organization in the UK, re-homing over 16,000 dogs a year through our network of eighteen Re-homing Centers across the British Isles/ Many of the dogs that are taken in by our Centers are likely to have originated in puppy farms (our term for puppy mills). In addition we take ex-breeding bitches from puppy farms and so are well aware of the poor conditions that frequently exist, and of the long term consequences that has on both breeding bitches and their puppies, Consequently we have worked for many years to raise the standards of care in

puppy farms in the UK and in other countries or to have them closed. We consider that good legislation has a significant influence on raising those standards and have expended considerable effort to achieve better legislation in the UK.

Comment: We have been shown the proposed Standards for Commercial Kennels. The standards are precise and based on sound scientific principles. We therefore consider that their implementation would significantly enhance the conditions that apply on puppy farms.

RESPONSE

The Department appreciates the supportive comment. The language of the final-form regulation, although based on and still retaining many of the overall ideas and standards of the proposed regulation, has been significantly modified to provide additional clarity, more objective standards and provisions which allow for more effective and uniform enforcement. The final-form regulation contains additional sections that break the regulation down into the basic elements set forth in the statute (ventilation, humidity, auxiliary ventilation, ammonia levels, carbon monoxide, lighting and flooring. In addition, the ventilation provisions measure air circulation in cubic feet per minute per dog (CFM) not in exchanges per hour. This measurement is much easier to check, assess and enforce and allows kennel owners to adjust air circulation levels dependent on the number of dogs housed in the kennel housing facility. The ventilation section also sets forth clear standards and guidance for what constitutes a violation and clear standards and guidance with regard to a kennel owner's duty if a mechanical failure should occur. The humidity section sets forth clear humidity standards that are based on scientific research, data and practices. The auxiliary ventilation provisions make it clear that air conditioning to reduce temperatures may be utilized when temperatures rise above 85 degrees Fahrenheit, but is not required. It also sets forth examples of other techniques that are currently being utilized in kennels. The ammonia provisions set forth clear levels and measurement standards, all of which are based on consultation with and research by experts (engineers, animal scientist and veterinarians). The lighting provisions now establish clear levels and standards for either natural or artificial lighting or both. Finally, the flooring section is broken down into three subsections. The first two subsections set forth the flooring standards contained in section 207(i)(3)(i) and section 207(i)(3)(ii) of the Dog Law (3 P.S. §§ 459-207(i)(3)(i) and (i)(3)(ii)). The third section delineates the legal authority and the standards for alternative flooring. These changes all incorporate language that is clear and establishes more objective standards.

Comment: Wherever animals are kept in a commercial environment there is a risk that the influence of resources (or lack of them) will impinge on the welfare of the animals. All dogs are sentient beings and deserve the protection of the law when their welfare is threatened and this is particularly important in a commercial environment. Dogs Trust urges the Department of Agriculture to adopt the proposed standards for commercial kennels.

RESPONSE

The Department agrees and believes the passage of Act 119 of 2008 supports and opinion that the General Assembly believes higher standards are necessary in a commercial kennel environment.

Although, the Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature, the regulation is based on and still retains many of the overall ideas and standards of the proposed regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable

DOG ADVOCACY ORGANIZATIONS, ASSOCIATIONS AND DOG CLUBS COMMENTS

I. UNITED AGAINST PUPPY MILLS – Comments-General and Specific

Commentator:
Submitted by: Helen Ebersole, MS, President; L. Thomas Gemmill, VMD, Veterinary Advisor;
Cyndy Baxter, Esquire, Legislative Chair; Jenny Stephens, Executive Secretary
P.O. Box 7202, Lancaster, PA 17604

Background: I am writing on behalf of United Against Puppy Mills, one of the Commonwealth's largest not for profit advocacy groups focusing on the health, welfare and care of the breeder dogs, many that spend their lives in Pennsylvania's large scale commercial breeding kennels. In 2006, UAPM presented Governor Rendell with the signatures of more than 30,000 Pennsylvania residents for the purpose of requesting the introduction of legislation that would improve the standards of care rendered to tens of thousands of dogs confined within these commercial facilities. Today UAPM maintains an active membership whose chief concern is the welfare and wellbeing of Pennsylvania's breeder dogs.

A. General Comments:

Comment: United Against Puppy Mills supports all of the regulations recommended by the Canine Health Board ("CHB") and believes that collectively they will provide long awaited relief to the dogs - many who have suffered for years in silence. Additionally, we believe these recommended regulations will have a direct and positive impact not only on the puppies born at these facilities but on countless Pennsylvania consumers who purchase puppies at Pennsylvania's retail pet shops and directly from Pennsylvania's commercial breeders.

RESPONSE

The Department agrees. The language of the final-form regulation, although based on and still retaining many of the overall ideas and standards of the proposed regulation, has been significantly modified to provide additional clarity, more objective standards and provisions which allow for more effective and uniform enforcement. The final-form regulation contains additional sections that break the regulation down into the basic elements set forth in the statute (ventilation, humidity, auxiliary ventilation, ammonia levels, carbon monoxide, lighting and flooring. In addition, the ventilation provisions measure air circulation in cubic feet per minute per dog (CFM) not in exchanges per hour. This measurement is much easier to check, assess and enforce and allows kennel owners to adjust air circulation levels dependent on the number of dogs housed in the kennel housing facility. The ventilation section also sets forth clear standards and guidance for what constitutes a violation and clear standards and guidance with regard to a kennel owner's duty if a mechanical failure should occur. The humidity section sets forth clear humidity standards that are based on scientific research, data and practices. The auxiliary ventilation provisions make it clear that air conditioning to reduce temperatures may be utilized when temperatures rise above 85 degrees Fahrenheit, but is not required. It also sets forth examples of other techniques that are currently being utilized in kennels. The ammonia provisions set forth clear levels and measurement standards, all of which are based on consultation with and research by experts (engineers, animal scientist and veterinarians). The lighting provisions now establish clear levels and standards for either natural or artificial lighting or both. Finally, the flooring section is broken down into three subsections. The first two subsections set forth the flooring standards contained in section 207(i)(3)(i) and section 207(i)(3)(ii) of the Dog Law (3 P.S. §§ 459-207(i)(3)(i) and (i)(3)(ii)). The third section delineates the legal authority and the standards for alternative flooring. These changes all incorporate language that is clear and establishes more objective standards.

Comment: United Against Puppy Mills has reviewed the comments to the CHB regulations which have been submitted by organizations representing national and Pennsylvania-based purebred groups, as well as other state-based canine organizations. These groups readily admit that the CHB's recommended regulations do not directly affect their members or the dogs owned by those members. Even so, these groups have attempted to cast a negative shadow upon the findings of the CHB by pointing to a lack of published scientific studies to justify the need for many of the proposed regulations along with the financial ramifications some commercial breeders may possibly incur when complying with the requirement to implement: natural light; air changes to control

humidity, ammonia levels, carbon monoxide, odors, particulate matter and disease; solid flooring; access to a partially shaded exercise area; and ventilation to ensure temperatures do not rise above 85 degrees.

RESPONSE

The Department has reviewed every comment and has done additional research and consulted with experts such as engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department. The final-form regulation – including all of the ventilation, humidity and ammonia level standards – are based on scientific research and data and expert opinion based on normal animal husbandry practices and experience. In addition, the final-form regulations are within the specific statutory authority and duty conveyed by the Act.

With regard to cost issues, the Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry – such as harm to the dogs and additional costs imposed upon consumers that purchase puppies from kennels not meeting the appropriate standards. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

Comment: The CHB's regulations will potentially affect less than 300 commercial breeding businesses in the Commonwealth and that a majority of these specific kennels, based upon information extrapolated from the Bureau's inspection data base as it pertains to the number of dogs sold, earn hundreds of thousands of dollars from the sale of puppies each year. While it is unfortunate that little, if any, of the money produced by these breeding operations has been reinvested into updating kennel equipment and the physical upkeep of structures at and within many of these kennels, it has been determined by Pennsylvania's General Assembly that the living conditions for these dogs - the very dogs responsible for producing profits - be improved so as to stop any possible suffering that's attributed to antiquated living facilities and a generalized and overall lack of care. This decision is further affirmed by advocates across the Commonwealth as well as the members of United Against Puppy Mills.

RESPONSE

The Department agrees that the General Assembly, through the enactment of Act 119 of 2008, intended the living conditions of dogs housed in commercial kennels to be improved and that such improvements must account for the health and welfare of the dogs. As of January 2010, many commercial kennels had either decided to close or have downsized. There are fewer than 175 commercial kennels that will be affected by the final-form regulation. The majority of the costs imposed on these kennels are imposed by the Act itself. The regulations only pertain to a specific subset of additional health and welfare issues, generally, ventilation, auxiliary ventilation, humidity, ammonia levels, lighting and auxiliary flooring options. The Department, with the assistance of the Canine Health Board members, Department veterinarians, engineers and architects and animal scientists has promulgated a final-form regulation that carries out the duty to regulate these provisions in a manner that will account for the health and welfare of the dogs and that is within the statutory authority granted by the Act.

Comment: To their credit, the CHB's proposed regulations have provided commercial breeders with the ability to implement creative ideology to accomplish compliance with the regulations. This is witnessed by kennels who have applied for and been awarded low cost state-based loans and financing through Pennsylvania's Renewable Energy Program. The Renewable Energy Program encourages the utilization of "green" technology and ultimately benefits Pennsylvania and its residents.

RESPONSE

The Department appreciates the commentator setting forth this information. The modifications made to the final-form regulations should allow for the same innovative and creative approaches.

Comment: It is time for Pennsylvania to be recognized as a humane commonwealth and to turn the comer from being known as the "Puppy Mill Capital of the East." For too long, inhumane commercial kennels have reaped the financial rewards of mass producing puppies with little to no regard for the health and well-being of the puppies or the breeder stock. The standards proposed by the CHB for Class "C" commercial kennels will raise the required treatment of dogs in these kennels to a more humane level and United Against Puppy Mills fully supports and applauds these proposed regulations.

RESPONSE

The Department appreciates the supportive comment and also commends the Canine Health Board for their diligent work and research in crafting the initial Guidelines upon which the proposed regulations were drafted and which form the basis of the final-form regulations. As stated previously, although the language of the final-form regulation is based on and still retains many of the overall ideas and standards of the proposed regulation it has been modified. The modifications provide additional clarity, more objective standards and provisions which allow for more effective and uniform enforcement. The final-form regulation contains additional sections that break the

regulation down into the basic elements set forth in the statute (ventilation, humidity, auxiliary ventilation, ammonia levels, carbon monoxide, lighting and flooring. In addition, the ventilation provisions measure air circulation in cubic feet per minute per dog (CFM) not in exchanges per hour. This measurement is much easier to check, assess and enforce and allows kennel owners to adjust air circulation levels dependent on the number of dogs housed in the kennel housing facility. The ventilation section also sets forth clear standards and guidance for what constitutes a violation and clear standards and guidance with regard to a kennel owner's duty if a mechanical failure should occur. The humidity section sets forth clear humidity standards that are based on scientific research, data and practices. The auxiliary ventilation provisions make it clear that air conditioning to reduce temperatures may be utilized when temperatures rise above 85 degrees Fahrenheit, but is not required. It also sets forth examples of other techniques that are currently being utilized in kennels. The ammonia provisions set forth clear levels and measurement standards, all of which are based on consultation with and research by experts (engineers, animal scientist and veterinarians). The lighting provisions now establish clear levels and standards for either natural or artificial lighting or both. Finally, the flooring section is broken down into three subsections. The first two subsections set forth the flooring standards contained in section 207(i)(3)(i) and section 207(i)(3)(ii) of the Dog Law (3 P.S. §§ 459-207(i)(3)(i) and (i)(3)(ii)). The third section delineates the legal authority and the standards for alternative flooring. These changes all incorporate language that is clear and establishes more objective standards. The final-form regulation – including all of the ventilation, humidity and ammonia level standards – is based on additional scientific research and data and expert opinion based on normal animal husbandry practices and experience. In addition, the final-form regulations are within the specific statutory authority and duty conveyed by the Act.

B. Specific Comments:

Comment: United Against Puppy Mills has identified specific research pursuant to ammonia levels and lighting that lend additional credence to the CHB's recommendations:

Ammonia Levels:

1. Ammonia Emissions and Animal Agriculture
http://agenvpolicy.aers.psu.edu/Documents/BeckerGravesAmmonia 101.pdf and

2. Public Health Statement for Ammonia Agency for Toxic Substances & Disease Registry Department of Health and Human Service
http://www.atsdr.cdc.gov/toxprofiles/phsI26.html#bookmark09

Based on the above sources, UAPM offers the following opinion on ammonia levels: OSHA safety standards for humans call for no more than 35 ppm/15 minutes. Inasmuch as poultry has been documented to have decreased body weight in 25 ppm conditions, this is clearly a level where damage is being seen. Therefore, levels should be required to be maintained comfortably below these damaging levels and a maximum level of 10 ppm would be reasonable to create a safe environment for the workers and the dogs.

RESPONSE

The Department agrees that 10ppm would be an appropriate ammonia level to protect the health and welfare of dogs housed in kennel facilities. However, based on a comment from Dr. Mikesell and consultation with others, the Department believes current ammonia level monitors may not be able to accurately measure ammonia at those levels. In addition, additional consultation with Dr. Kephart, Dr. Mikesell and Department and Canine Health Board veterinarians, the Department believes that ammonia levels of 20 ppm of ammonia are still problematic to the health and welfare of most animals, including dogs. Therefore, the consensus was that ammonia levels should be set at 15 ppm. Such a level is measurable and will assure the health and welfare of dogs housed in kennel facilities.

Lighting:

1. The Engineering Toolbox Illuminance - Recommended Light Levels http://www.engineeringtoolbox.com/liight-level-rooms-d_708.html

and

2. Working Party for the Preparation of the Fourth Multilateral Consultation of Parties to the European Convention for the Protection of Vertebrate Animals Used for Experimental and Other Scientific Purposes (ETS 123) Species Specific Provisions for Dogs http://www.coe.intit/E/Legal_affairs/Legal_co-operation/Biological_ safety use of animals/Laboratory animals /GT123(2002)45rev%20 PART%20B%20dogs.pdf

Based on the above sources, UAPM offers the following opinion on lighting: Since the light in kennels will come from both natural sources and electrical fixtures it would be appropriate to set the electrical output level at 60 foot candles, a range that is comparable to what is commonly found in a workspace environment and an active searching environment such as a supermarket. In addition it would be appropriate to have a diurnal light cycle with varying intensity from 30 to 70 foot candles available. At night a minimal level of 1 foot candle, such as is commonly found in a public exit corridor, should give sufficient light to alleviate stress but not affect the diurnal photo-period desired. The commercial dog breeding business has been in existence for decades. It is an industry, however, in which most of its operating methodology remains clandestine and shrouded in secrecy. For that reason, there are little to no published studies that specifically address situations that are unique to breeder dogs in commercial breeding kennels. There are, however, scientific studies that have focused on dogs kept in research facilities and laboratories for breeding purposes, and livestock studies, that clearly support the recommended standards included within the proposed CHB regulations.

These regulations will provide Pennsylvania's breeder dogs with more humane conditions, a clean living environment and a healthy atmosphere.

RESPONSE

The Department appreciates the research done by the commentator and appreciates the input regarding the specific lighting range that should be established for commercial kennel housing facilities. The Department generally agrees with the comment and the research and the final-form regulation reflects that agreement. In

addition, the Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with an Engineer who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

II. PENNSYLVANIA FEDERATION OF DOG CLUBS (PFDC) AND NATIONAL ANIMAL INTEREST ALLIANCE (NAIA)

Submitted by: Julian Prager, PFDC Legislative Chair and NAIA Legislative Coordinator
7552 Stein Road, Zionsville, PA 18092-2920

Background:

These comments are submitted on behalf of the Pennsylvania Federation of Dog Clubs (PFDC) and the National Animal Interest Alliance (NAIA). PFDC is comprised of dog clubs in the Commonwealth and their members who show and train dogs in conformation, performance and sporting venues. It represents small, hobby breeders who produce dogs primarily with the intent of showing them in events or using them in using them in sporting or working activities. NAIA is a national organization with the mission of promoting the welfare of all animals, strengthening the human-animal bond, and safeguarding the rights of responsible animals owners. Although neither of these groups represents commercial kennel owners *per se*, both groups are concerned when the rights of individual owners or breeders are compromised without legal justification.

We appreciate the work the Canine Health Board (Board) has done in reviewing health standards under Section 221 of the Dog Law (Act 119). Most of the requirements of the Standards address areas affecting the health of dogs and are generally reasonable. However, we believe that there are some areas where the Standards present problems because they are vague and do not provide sufficient guidance to the public, the potential fiscal impacts are misstated, there are potential internal conflict among the Standards, or the Standards established by the Board are *ultra vires*.

A. General Comments:

Comment: COSTS to Commonwealth - The analysis of costs and revenue loss to the Commonwealth is faulty and underestimates both the cost and revenue loss. On the cost side, the Department states that it will cost the Commonwealth $94,775 in FY 1 (without optional costs) and $675 annually thereafter to replace equipment in FY 2-4. However, the Department attributes no cost in several areas where the cost is not able to be determined. There is a significant difference between a cost that may not be estimated accurately and no cost at all.

The cost estimate for additional staff required to perform inspections at commercial kennels is listed as $0, despite that fact that the relative humidity and particulate matter are to be measured at locations randomly selected of 10% of the dogs in the kennel, the ammonia level is similarly measured with an additional four locations for measurement, and the air velocity is similarly measured with the addition of all intake and exhaust vents. It is unclear how the Department is able to estimate it will not cost more to do this than to perform the more limited, current procedures. In addition, significant additional time will be required to enter these data on the new inspection form, to ensure their accuracy and readability and to ensure accurate data entry of these multiple data points into the new system. Furthermore, the Department estimates no revenue impact from these regulations. However, the Department is already reporting an increase in the number of commercial kennels voluntarily closing due to the pending full implementation of Act 119 of 2008 and the expected commercial regulations. Since licenses fees are a significant part of the department's revenue base for dog law enforcement, it is unrealistic to assume no impact on revenue resulting from the implementation of these regulations.

RESPONSE

The Department has fully set forth costs estimates in the regulatory analysis form that accompanies the final-from regulation. The regulatory analysis form provides cost estimates for implementation of the final-form regulation, including estimates received from engineers and firms that design and/or build kennels. The cost estimates are based on the language of the final-form regulations related to ventilation, auxiliary ventilation, humidity, ammonia and carbon monoxide controls and lighting requirements. The Department points out that The Department has done research and set forth what it believes to be the appropriate costs associated with the final form regulations.

The Department will not be hiring additional staff to perform kennel inspections. The provisions related to where and how the Department will take measurements have been removed from the final-form regulation. The final-form regulation, while still requiring measurements, is much less labor intensive. Ventilation rates will be verified by the person installing the equipment and checked through a number of avenues, including kennel measurements supplied by the kennel owner and verified by the Department and the stamped capacity of the ventilation system. Humidity and temperature readings will be taken by instruments supplied by the Department and permanently mounted in the kennel. Information will be reviewed and kennel records will be reviewed. Ammonia and lighting level readings will still be taken, but are not excessively time consuming. If illness or stress related conditions associated with poor ventilation are observed, the State dog warden will take precise readings in that part of the kennel housing facility.

The commentator must keep in mind that the majority of costs of redesign and construction were imposed by the Act itself and should not confuse those costs with the costs imposed by the regulations. In fact, any cost related to wire flooring and additional staff costs imposed because of the prohibition against wire flooring is a condition imposed by the Act itself and not the regulations. All of the flooring requirements are imposed by the Act. The regulations mirror the language of the Act and set forth standards the Canine Health Board will consider when approving any **additional types of flooring** submitted by the regulated community (which would be their choice of flooring – not a choice imposed by the regulations). Therefore, the regulations themselves do not impose additional costs related to the types of flooring that must be utilized in kennels. Sections 207(i)(3)(i) and (ii) of the Dog Law impose those costs, including any additional manpower costs related to cleaning or care of the flooring. In addition, the Act, not the regulations, sets forth the requirements for exercise areas. The regulations do not impose any requirements on or for the exercise areas of the kennel and therefore, impose no costs related to the exercise area of the kennels. Furthermore, many of the conditions and requirements imposed by the regulations (as set forth more fully in responses to questions related to specific provisions of the regulations) are standards with which kennels regulated by the United States Department of Agriculture are already required to comply and therefore, although part of the cost estimates set forth in the regulatory analysis form, those standards, if already being complied with, will not in practice impose any additional costs on those types of kennels.

Comment; COSTS to Regulated Community - With respect to costs to the regulated community, the costs are underestimated. The department states the "kennels that choose to mechanically circulate and filter" their internal air will have a cost of from $5,000 to $13,000 per unit for 5,700 cubic feet per minute of circulation and states that most commercial kennels are less than 5,000 square feet. It then requires in the regulations that when the ambient temperature is 85 degrees Fahrenheit or higher (a condition found in all Pennsylvania counties in the summer months) that the use of mechanical ventilation is mandated. It provides an optional cost of $2,955 for purchasing devices to measure temperature, humidity, ventilation, ammonia and particulates. However, it is unreasonable to require a business to meet certain standards and not to assume the business will purchase those devices needed to ensure compliance with the law and regulations issued under it. Therefore, the minimal cost to commercial kennels should be raised from $20 to at least $7,975 per kennel, or a minimum of $2,791,250 for the regulated community.

RESPONSE

The Department has fully set forth costs estimates in the regulatory analysis form that accompanies the final-from regulation. The regulatory analysis form provides cost estimates for implementation of the final-form regulation, including estimates received from engineers and firms that design and/or build kennels. The cost estimates are based on the language of the final-form regulations related to ventilation, auxiliary ventilation, humidity, ammonia and carbon monoxide controls and lighting requirements. The Department points out that The Department has done research and set forth what it believes to be the appropriate costs associated with the final form regulations.

The final-form regulation, while still requiring measurements, is much less labor intensive and the Department will supply some of the devices necessary to assure compliance. Ventilation rates will be verified by the person installing the equipment and checked through a number of avenues, including initial kennel measurements supplied by the kennel owner and verified by the Department and the stamped capacity of the ventilation system in the kennel. Humidity and temperature readings will be taken by instruments supplied by the Department and permanently mounted in the kennel housing facility. Information will be reviewed and kennel records will be reviewed. Ammonia and lighting level readings will still be taken, but these meters are not excessively expensive and those costs are set forth in the regulatory analysis form. In addition, according to the engineers consulted, if ventilation rates are maintained at the levels required by the final-form regulations, ammonia levels should not rise above the minimum threshold established in the regulations. If illness or stress related conditions associated with poor ventilation are observed in the dogs, the State dog warden will take more precise readings in that part of the kennel housing facility.

Comment: REQUIREMENTS OF THE LAW - Act 119 limits the reach of the Board to distinct, circumscribed areas. Section 221 establishes the Board, its process and the scope of its powers. Under Subsection (f), the purpose of the Board is stated: "to determine the standards based on animal husbandry practices to provide for the welfare of dogs under Section 207(h)(7) and (8) and (i)(3)." In addition, under Section 207 (i)(5) the Board may, upon a commercial kennel owner's request, consider "on a case-by-case basis for an alternative means of allowing clearance from a primary enclosure to the exercise area or exercise that is required in paragraphs (4) and (6)(i) if the kennel owner presents the board with a plan that the board determines is verifiable, enforceable and provides for exercise equal to or greater than that which the dogs would receive under paragraphs (4) and (6)(i)."

Insofar as the proposed regulations issued by the Department are required by law to be issued based on the Board's Guidelines, we must evaluate the authority of the Board to establish these Guidelines. The Board cannot establish requirements that run counter to the statutory requirements. See also Pennsylvania Professional Pet Breeders Association, et al v. Dep't of Agriculture (U.S, District Court for the Middle District of Pennsylvania, Civil No. 1:CV-09-1644, Pg. 9). Since the Board cannot establish standards inconsistent with the law, it is inappropriate to bootstrap regulations that are *ultra vires* into final form regulations when the regulations were invalid *ab initio*. However, there are areas within the guidelines that may be *ultra vires* for the Board, but within the authority of the Department to issue regulations. To the extent it is possible, these comments have tried to separate these issues so that regulations which are outside the Board's authority, but not delegated to the Board exclusively under the law, are deemed legal unless otherwise objectionable.

RESPONSE

The Department will review the comments and appreciates the commentators efforts.

B. Specific Comments:

Section 28a.2 – Ventilation

Comment: Statutory vs. Regulatory Language
Statutory Language:
Regarding the ventilation standards, Section 207(h)(7) states that "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation." Furthermore, it provides that the "relative humidity must be at a level that ensures the health and well-being of the dogs housed therein." It authorizes the Canine Health Board (the Board) to "determine auxiliary ventilation to be provided if the ambient air temperature is 85 degrees F or higher" and authorizes it to determine the "appropriate ventilation, humidity and ammonia ranges . . ."

The Section 207(h)(7) does not authorize the Board to prescribe the methods of achieving the standards it determines are appropriate. It is authorized only to determine the relevant standards related to the health and well-being of dogs housed in the kennels, based on animal husbandry practices.

RESPONSE

In setting forth standards, a regulating agency must also establish and clarify the means by which such standards can be attained and the criteria under which such standards will be evaluated and enforced. After consulting with engineers and architects that design and build kennel buildings, and animal scientists and veterinarians, as well as, scientific studies and existing law – such as the Federal Animal Welfare Act and regulations - concerning proper animal husbandry practices, the Department set forth that supporting and clarifying criteria in the final-form regulations.

The Canine Health Board and hence the Department as the promulgating agency has the absolute authority, under section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) to set and establish proper ventilation, humidity and ammonia levels. The Board also has the authority to set auxiliary ventilation standards when the temperature in the kennel housing facility rises above 85 degrees Fahrenheit. Section 207(h)(7) reads, "...The relative humidity must be maintained at a level that ensures the health and well-being of the dogs housed therein. The appropriate ventilation, humidity and ammonia ranges shall be determined by the Board." This provision is in addition too, not a modification of the auxiliary ventilation authority. Under the authority set forth at section 221(f) of the Dog Law (3 P.S. 459-221(f)) these standards have to be and are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels.

The Statute in delineating the Board's authority plainly illustrates that the Board and the Department in promulgating the regulation is and shall be the duly constituted and appropriate body to articulate and prescribe (i.e. "to settle or decide by choice of

alternatives or possibilities") all requisite standards and ranges to ensure that the temperature, ventilation, humidity, and ammonia categories specifically enumerated in the Statute are measurable, quantifiable, and enforceable. The final-form regulation does that precisely. Indeed, had the Board and the Department done anything less than prescribe the specific standards and ranges it did in the final-form regulation, it arguably would not have fulfilled its statutory mandate. In fact, many of the comments received regarding the proposed regulations call for the Department to set forth such language and standards in the final-form regulation in order to assure clarity, objectivity and enforceability. The Department has endeavored, within the bounds of its statutory authority and utilizing the research, knowledge, experience and expertise of engineers, architects, animal scientists and veterinarians to draft a final-form regulation that does utilize animal husbandry practices and scientific evidence and practices that will account for and assure the health and welfare of dogs in commercial kennels. This has been set forth in specificity throughout this comment and response document. Thus, the Department believes the final-form regulation precisely conforms to the statutory mandate of "determining" the appropriate standards and ranges for ventilation, humidity, and ammonia in commercial dog kennels, and therefore should be issued as written in its final form.

Regulatory Language: Section 28a.2

It is the commentators' belief that the Board and the Department erred in requiring mechanical ventilation systems for use in commercial kennels in a number of subsections of Section 28a.2. Furthermore, it is well documented in literature related to animal husbandry that building design and non-mechanical means may be used to provide adequate levels of ventilation. Since animal husbandry standards are established as the foundation upon which Board's standards are to be based, the standard requiring the use of mechanical means for ventilation is inappropriate.

RESPONSE

The Department could find no support in the literature, science or in the opinion of any of the engineers consulted - that design and build kennel housing facilities - for the contentions set forth in the above comment. As set forth in detailed responses to other comments related to the ventilation provisions of the proposed regulations, the final-form regulations base the ventilation and air circulations standards on information supplied by experts such as the engineers and architects consulted and animal scientists and veterinarians. The consensus opinion of the engineers was that the proper rates of ventilation to assure the health and welfare of the dogs could not be achieved or properly maintained without a mechanical means of air circulation. Various factors, including wind, wind direction and inverse convection to name a few, make it impossible for any kennel building to be designed in a manner that would allow it to obtain the proper ventilation levels, on a consistent and necessary basis, without mechanical means.

Regulatory Language: Section 28a.2(1)

The requirement in Subsection 28a.2(1) to keep the temperature below 86 degrees when dogs are present is beyond the scope of the Board's or the Department's authority as defined in the statute. If the legislature had intended to provide a maximum temperature setting, it could have done so in the statute. We believe that the legislative history of the

act makes it clear that the intent of the language in the statute was to have the Board do exactly what the statute states, i.e. determine additional ventilation requirements in commercial kennels at temperatures above 85 degrees to reduce the impact of higher temperatures on dogs in the kennels in accordance with animal husbandry practices. Furthermore, by inference Section 207(h)(6) of the act permits the temperature to exceed 85 degrees, provided the ventilation standards are met.

RESPONSE

The final-form regulations no longer sets a temperature cap of 86 degrees Fahrenheit, nor do they control the ambient temperature in the kennel housing facility. The Department, after viewing the comments submitted by the Independent Regulatory Review Commissions and Legislators related to requiring temperature reduction through the use of air conditioning units when kennels exceeded 85 degrees Fahrenheit decided to utilize the absolute authority set forth in the statute to regulate humidity levels and assure a proper environment, based on animal husbandry and scientific information related dog survivability and safety and heat index levels. The rationale for the approach and support for the levels established in the final-form regulation is set forth in previous answers to comments from the Independent Regulatory Review Commission, the Honorable Senator Brubaker and Members of the Republican House Agricultural and Rural Affairs Committee.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the use of auxiliary ventilation. The auxiliary ventilation techniques are techniques currently employed in kennels. This information was gathered from an AKC Senior Breed Field Representative and the Department and reviewed by engineers. Nothing in the final-form regulation requires the reduction of temperature to a level of 85 degrees Fahrenheit or the use of air conditioning.
The heat-index approach followed by the Department appears to be generally supported by later comments/suggestions submitted by this commentator.

Comment: Disparate Impact of Regulation
An ancillary problem with the requirement to use mechanical ventilation when the temperature exceeds 85 degrees is that it will have a disparate impact on a protected class those whose religious beliefs prohibit or severely restrict the use of electricity. Any regulation that would require violation of their religious beliefs must be subject to significant scrutiny. In cases like this, where it is apparently beyond the authority granted the Board or the Department, it cannot be supported.

RESPONSE

The Department disagrees with this comment. Without getting into the merits of the legal argument itself, the protected class referred to in this statement already utilizes generators in their business pursuits and ventures. The persons referred to utilize generators to operate milking equipment and manufacture furniture, sheds and playground equipment to name a few business ventures in which they are involved. This is merely another business venture that happens to be a heavily regulated business venture. It is a business venture where the Commonwealth requires the health and welfare of the animals, which are the business enterprise, be accounted for and maintained. This regulation treats all classes of person regulated in the same manner and does not discriminate against any one class of persons.

In addition, the protected class discussed is also, in many instances, regulated by the United Stated Department of Agriculture, under the Animal Welfare Act and its regulations at 9 CFR. The Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)). The Federal government has obviously recognized the necessity of requiring all persons raising dogs to have and employ adequate means to provide normal animal husbandry practices that will account for the health and safety of the dogs. The Department's regulations take the same approach.

Comment: Random Sampling Language

Furthermore, obtaining randomness is a highly technical, scientific process. Just choosing dispersed areas of measurement does not do it. If the measurements are not actually randomly made, any resulting enforcement actions are subject to challenge. Therefore, we suggest the use of a different standard of selecting measurement locations. This comment applies to all references to random measurements in the regulations.

We believe a better standard, requiring fewer measurements, but providing the necessary measurements and records, would be:

28a.2(1) (a) Each kennel shall utilize functional ventilation, air movement, heating and/or air-conditioning and/or humidity control systems that provide the required ventilation and air movement to each area of the kennel where dogs are housed when the temperature is out the range provided in the statute.

(b) All measurements shall be made at the standing shoulder level of dogs housed in the kennel in the middle of each room of the kennel in which dogs are housed or, in kennel rooms larger than 1,000 square feet, at least at one point for each 1,000 square feet or part thereof measured at points central to each portion of the room divided in sizes as equal as practicable.

RESPONSE

The Department appreciates that the commentator took the time to prescribe and suggest alternative language for this provision of the regulation. However, because of extensive modification to the ventilation provisions of the final-form regulations, such as replacing air exchanges per hour with cubic feet per minute per dog as the standard, the

measurement standards addressed in the comment have been eliminated in the final-form regulation.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f) (1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. This was done after consultations with an engineer and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification from a professional engineer and information supplied by the kennel owner and verified by the professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per

dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. This was done after consultations with an engineer and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The standard was set based on the expert advise of the engineers, animal scientists and veterinarians consulted.

Comment: Subsections 28a.2(2) and (3)

The requirements are excessive and time-consuming. It is unclear where the temperature is to be measured. One possibility is that the temperature will be measured at the standing shoulder height, in their enclosures, for a randomly chosen 10 percent of the dogs. This appears to be what is meant in Subsection (4) where there is a specific reference to the measurement being done in each primary enclosure of the 10% of the dogs. Another interpretation is that the average standing shoulder height of a randomly selected 10 percent of the dogs will be used to measure the temperature, but in unspecified locations. The former interpretation will significantly increase the workload of the dog wardens; in the latter case, more specificity is required. This Standard will require 10 independent measurements in a 100-dog kennel, increasing the time required to perform each inspection and to record and maintain related data, in addition to adding time to reset the thermometers between readings. The result would be increased costs for staff and supplies, which will be transferred to the commercial kennels and purchasers of their puppies.

RESPONSE

As set forth previously, he Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and

have been set forth in subsection (f) (1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

In addition, the final-form regulation no longer requires the State dog wardens to take measurements in specific parts of the kennel or to measure 10% of the dogs at shoulder height.

Comment: Subsection 28a.2(4)

The requirements of Subsection 28a.2(4) are clear and specific. However, if this standard were implemented in final regulations, it would require significantly increasing the time for each inspection since the ammonia detector would have to be reset after each measurement and calibrated periodically. In a 100-dog kennel, the Guideline would require 18 separate measurements. This would result in the need for more staff by the Department to perform its duties, for recording significantly more data, and the purchase of multiple ammonia detectors. We understand the need to measure ammonia levels in corners and along walls, but wonder whether fewer measurements in total might be sufficient to obtain reliable and valid date to evaluate the health of the dogs in the kennel.

RESPONSE

The Department agrees for a number of reasons and has deleted that requirement from the final-form regulation. While the Department's research and consultation with engineers also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel and the Department believes ammonia measurements should therefore be taken at the height of the dogs, the Department does not agree the precise number and places of measurement should be established in a regulation. Regulations are not intended to regulate the regulator and such regulation of the regulator can lead to consequences regarding enforcement and flexibility of approach, including striking down of a regulatory approach resulting in the inability to regulate or the inability to utilize a new accepted technology. Standards for the regulator are more appropriately and

commonly established in a guidance document or statement of policy issued by the regulating agency. Therefore, the final-form regulations do not impose such standards on the Department.

Comment: Subsection 28a.2(5)
This subsection is internally inconsistent and appears arbitrary, capricious and an abuse of authority. It requires that CO be kept below detectable levels in all areas of the kennel and requires detectors able to monitor the level throughout the entire facility. These detectors must meet the standards set in UL 2034 or IAS 6-96.

a. However, according to the U.S. EPA, the air quality standard for **outdoor air** is 9 parts per million (40,000 micrograms per meter cubed) for 8 hours, and 35 parts per million for 1 hour. While the EPA states that there are no standards agreed upon for indoor air quality, they recognize that the CO level near a properly adjusted gas stove is 15 parts per million. Therefore, it is improper to establish a standard for acceptable levels of CO as being undetectable, both because there are no recognizable standards for indoor CO levels in either human or animal husbandry practices and because the mandated level is below the levels the EPA determines exist in both outdoor and indoor air in general.

b. The reference to the UL Standard 2034 is inappropriate since the standard states in 1.1 that it covers detectors "in ordinary indoor locations of dwelling units, including recreational vehicles, mobile homes and recreational boats with enclosed accommodation spaces and cockpit areas." These are clearly not animal husbandry uses. If this standard were applicable, it permits a carbon monoxide concentration of 70 parts per million with an alarm response time of between 60 and 240 minutes as an acceptable operating level. The acceptable response time decreases to between 4 and 15 minutes at 400 parts per million. If installation of CO alarms is mandated, the acceptable levels should be within the functional parameters of the alarms.

c. We do not comment on the standards regarding IAS 6-96 since we have been unable to obtain a copy to determine what it requires. However, we expect that our comments would parallel those regarding UL 2034.

We suggest the following language as preferable in the standard:

28a.2(5) Kennels shall install, and maintain the operability of, carbon monoxide detectors with the ability to monitor the carbon monoxide level throughout the entire facility in which dogs are housed. The detectors must meet or exceed the UL standard 2034 or the IAS 6-96 standard, or their successor standards. When an alarm sounds, the kennel owner or manager shall immediately activate auxiliary ventilation or use alternative means to reduce the carbon monoxide level below the point where the detectors sound an alarm.

RESPONSE

The Department appreciates the extra length the commentator went to in providing the suggested language The Department agrees that the language was internally inconsistent and has modified the language in the final-form regulation in a manner that comports with the suggestion of the commentator. The final-form regulation only requires the use of carbon monoxide detectors in kennels that heat with carbon monoxide producing equipment and does not require the measurement or set any specific standard for carbon monoxide levels. The kennel must merely install and maintain functional carbon monoxide detectors. This will account for the health of the dogs and the persons working in the kennel.

The Department agrees with the Canine Health Board, that carbon monoxide levels should at the very least be monitored for safety purposes and to assure proper ventilation and air circulation is occurring within a kennel that utilizes a carbon based form of heating or mechanical ventilation. The engineers the Department consulted believe that carbon monoxide levels will take care of themselves if the kennel is properly ventilated and meets the air exchange rate criteria of the regulations. However, the engineers and animal scientists consulted by the Department acknowledge and agree, carbon monoxide gas can build up in any enclosed building where carbon based mechanical ventilation or heating equipment is in use. Carbon monoxide is colorless and odorless and is deadly. The regulations only require that carbon monoxide detectors be installed. If carbon monoxide levels rise to the point the detectors are triggered the kennel has a problem with ventilation or air exchange in that part of the kennel housing facility and needs to take action to assure the health, safety and welfare of the dogs housed in that area of the kennel. Section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)) states in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and prevent moisture condensation ...the appropriate ventilation...ranges shall be determined by the Canine Health Board. One of the purposes of ventilation is to exchange or re-circulate air in a manner that removes pathogens, including carbon monoxide and replenishes oxygen. The regulatory requirement is inexpensive and necessary to assure the health, safety and welfare of dogs housed in kennels, which is the general overall duty and authority of the Canine Health Board under section 221(f) of the Act (3 P.S. § 459-221(f)).

Comment: Subsection 28a.2(6)

Subsection 28a.2(6), we note again our objection to the requirement for mechanical systems. Furthermore, we believe the requirement in the subsection, as worded, would create delays taking corrective action. Not only is the Bureau unstaffed on evenings and weekends, but also it may not be possible or necessary to obtain this information from the Bureau before corrective action is taken. We believe better language to protect the health of the animals, to reduce Bureau staffing requirements, and to not require the Bureau to have staff available that are knowledgeable in all types of mechanical ventilation systems would be:

28a.2(6) In the event of a malfunction of the systems required under these rules, the kennel must have windows, doors, skylights, or other openings in the structure that shall be operable to maintain ventilation. In the event of a system malfunction, the kennel owner or manager shall:

immediately take any necessary actions to achieve compliance with the standards established in this section, and
immediately take all necessary actions to correct the malfunction, and
as soon as practicable, notify the Bureau of Dog Law Enforcement during normal business hours of the failure and the steps taken to achieve corrective action.

RESPONSE

Once again the Department appreciates the fact the commentator took the time to suggest alternative language. The language of the final-form regulation related to this provision has been extensively modified. The language of paragraph (6) of section 28a.2 of the proposed regulation has been modified in the final-form regulation. The modified language is now set forth in section 28a.2(g) of the final-form regulation and sets forth the duties and requirements of the kennel owner in the event of a mechanical system malfunction. The kennel owner is still required to contact the Department, but the requirements are set forth in specific detail regarding the timing of the contact and the information the kennel owner is required to give to the Department. First, the final-form regulation refers to the kennel "owner" and establishes clear and precise steps to be taken if there is a malfunction of the mechanical ventilation system. Those steps to be taken and the correction of the malfunction are incumbent upon the kennel owner, not the Department. The first step is for the kennel owner to take action to correct the malfunction. There is now clear direction with regard to the time period within which the kennel owner must contact the Department to report the malfunction and with regard to what the kennel owner must report to the Department. In addition, the kennel owner must contact a veterinarian, not the Department, to consult on the proper steps to be taken to protect the health and well being of the dogs during the time period of the malfunction.

The requirements set forth in section 28a.2(8)(v) of the proposed regulation – regarding the requirement that the Department – not the kennel owner – consult an engineer and recommend improvement to meet compliance standards has been removed from the final-form regulation. Kennel owners are responsible for compliance and they must take appropriate steps – including contacting the proper experts – if there is a mechanical malfunction or compliance standard issue.

Comment: Subsection 28a.2(7)

Subsection 28a.2(7) is beyond the scope of the authority of the Board. Standards for particulate matter are not covered by the statutory authorization granted to the Board under Section 207(h)(7). This area, although affecting the health and welfare of the animals in the kennel, is not within the authorized scope of the Board and may not be bootstrapped merely by referencing ventilation. However, it may be within the authority of the Department to proposed regulations in this area. As the IRRC stated in its February 2009 Newsletter, a regulation may be deficient where it conflicts with or duplicates a statute. The statute contains cleanliness standards for commercial kennels in section 207(h)(14)(i). "Excreta, feces, hair, dirt, debris and food waste must be removed from primary enclosures at least daily or more often if necessary to prevent an accumulation of excreta, feces, hair, dirt, debris and food waste to prevent soiling of dogs contained in the primary enclosures and to reduce disease hazards, insects, pests and odors." We believe the proper interpretation of this section does not permit either the

Board or the Department to set measurement standards for particulate matter in commercial kennels.

RESPONSE

The Department has removed this provision from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation requirements of the regulations were being met, particulate matter would not pose a problem in the kennel.

Comment: Subsection 28a.2(8)

a. Subsection 28a2(8) clearly allows air change to be set at a required level. In fact, this is the appropriate method of ensuring that noxious air contaminants remain at satisfactory levels. If air circulation and exchange levels are properly determined, ammonia levels, CO levels and other contaminants will be properly controlled. However, we question the need for fresh air changes at the rate of one air change every 7.5 minutes (8 exchanges per hour) and its impact on achieving other standards in the regulations where the outside air temperature greatly exceeds or is below the required temperature range in the act. Maintaining temperature and humidity at levels to provide protection for the animals may not be possible when the outside temperature is 100 degrees and the humidity is 95 percent if the required fresh air exchange standard is to be met. Conversely, it may be difficult to achieve sufficient temperatures inside when the outside temperature is below zero in the winter if the air exchange standard is to be met.

b. In addition, the relationship between this Subsection and Subsection 11 is unclear. This subsection states that air changes must occur with fresh air; subsection 11 refers to the use of recirculated air. If there is sufficient fresh air being circulated, it is not clear how recirculated air in addition to the fresh air requires any treatment. If filtered, recirculated air is permitted, why is it not included in the calculation of air changes, without reference to fresh air changes?

RESPONSE

As set forth previously, the Department As set forth previously, he Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f) (1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air

circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

In addition, the language previously contained in section 28a.2, subsection (11) has been deleted from the final-form regulation.

Comment: Subsection 28a.2(9)

Subsection 28a.2(9) attempts to expand the authority of the Board to areas of animal stress by bootstrapping it to the authority to set ventilation standards. However, correlation is not causation. The authority of the Board extends only to setting appropriate levels specified in the statute. Although this is a valid health concern and stress reduction does affect animal health, it is not covered by the scope of the statutory authority of the Board. While the Department may issue regulations in this area, Paragraph 9 does not present a valid, enforceable standard. This Paragraph, as worded, makes it illegal for dogs in commercial kennels to become sick or to die, to be shy or develop skin conditions. Although these are not desirable conditions, it is beyond reason to penalize a commercial kennel if a dog dies or gets sick. These guidelines would be a valuable teaching tool for wardens as to conditions that may indicate problems in the kennel. However, they cannot function as enforceable standards within a rational regulation.

RESPONSE

The final-form regulation shortens the list to those signs of illness or stress that are related to ventilation issues and no longer makes the mere existence of those signs a violation. Section 28a.2(9) of the proposed regulations (See section 28a.2(h) of the final-form regulation), which related to conditions in dogs that were signs of illness and stress has been modified in the final-form regulations. The number and type of conditions in dogs that may denote poor ventilation has been reduced. In addition, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that veterinarians have asserted can result from poor ventilation, air

circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility. This is within the authority of the statute to regulate and assure compliance with proper ventilation, humidity and ammonia level standards.

Comment: Subsection 28a.2(10)

Subsection 28a.2(10) is unnecessary in that it restates the provision of the statute or other regulations in all respects and is unenforceable in that the measurement is subjective.

RESPONSE

The language previously contained in section 28a.2, subsection (10) has been deleted from the final-form regulation.

Comment: Subsection 28a.2(11)

Subsection 28a.2(11) is addressed by the comments on Subsection (8).

RESPONSE

The language previously contained in section 28a.2, subsection (11) has been deleted from the final-form regulation.

Comment: Subsection 28a.2(12)

Subsection 28a.2(12) is unclear as to its meaning. Most codes establish standards for new construction. Existing buildings are permitted to continue operating under the codes in place when they were constructed until there is a major renovation. At that time, upgrading systems to the new code is required. We have no objection if the intent of this subsection is to follow the standard building code and zoning practice as it applies to buildings used for animal husbandry purposes. We believe that a requirement to upgrade existing buildings to current standards whenever there are changes to the standards is contrary to normal industry and governmental practices and would cause significant fiscal harm to the regulated community. We suggest the following language be applied here and with respect to all references to building codes:

28a.2(12) Ventilation systems must comply with the applicable building codes at the time of construction and shall be updated to meet successor codes when major structural renovations are made.

RESPONSE

All language regarding "applicable codes" including the language previously contained in section 28a.2, subsection (12) has been deleted from the final-form regulation.

Comment: Subsection 28a.2(13)

We note that the Preliminary Guidelines issued by the Board suggested temperature levels for neonates, although they are not included here. We believe it is within the authority of the Department to issue such regulations for the proper care of neonates, which have a different susceptibility to temperature ranges than adult dogs. We suggest the following language:

28a.2(13) Neonates under 3 weeks of age must have access to a portion of the enclosure with a temperature not lower than 80 degrees.

RESPONSE

Based on this and other similar comments related to neonates, which suggested the temperature for neonates should never fall below 90 degrees Fahrenheit, the Department consulted with veterinarians. The consensus among veterinarians was that normal animal husbandry practices dictate that the mother provides the necessary body heat to sustain the neonates/puppies and that no exception should be made to the 85 humidity index, because such an exception would be detrimental to the adult mother dog. Therefore, no changes have been made and the kennel must maintain a heat index value of 85 or below. The Department notes, that the Federal Animal Welfare Act regulations make no such exception for neonates and the Federal Animal Welfare Act regulations, unlike these regulations, does set an upward temperature cap of 85 degrees Fahrenheit.

Section 28a.3 Lighting.

Comment: Statutory vs. Regulatory Language

Statutory Language

Section 207(h)(8) states: "Housing facilities for dogs must be lighted well enough to permit routine inspection and cleaning of the facility and observation of the dogs. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs from excessive light. The appropriate lighting ranges shall be determined by the Canine Health Board."

Regulatory Language

Comment – New language – add a subsection

We would add a new Subsection before Subsection 28a.3(1) to read as follows and renumber all the following subsections:

28a.3(1) Each kennel shall have a mixture of natural and artificial light of at least 80 foot-candles during daylight hours and at no more than 5 foot-candles during nighttime hours.

This standard sets the levels of lighting in the kennel, as permitted to Board by the law.

RESPONSE

The Department has modified the language of the lighting sections of the final-form regulation in a manner similar to that suggested by the commentator. The final-form regulation no longer contains the language of what was section 28a.3(1) of the proposed regulation (now section 28a.7 of the final-form regulation). The final-form regulation now allows for either natural or artificial light or for a combination of both. It sets general standards for all lighting and establishes specific standards that in addition to the general standards, apply to either type of lighting. What was subparagraph (1) of the proposed regulation is now contained in a provision that relates only to natural light. Natural light is no longer required. What were subparagraphs (1)(ii)-(1)(vi), have been removed from the final-form regulation. The new language, regarding general lighting standards, mirrors the language of the Act and is consistent with existing USDA standards. In addition, the final form regulations, at section 28a.7(a)(5), sets a lighting range of 40-60 foot candles. The range was modified and established based on expert opinions – as set forth more fully in answers to similar comments posed by the Honorable Senator Brubaker and the Independent Regulatory Review Commission.

Comment: Subsection 28a.3(1)

Despite the statement made in the first sentence of Section 28a.3, Subsection 28.3(1) goes beyond the authority of the Board, which is authorized only to establish lighting ranges. The statute explicitly permits either artificial or natural light and neither the Board no the Department has the authority under the statute to require natural light.

RESPONSE

The final-form regulation no longer contains the language of what was section 28a.3(1) of the proposed regulation (now section 28a.7 of the final-form regulation). The final-form regulation now allows for either natural or artificial light or for a combination of both. It sets general standards for all lighting and establishes specific standards that in addition to the general standards, apply to either type of lighting. What was subparagraph (1) of the proposed regulation is now contained in a provision that relates only to natural light. Natural light is no longer required. What were subparagraphs (1)(ii)-(1)(vi), have been removed from the final-form regulation. The new language, regarding general lighting standards, mirrors the language of the Act and is consistent with existing USDA standards.

Comment: Subsection 28a.3(1)(ii)

a. Even if the Board had the authority to prescribe natural lighting, it would lack the authority to require transparent windows in Paragraph 28a.3(1)(ii), as contrasted with translucent windows, since it is only the level of light that may be regulated. Insofar as

the amount of glazed area in Paragraph 28a.3(1)(ii) can be related to the amount of light provided, it is within the grant of authority by the legislature.

b. We note that the approach taken by the Board has completely eliminated one source of acceptable natural light frequently found in the animal husbandry practices of kennels. That is the use of translucent or transparent door inserts in doors used for providing unfettered access to outdoor runs. These doors are widely used in kennels and provide significant natural light in each primary enclosure during the hours of natural daylight.

RESPONSE

The final-form regulation eliminates the language set forth in the comment. The final-form language now utilizes the same language as set forth in the Federal Code of Regulations associated with the Animal Welfare Act (9 CFR § 1.1), definition of indoor housing facility, part (3) with regard to the coverings that must be on windows or openings that provide natural sunlight. This also eliminates the issues set forth in part (b) of the comments.

Under the authority and parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, which is the authority under which this regulation is promulgated, the Department believed it had no statutory authority to require visual access to windows for dogs housed in kennel facilities that had received an exemption from outdoor exercise. The Department still requires natural light be provided in such kennels and agrees that actual access to windows during exercise is a good idea, but not one that can be mandated by these regulations.

Comment: Subsection 28a.3(1)(iii)

Paragraph 28a.3(1)(iii) duplicates the statutory language and is unnecessary.

RESPONSE

The Department may reiterate statutory language in a regulation and agencies often do utilize such an approach in order to assure the regulated community knows the general as well as the specific standards which apply. The regulated community in many instances is more likely to have access to the regulatory standards than the statutory standards and reiterating the standards harms no one. That said, section (iii) has been deleted, but the language of the statute is still reiterated in the general lighting standards of the final-form regulations at section 28a.7(a).

Comment: Subsection 28a.3(1)(iv)

Paragraph 28a.3(1)(iv) is beyond the scope of authority of the Board in that it does not cover lighting ranges in housing areas or primary enclosures. However, since shade is an important health requirement for dogs outside in the heat, this is an appropriate regulation for issuance by the Department under its authority.

RESPONSE

The requirements that were in subsection 28a.3 (i)(iv) related to shading of the outdoor exercise area have been removed from the final-form regulation. The Department agrees it could require such a provision in its general regulations that pertain to all kennels, but has no authority to require shade under the authority of sections 207(h)(7),(h)(8)(i)(3) or 221(f) (3 P.S. §§ 459-207(h)(7)(8)(i)(3) and 459-221(f)), which are the provisions of the Act under which these regulations are required to be promulgated.

Comment: Subsection 28a.3(1)(v) and (vi)

Paragraphs 28a.3(1)(v) and (vi) exceed the reach of the Board's authority under section 207(i)(5), which extends to determining that a plan is verifiable, enforceable and provides for exercise equal to or greater than that which the dogs would be provided should the Department grant an exemption from outdoor exercise under Section 207(i)(6)(x)(B). There is nothing in the statute to suggest that the Board has the authority to proscribe different lighting requirements for kennels where waivers are granted. Furthermore, transparent windows set at a height to permit each dog to have an unobstructed view of the outdoor environment could prove dangerous since they would have to be set at or slightly above the dog's eye level. This might result in dogs trying to exit through a closed or partially opened window, resulting in injury to the dog. We refer again to our comments, above, regarding transparent or translucent inserts in kennel doors. We believe the following regulations issued by the Department would meet the goals of the Board and stay within the provisions of the statute:

28a.3(1)(v) If a department grants a kennel a waiver for indoor exercise under section 207(i)(6)(x)(B) of the Dog Law (3 P. S. § 459-207(i)(6)(x)(B)), the department may require as a condition of the waiver that natural light enter into each primary enclosure for a portion of the period of natural daylight.

28a.3(1)(vi) If the department grants a waiver to a kennel for indoor exercise under section 207(i)(6)(x)(B) of the Dog Law (3 P. S. § 459-207(i)(6)(x)(B)), the department may require as a condition of the waiver that full spectrum lighting be provided for the entirety of the daytime light cycles in areas that house dogs.

RESPONSE

The Department appreciates that the commentator provided suggested language, but the time for granting the waivers set forth in that language has passed (April of 2009) so no new waivers will be issued in the future. Subsections 28a.3(1)(v) and (vi) have been eliminated from the final-form regulation. Under the authority and parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, which is the authority under which this regulation is promulgated, the Department believed it had no statutory authority to require visual access to windows for dogs housed in kennel facilities that had received an exemption from outdoor exercise. The Department still requires natural light be provided in such kennels and agrees that actual access to windows during exercise is a good idea, but not one that can be mandated by these regulations. This requirement has been eliminated from the final-form regulation. The final-form regulation no longer sets or requires a minimum amount of external windows and skylights in order to aid in meeting

the lighting standards of the regulations. The sixteen or so kennels that received approval for indoor exercise only, will be required to provide some light through external doors and openings. In addition, with regard to authority to require external doors and openings in a kennel building, the Department, in this regulation, requires external openings to allow for ventilation if the mechanical ventilation system fails.

Comment: Subsection 28a.3(2)(i)

Subsection 28a.3(2)(i) also exceeds the authority of the Board in that lighting type is not something the Board is authorized to specify. Exposure to full spectrum lighting is desirable for dogs not having access to outdoor exposure to natural lighting. It would be acceptable for the Department to require full spectrum lighting be provided in those kennels where the department grants a kennel a waiver for indoor exercise similar to the provision presented above.

RESPONSE

The Department disagrees with this comment. With regard to authority, the Canine Health Board and hence the Department have the authority to set appropriate lighting ranges, but the duty to assure the lighting standards account for the welfare of the dogs (3 P.S. § 459-221(f)). Natural light, providing the full-spectrum of wavelength is necessary for normal eye and brain development in animals. Full spectrum lighting is the only lighting that even closely simulates the wavelengths of natural sunlight. As set forth in previous answers to comments from the Honorable Senator Brubaker and the Independent Regulatory Review Commission, natural sunlight is important for the health of dogs housed in kennels – for vitamin D levels and eye development among other issues. The need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight.

Comment: Subsection 28a.3(2)(ii)

Paragraph 28a.3(2)(ii) is superfluous in that it duplicates the statutory requirement of diurnal lighting.

RESPONSE

The Department may reiterate statutory language in a regulation and agencies often do utilize such an approach in order to assure the regulated community knows the general as well as the specific standards which apply. The regulated community in many instances is more likely to have access to the regulatory standards than the statutory standards and reiterating the standards harms no one. The diurnal lighting cycle requirement of the Dog Law is reiterated and further defined in the general lighting provisions, at Section 28a.7(a)(3), of the final-form regulation.

Comment: Subsection 28a.3(2)(iii)(iv)and (v)
Paragraph 28a.3(2)(iii), (iv) and (v) are beyond the scope of authority of the Board under the law. However, they are reasonable standards for the Department to establish for the safety of animals.

RESPONSE

The Department disagrees. These provisions have been modified in the final-form regulation. The provisions are within the scope of authority granted by the Dog Law. Section 221(f) defining the very purpose of the Canine Health Board requires the Board to assure the lighting standards established by section 207(h)(8) account for the welfare of the dogs housed in commercial kennel housing facilities (3 P.S. 459-221(f)). These standards are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels. In addition, these standards further clarify the lighting standards established by section 207(h)(8) of the Dog Law (3 P.S. § 459-207(h)(8)). In setting forth standards, a regulating agency must also establish and clarify the means by which such standards must be attained in order to assure the welfare of the dogs. The Statute in delineating the Board's authority plainly illustrates that the Board and the Department in promulgating the regulation is and shall be the duly constituted and appropriate body to articulate and prescribe (i.e. "to settle or decide by choice of alternatives or possibilities") all requisite standards and ranges to ensure that the lighting standards that are specifically enumerated in the Statute are measurable, quantifiable, and enforceable.

Comment: Subsection 28a.3(2)(iii)(iv)and (v)
Our comments on Subsection 28a.3(3) are the same as those made with respect to Subsection 28a.2(12).

RESPONSE

All language regarding applicable codes has been removed from the final-form regulation, including the language that was set forth at 28a.3(3) of the proposed regulation.

Section 28a.4 Flooring

Comment: Statutory vs. Regulatory Language

Statutory Language
Section (i)(3)(i) specifies that flooring "shall be strong enough so that the floor does not sag or bend between the structural supports, shall not be able to be destroyed through digging or chewing by the dogs housed in the primary enclosure, shall not permit the feet of any dog housed in the primary enclosure to pass through any opening, shall not be metal strand whether or not it is coated, shall allow for moderate drainage of fluids and shall not be sloped more than 0.25 inches per foot." It further authorizes permissible slatted flooring for commercial kennels in section 207(i)(3)(ii) and authorizes the Board in subparagraph (iii) to approve additional flooring options that meet the provisions of Section 207(i)(3)(i)

Regulatory Language

Comment: Subsection 28a(4)(1), (2), (3), (6) and ((8)

Subsections 28a.4(1), (2), (3), and (6) and (8) properly follow the Board's scope of authority. However, it would be preferable to list the specific sections within the dog law relevant to the flooring standards, rather than refer to the entire dog law since this provides little guidance to the regulated community regarding where the other standards can be found.

RESPONSE

The entire Section related to flooring has been restructured in the final-form regulation. The Department has taken the Independent Regulatory Review Commission's suggestion and restructured the section related to flooring, section 28a.8 of the final-form regulation. In restructuring this section the Department felt it would be even more helpful to the regulated community if all the flooring standards established by the Act, were also delineated in the regulation. Therefore, the Department established two new subsections which reiterate the language contained in sections 207(i)(3)(i)(related to general flooring standards) and (i)(3)(ii)(related to slatted flooring) of the Act (3 P.S. §§ 459-207(i)(3)(i) and (ii)). In addition, the Department had to then modify the language of the proposed regulations which sought to espouse the additional flooring options. In doing so, the Department established subsection 28a.8(c), which sets forth the language of the statute allowing the Canine Health Board to approve additional flooring options, and delineates the authority and duty of the Canine Health Board to assure the additional flooring standards adhere to the general requirements established by section 207(i)(3)(i) of the Act and that additional flooring options, based on proper animal husbandry practices, provide for the health, safety and welfare of the dogs confined to these kennels, as required by section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 459-221(f)). The Department included the standards set by the Canine Health Board in the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department veterinarians and some Canine Health Board veterinarians, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices.

Comment: Subsection 28a(4)(4)

Subsection 28a.4(4) appears to require the use of a resting board, which provision had been removed in a prior regulatory review. A properly designed radiant heating or cooling system will be thermostatically regulated to maintain proper temperature levels on the surface to obtain the desired air temperature. Since the regulations do not address the issue of dogs being too warm during the heating season or too cold during the cooling

season with regard to the ambient air temperature, it is not appropriate to restrict the use of radiant heating or cooling except as it produces heating outside the mandatory ranges. It is unlikely in the extreme that a commercial kennel would spend more than is necessary to control the temperature levels in the kennel.

RESPONSE

Radiant heating and cooling floor systems are not prohibited by the regulation and a rest board is not required. Although, as the commentator states, it may be unlikely that such a system would get too hot or cold, the Board and the Department believe it is imperative to protect the welfare of the dogs, that there be an area the dog can escape to in case of a malfunction or other problem that causes overheating or overcooling.

Comment: Subsection 28a(4)(5)

Our comments to Subsection 28a.4(5) are the same as those made with respect to Subsection 28a.2(12) and Subsection 28a.3(3).

RESPONSE

All language regarding applicable codes has been removed from the final-form regulation, including the language that was set forth at 28a.4(5) of the proposed regulation.

Comment: Subsection 28a(4)(7)

Subsection 28a.4(7) is both unnecessary as duplicating the provision of the statute and exceeds the authority of the Board in that they are not granted the authority to order microbial assessments. The Department may have the authority to order a microbial assessment where there is evidence of a violation of the law or a regulation, but this does not provide a measurable and enforceable standard suitable for a regulation.

RESPONSE

In the final-form regulation, the Department has modified the language of what is now subsection 28a.8(c)(7), which was 28a.4(7) of the proposed regulations, by specifically removing the language "and may be subject to microbial assessment" and replacing that language with clear and distinct language regarding the ability of the flooring to be cleaned and sanitized in concurrence with the Act and current Department regulations.

Comment: Alternative Flooring Options

Despite the short time frame within which the Board had to issue these Guidelines, we had hoped that the Board would be able to consider and approve additional flooring options that were in conformance with Section 207(i)(3)(i). Absent any other approved flooring, the provision of this section will have a significant fiscal impact on the regulated community, will not provide adequately for flexibility in providing for the welfare of dogs within the law and may ultimately result in a fiscal impact on the public through increased cost for dogs.

RESPONSE

The Canine Health Board, under the authority of section 207(i)(3)(iii) of the Dog Law, "may" approve additional flooring options, however they are under no obligation to approve any additional flooring options and are certainly under no obligation to include such decisions in the final-form regulation. Other than setting forth solid flooring as an approved flooring type, the Board has not set forth approvals or disapproval of any specific flooring types or brand names in the final-form regulation. Instead, and we believe more appropriately, the Department, in the final-form regulation, has set forth the specific parameters of the Act and the authority of the Board and has established a subsection that delineates specific alternative flooring requirements or specification that must be met in order for an alternative flooring type to be approved.

The specifications are based on the parameters of section 207(i)(3)(i) and the Board's expertise, duty and authority under section 221(f) to consider animal husbandry and welfare issues related to alternative flooring types. More specifically, the Board has the authority to address individual alternative flooring requests under section 207(i)(3)(iii) of the Dog Law (3 P.S. § 459-207(i)(3)(iii)). When addressing alternative flooring options, the Board must determine whether or not the flooring at issue meets the criteria of section 207(i)(3)(i) of the Dog Law and whether based on its expertise and experience whether or not the flooring at issue, based on animal husbandry practices, provides for the welfare of dogs. (3 P.S. §§ 459-207(i)(3)(i) and 221(f)).

The requirements continue to utilize many of the same parameters established in the proposed regulation, but add language that further clarifies and objectifies the standards. Any additional standards are based on discussions and consultations with Canine Health Board and Department veterinarians and are based on their expertise and experience related to animal husbandry practices and the welfare of dogs.

III. DANDIE DINMONT TERRIER CLUB OF AMERICA

Submitted by: Linda North Glick, Legislative Liaison Chair
Dandie Dinmont Terrier Club of America
103 Red Rambler Drive
Lafayette Hill, PA 19444-2108

Comment:

The new proposed Canine Health Board regulations concerning commercial kennels are, in many respects, academic engineering standards which do not comport with the actual and circumstances of commercial kennel operations.

RESPONSE

The Canine Health Board and the Department was required to set ventilation, auxiliary ventilation, humidity, ammonia and lighting levels and standards. The proposed and final-form regulations carry out that exact legislative duty. The regulations are technical in nature. However, the changes to the final-form regulation have added clarity and more objective standards. The requirements of the final-form regulation are based on

conversations and consultations with engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department. The standards comport with the duty and authority given the Department and the Board, by the Act.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

Comment:

These regulations will require the Dog Law Enforcement Bureau of the Department of Agriculture and commercial kennel operators each to purchase costly technical equipment, and send their personnel for training in the use and maintenance of such equipment. This fiscal impact has been substantially underestimated by the framers of the regulations.

RESPONSE

The final-form regulations removes the necessity of the Department to purchase any equipment to measure particulate matter or carbon monoxide levels. Standard carbon monoxide monitors will be required to be installed in kennels that utilize a carbon monoxide producing heating or cooling source, but there is no set level to be measured.

The final-form regulation requires air flow to be measured in cubic feet per minute per dog, as was the suggestion of the architects, engineers and animal scientists consulted by the Department. It also requires a professional engineer to certify the system utilized meets the standards of the regulations.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

This allows the Department to utilize a third party professional certification and to periodically check the CFM rating on the ventilation and air circulation equipment employed by the kennel owner to assure it continues to meet and be operated to meet the required air circulation values. Therefore, the Department will be able to purchase a reduced amount of equipment to measure air circulation, which will only need to be utilized to spot check and if the dogs in the kennel exhibit signs of illness or stress that may be associated with ventilation problems, as set forth more fully at subsection 28a.2(h) of the final form regulations.

The Department will have to purchase ammonia level monitors and will purchase temperature and humidity monitoring devices to be installed in kennels as set forth at subsections 28a.4(b)(4) and (5) of the final-form regulation. In deciding to purchase the temperature and humidity monitoring devices the Department took into account the comments of kennel owners and other related to the cost to the kennel owners of having to purchase such equipment to monitor their kennels and the issue of standardization of such equipment so that measurements are taken in the same manner and by the same type of equipment. The Department will bear the cost of buying, calibrating, replacing and installing the monitors and kennel owners will be able to continually check the monitors to assure their kennel facility is in compliance with the standards of the regulations. regulation. Therefore, the regulated community will not have to purchase any humidity or

temperature monitors, as they will be able to view the monitors supplied by the Department.

Finally, light meters will be purchased to assure the lighting in the kennels provides the appropriate footcandle range of lighting.

The total number of all such devices and the costs to buy, calibrate and train wardens in their use is contained in the regulatory analysis form that accompanies the final-form.

Comment:

The proposed regulations concerning carbon monoxide have no basis in Act 119.

RESPONSE

The Department agrees with the Canine Health Board, that carbon monoxide levels should at the very least be monitored for safety purposes and to assure proper ventilation and air circulation is occurring within a kennel that utilizes a carbon based form of heating or mechanical ventilation. One of the most acutely toxic indoor air contaminants is carbon monoxide (CO), a colorless, odorless gas that is a byproduct of incomplete combustion of fossil fuels. Common sources of carbon monoxide are tobacco smoke, space heaters using fossil fuels, defective central heating furnaces and automobile exhaust. Improvements in indoor levels of CO are systematically improving from increasing numbers of smoke-free restaurants and other legislated non-smoking buildings. By depriving the brain of oxygen, high levels of carbon monoxide can lead to nausea, unconsciousness and death. According to the American Conference of Governmental Industrial Hygienists (ACGIH), the time-weighted average (TWA) limit for carbon monoxide (630-08-0) is 25 ppm.

The engineers the Department consulted believe that carbon monoxide levels will take care of themselves if the kennel is properly ventilated and meets the air exchange rate criteria of the regulations. However, the engineers and animal scientists consulted by the Department acknowledge and agree, carbon monoxide gas can build up in any enclosed building where carbon based mechanical ventilation or heating equipment is in use. Carbon monoxide is colorless and odorless and is deadly. The regulations only require that carbon monoxide detectors be installed. If carbon monoxide levels rise to the point the detectors are triggered the kennel has a problem with ventilation or air exchange in that part of the kennel housing facility and needs to take action to assure the health, safety and welfare of the dogs housed in that area of the kennel. Section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)) states in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and prevent moisture condensation ...the appropriate ventilation...ranges shall be determined by the Canine Health Board. One of the purposes of ventilation is to exchange or re-circulate air in a manner that removes pathogens, including carbon monoxide and replenishes oxygen. The regulatory requirement is inexpensive and necessary to assure the health, safety and welfare of dogs housed in kennels, which is the general overall duty and authority of the Canine Health Board under section 221(f) of the Act (3 P.S. § 459-221(f)).

Comment:
Additionally, the proposed rules concerning kennel temperatures, humidity, and air changes are presented without the required explanations of how these standards were computed and/or otherwise determined, or justified, as required by IRRC regulation.

RESPONSE

This document, as well as, the preamble to the final-form regulation set forth the experts consulted and the authority for each provision of the final-form regulation. The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels. The regulation applies equally to all commercial kennels in the Commonwealth.

IV. THE CULTURED CANINE, LLC

Submitted by: Diane Podolsky, CPDT, CTC

Comments:

As a certified professional dog trainer (CPDT-KA), a valedictorian graduate of the San Francisco SPCA Academy for Dog Trainers, the owner of The Cultured Canine, LLC and the New York Small Dogs Examiner for Examiner.com, I am writing to endorse the regulations created and proposed by the Canine Health Board. I strongly support these changes for the following reasons:

1. Pennsylvania's reputation has been tarnished by being branded a "puppy mill" capital which allows dogs to be raised in inhumane conditions.

2. These regulations are based in scientific research and on advice provided by scientific experts.

3. These regulations will ensure that any dog who is commercially bred will be given adequate light, heat, ventilation, air quality, flooring, and social exposure and interaction - all essential factors that were OMITTED from the recently enacted dog law. For the first time, commercially bred puppies and dogs will have a guarantee of an environment that will promote - not hinder - behavioral and physical health.

4. It is time that Pennsylvania was a leader in humane care of animals, rather than always appearing in the news for the numerous abuses that occur here. This regulation will ensure humane care.

5. My own dog was whelped and raised in substandard conditions in a "puppy mill." I know that this is the case because I requested and received via USDA inspection reports for the breeding facility at the time of his gestation, whelping and raising via a FOIA request. The reports were appalling and yet the facility was not shut down. This facility was in Missouri. My dog's veterinary bills (he is now 11 years old), many of which are due to genetic and other issues related to his place of origin, are over $30,000. This does not take into account his experiences as a sentient being who has suffered from the medical conditions that those bills reflect nor my stress, loss of business income and sadness from his medical problems. Many of these problems could have been avoided by careful genetic planning and proper puppy raising protocols in a healthy environment.

RESPONSE

Response is to comments 1-5 above: The Department agrees and believes the passage of Act 119 of 2008 supports this commentator's overall opinion that the Pennsylvania General Assembly believes higher standards are necessary and required in commercial kennels in Pennsylvania.

The Department appreciates the comments and concerns of this commentator. It has worked very hard to perform additional research and consult appropriate experts – including additional input from and research done by members of the Canine Health Board – in drafting this final-form regulation. As stated above, any changes are based on additional research and consultations undertaken by the Department as part of its duty to answer all comments received and assure the final-form regulation is clear, as objective as possible and meets form and legality standards. As set forth in the answers to other comments, the Department consulted with engineers and architects that design and build kennel facilities, consultations with animal scientists, a meeting with an AKC senior field representative and information and input from Canine Health Board and Department veterinarians. The Department has drafted a final-form regulation that it believes fully complies with the statutory authority and mandate established by the Dog Law, adds clarity to certain provisions, creates more objective standards and most importantly will provide for the health and welfare of dogs housed in commercial kennels in this Commonwealth.

The language of the final-form regulation, although based on and still retaining many of the overall ideas and standards of the proposed regulation, has been significantly modified to provide additional clarity, more objective standards and provisions which allow for more effective and uniform enforcement. The final-form regulation contains additional sections that break the regulation down into the basic elements set forth in the statute (ventilation, humidity, auxiliary ventilation, ammonia levels, carbon monoxide, lighting and flooring. In addition, the ventilation provisions measure air circulation in cubic feet per minute per dog (CFM) not in exchanges per hour. This measurement is much easier to check, assess and enforce and allows kennel owners to adjust air circulation levels dependent on the number of dogs housed in the kennel housing facility. The ventilation section also sets forth clear standards and guidance for what constitutes a violation and clear standards and guidance with regard to a kennel owner's duty if a mechanical failure should occur. The humidity section sets forth clear humidity standards that are based on scientific research, data and practices. The auxiliary ventilation provisions make it clear that air conditioning to reduce temperatures may be utilized when temperatures rise above 85 degrees Fahrenheit, but is not required. It also sets forth examples of other techniques that are currently being utilized in kennels. The ammonia provisions set forth clear levels and measurement standards, all of which are based on consultation with and research by experts (engineers, animal scientist and veterinarians). The lighting provisions now establish clear levels and standards for either natural or artificial lighting or both. Finally, the flooring section is broken down into three subsections. The first two subsections set forth the flooring standards contained in section 207(i)(3)(i) and section 207(i)(3)(ii) of the Dog Law (3 P.S. §§ 459-207(i)(3)(i) and (i)(3)(ii)). The third section delineates the legal authority and the standards for alternative flooring. These changes all incorporate language that is clear and establishes more objective standards.

DOG AND PET REGISTRY ORGANIZATIONS COMMENTS

I. AMERICA'S PET REGISTRY, INC.

Commentator:
Submitted by: Michael Glass
America's Pet Registry, Inc.
118 Mulberry Court
Collegeville, Pennsylvania 19426

Comments on General Provisions of the Preamble

Comment: General

Rather than the CHB establishing standards for the "health and well being" of a dog according to the direct charge of Act 119...they attempted to establish standard for every aspect of the commercial kennel and dog that would relate to its "health and well being". This is beyond their charge, responsibility and not within their limitations.

More so, the CHB admits they are to consider Act 119 "in narrow specific areas" as it directly relates to health and well being. The CHB went far beyond that scope.

RESPONSE

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also

consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels. The regulation applies equally to all commercial kennels in the Commonwealth.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

Comment: Related to the "Background" provisions of the Preamble to the proposed regulation

We state the CHB goes outside the boundaries of its charge, limitations and responsibility. As shown above: the limits are listed. "Additional flooring" is not addressed. There is evidence to define and regulate current flooring; which is not the charge of the CHB.

RESPONSE

Additional flooring options are not required to be addressed in the regulations or by any other means. The Canine Health Board, under the authority of section 207(i)(3)(iii) of the Dog Law, "may" approve additional flooring options, however they are under no obligation to approve any additional flooring options and are certainly under no obligation to include such decisions in the final-form regulation. Other than setting forth solid flooring as an approved flooring type, the Board has not set forth approvals or disapproval of any specific flooring types or brand names in the final-form regulation. Instead, and we believe more appropriately, the Department, in the final-form regulation, has set forth the specific parameters of the Act and the authority of the Board and has established a subsection that delineates specific alternative flooring requirements or specification that must be met in order for an alternative flooring type to be approved. The specifications are based on the parameters of section 207(i)(3)(i) and the Board's expertise, duty and authority under section 221(f) to consider animal husbandry and welfare issues related to alternative flooring types. More specifically, the Board has the authority to address individual alternative flooring requests under section 207(i)(3)(iii) of the Dog Law, if they so chose (3 P.S. § 459-207(i)(3)(iii)). When addressing alternative flooring options, the Board must determine whether or not the flooring at issue meets the criteria of section 207(i)(3)(i) of the Dog Law and whether based on its expertise and experience whether or not the flooring at issue, based on animal husbandry practices, provides for the welfare of dogs. (3 P.S. §§ 459-207(i)(3)(i) and 221(f)).

With regard to the flooring provisions that are contained in the final-form regulation, they establish standards and the restructuring of the provisions are based on

suggestions made by the Independent Regulatory Review Commission. In restructuring this section the Department and the Commission felt it would be even more helpful to the regulated community if all the flooring standards established by the Act, were also delineated in the regulation. Therefore, the Department established two new subsections which reiterate the language contained in sections 207(i)(3)(i)(related to general flooring standards) and (i)(3)(ii)(related to slatted flooring) of the Act (3 P.S. §§ 459-207(i)(3)(i) and (ii)). In addition, the Department had to then modify the language of the proposed regulations which sought to espouse the additional flooring options. In doing so, the Department established subsection 28a.8(c), which sets forth the language of the statute allowing the Canine Health Board to approve additional flooring options, and delineates the authority and duty of the Canine Health Board to assure the additional flooring standards adhere to the general requirements established by section 207(i)(3)(i) of the Act and that additional flooring options, based on proper animal husbandry practices, provide for the health, safety and welfare of the dogs confined to these kennels, as required by section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 459-221(f)). The Department included the standards set by the Canine Health Board in the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department veterinarians and some Canine Health Board veterinarians, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices.

The requirements continue to utilize many of the same parameters established in the proposed regulation, but add language that further clarifies and objectifies the standards. Any additional standards are based on discussions and consultations with Canine Health Board and Department veterinarians and are based on their expertise and experience related to animal husbandry practices and the welfare of dogs.

Comments: Fiscal Impact - General
We understand that the intent of the CHB is to show that the proposed regulations will not create a fiscal impact in many areas- This is not true. Cost of equipment, enforcement, additional paperwork & forms, has been not properly represented. There will be many increased costs.

The CHB had lengthy discussion with regard to, "...if we are creating these standards...we need to record and measure these standards..." This will generate excessive inspections, documentation, new forms, paperwork and increased costs.

RESPONSE

The Department has set forth the cost to kennel owners, the Department, local authorities and the general public in the regulatory analysis form that accompanies this final-form regulation. Those costs are based on the changes to the language of the final-

form regulation and consultations and costs estimates received from engineers that design and build kennel housing facilities and that utilized the final-form regulation to estimate the cost of both new construction and retrofitting of existing kennels to meet the regulatory standards. The costs of equipment to both the Department and the regulated community, length of inspections and enforcement have all been reduced because of the numerous changes to the final-form regulation. As an example, changes to the ventilation provisions of the regulations allow ventilation rates to be based on fan rates and information supplied by the installing engineer or architect and the kennel owner. In addition, a kennel owner can now re-circulate up to 70% of the air in the kennel, thus reducing costs and allowing for better and more efficient heating and control of humidity. The Department will buy and install all the humidity and temperature monitoring equipment, thus reducing the cost to the regulated community and not requiring duplicative equipment or training.

Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

Comments: Fiscal Impact – Specific sections of the Preamble to the Regulations

1. ***Commonwealth***

The Preamble to the proposed regulations states that the proposed regulation, once published as final-form regulations, would impose additional fiscal impacts upon the Department's Bureau of Dog Law Enforcement (Bureau). Once the final regulations are in place, additional fiscal impacts will be imposed. Those costs will be paid for entirely from the Dog Law Restricted Account. No general fund money will be used. The Department, in the Regulatory Analysis Form that accompanies the proposed regulation, has set forth an estimate of costs to the Bureau to enact and enforce the new regulatory standards that would be imposed by the final regulations.

a. Our research into the costs of the equipment needed does not reflect the estimates of the CHB. The cost of equipment that will be required for proper enforcement far exceeds the cost of equipment that might be used for non enforceable needs. i.e. measuring standards for personal health and safety. Regardless, this is not the charge of the board.

b. It is important to remember that four million dollars has been removed from the Dog Law restricted account to which the moneys are to be received from an account that no longer exists. The department currently reports serious economic concerns within 3 years not including the potential of this proposal if placed in effect. The time needed for enforcement by the officers far exceeds the estimates of the CHB. While it is quoted, "...all of these reading can be taking in less than a minute." This is not true for

enforceable needs. The time constraints of the readings needed directly relates to the quality of equipment used. Which in turn is grossly reflected in the equipments increased cost. By observation, the CHB clearly stated that a major foundation of standards will be the reading of AMMONIA LEVELS. The cost, calibration, training and time for inspections have been grossly underestimated. Calibration report attached.*
*The issue of full calibration as well as a 'snap test was not addressed which will add to the time for enforcement and cost for use of the equipment.

RESPONSE

The Department has researched the quality and cost of instruments that will be necessary to take the readings necessary to assure compliance with the final-form regulations and has set forth the cost of that equipment in the regulatory analysis form that accompanies this final-form regulation. Cost of calibration and training have been included in those calculations.

2. Political Subdivisions
The Preamble to the proposed regulations state that the addition of mechanical ventilation, additional artificial or natural lighting and flooring changes may require UCC permit and inspections. This should not specifically increase or decrease costs to local governments, however. Documentation from the Center for Local Government Services, Department of Community and Economic Development (DCED), confirms that municipalities are collecting fees to cover the expenses of Pennsylvania Uniform Construction Code (UCC) administration and enforcement, so that these proposed regulations will not have a fiscal impact on municipalities. Any additional workload generated by the regulation would be offset by the fees collected in association with the specific permit. The enforcement of the regulations will neither increase nor decrease any costs to local governments. Compliance with the ventilation, lighting and additional flooring standards required of Class C kennels standards will be enforced solely by the Department. Local governments will have no role in enforcement or any other area associated with the regulations in the Commonwealth. Most municipalities do not have commercial kennels. Nearly all are in 10 of the 67 counties—more than half are in Lancaster County. Commercial kennels represent about 15% of the total number of kennels regulated by the Department.

a. Although the report here states: "...neither increase nor decrease any costs to local governments..." we find this to be prejudice to the "...nearly 10 of the 67 counties..." This suggests that...there are no costs ...but if there were costs...the cost would only affect 10 counties. We see the possibility and foresight from the CHB for UNINTENDED CONSEQUANCES in this issue.

RESPONSE

The Department has set forth a similar answer in the final-form regulatory analysis form. The Department stands by its analysis and answer to this question in the regulatory analysis form. We are unsure what the commentator is trying to imply by stating the Canine Health Board foresaw the possibility of unintended consequences. The

Department has done basic research into the possible impact on municipalities that have commercial kennels within their boundaries and believes the calculations and information is correct.

3. *Private Sector*

The Preamble to the proposed regulations states that once published as final-form regulations will impose additional costs, at least for initial compliance, on the regulated community (Class C kennels). Class C kennels will likely have to make changes (some significant depending on the current state of their kennel operation) to comply with the ventilation and lighting provisions of the regulation. The flooring provisions of the regulation actually expand the type of flooring allowed under the act, in section 207(i)(3) and do not impose any new requirement. The costs to the regulated community will be varied, depending on the size and condition of the existing kennel. The Department has provided an estimate of costs to existing Class C kennels for compliance with the new standards in the Regulatory Analysis Form that accompanies these proposed regulations.

a. This is confusing. Above is stated "...The flooring provisions of the regulation actually expand the type of flooring allowed under the act, in section 207(i)(3) and do not impose any new requirement..." There is no discussion of additional flooring. Only "Solid" flooring is mentioned in this proposal. Kennels will NOT be allowed to use the current flooring used by many. Resulting is substantial increased costs in this arena also.

b. Although the proposal admits increased costs for initial compliance, such costs offered do not reflect properly on the current finding from the dog breeders. No attention is given to the dog breeders need for training and equipment to maintain data to ensure remaining in compliance.

c. Also, NOT TRUE stated, "...(flooring does) not impose any new requirement..." This is quite the opposite and has become one of the most addressed concerns in increased costs while also relating to cage size..."

RESPONSES

3. a. The current flooring being utilized by commercial kennels is banned by the Act and not by the regulations. The costs imposed to modify or change flooring – remove coated metal strand flooring – is imposed by the Act and not the regulations. The Act allows the Canine Health Board to approve additional flooring types that meet the requirements of the Act. The Board has set forth one additional flooring type – solid – in the regulation and has chosen, as allowed by section 207(i)(3)(iii) of the Act, to not address other specific flooring types and brands in the regulations. The regulation simply does not impose any flooring costs. All the flooring costs are imposed by the Act.

3. b. The final-form regulatory analysis form does consider such costs. However, many of the costs related to equipment and monitoring have been eliminated or reduced because of changes to the final-form regulation.

3. c. Once again, it is the Act and not the regulations that impose the edict that flooring in commercial kennels must be changed. The Act – specifically at section 207(i)(3)(i) outlaws the coated metal strand flooring being utilized in kennels. The

regulation only address additional flooring that may be allowed by the Canine Health Board and sets objective standards upon which the Board will judge the flooring based on animal husbandry practices and accounting for the welfare of the dogs housed on the alternative flooring presented.

4. ***General Public***
The Preamble to the proposed regulations states that once promulgated as final-form regulations, may raise the cost of purchasing a dog and therefore **may affect** purchasers of dogs. However, the general public will benefit from the implementation of the standards in the regulations, as the standards are intended, as were the amendments to the Dog Law that precipitated the regulations, to improve the health and welfare of the dogs and puppies that are sold to the general public. There are no mandatory requirements imposed on the general public by the regulation.

a. Note: One minor adjusted request regarding "may raise" and "may affect". The changes regardless of the reason "WILL raise" and "WILL affect" the general public.

RESPONSE

The Department acknowledges that commercial kennel owners may raise the selling price of their dogs because of additional costs imposed by both the Act itself and the regulations. The Department does not know and can not know exactly how many commercial kennel owners will raise their prices or the amount of the price increase. That is a private and confidential business decision that will be made by each individual commercial kennel owner. The offset of such a price increase to consumers should be receiving a healthier puppy that was raised in conditions and under requirements that account for the health and welfare of the dogs. That is the very intent of the amendments to the Act. The General Assembly, through the enactment of the statute imposed a duty upon the Canine Health Board and the Department to establish regulations regarding proper ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels. The final-form regulations are a result of that duty.

5. ***Paperwork Requirements***
The Preamble to the Proposed regulations states that the Department will not have to develop a large array of new application forms or review procedures, but in some cases may want to amend current forms. The Department will have to develop forms related to ventilation calculations.

a. Not True. The very creation of these standards is to be the backbone of ensuring and enforcing the health and well being of dogs. The very charge was to create standards for the needs of a dog, subsequently creating a foundation for data to be collected for current enforcement, future use and the possible need for future prosecution. It has also been recorded at the CHB meetings the need to collect this data and to 'revisit these issues next year".

b. As well, the CHB report addressed that... "The Department will not have to develop new application forms or review procedures, but in some cases may want to amend current forms."

Not True. It will be the inspection forms that will generate the need for more excessive paperwork as dictated by the need for the number of samples needed to be taken to ensure proper reading variations.

RESPONSES

5. a. and b. – The Department stands by the assertions it made in regarding the paperwork requirements. The Department, in response to the amendments to the Act has already generated a new kennel inspection form and has a template it can amend to add the new regulatory provisions to the kennel inspection form. In addition, the kennel inspection forms have areas in which the State dog warden writes in additional observations or set forth the facts surrounding the conditions that were found to be unsatisfactory. The State dog warden will have to take or review or both additional readings, but those readings can be set forth on the current kennel inspection form. The regulations will not generate much if any additional paperwork or forms. The current forms can and will be amended. Inspections may take longer to perform, but the paperwork will not be significantly increased, especially given the amendments to the ventilation provisions in the final-form regulation.

COMMENTS ON PREAMBLE AND ANNEX A RELATED TO SPECIFIC SECTIONS

Comments: Ventilation - Section 28a.2. Preamble and Annex A provisions

PREAMBLE

1. The Preamble to the proposed regulations, state, standards are established to satisfy the directive of section 207(h)(6) and (7) of the act regarding ventilation. Specifically, the proposed regulation addresses poor ventilation conditions that cause health and welfare problems in dogs, by establishing specific ventilation standards that must be met to ensure that these health and welfare problems do not develop. The specifics include that ventilation must be achieved through a mechanical system that will allow for 8—20 air changes an hour, keep consistent moderate humidity, institute auxiliary ventilation when the temperature rises above 85° F, keep ammonia levels and particulate matter at established levels and keep odor minimized as it is a sign of disease and bacteria growth.

a. It is not the charge of the CHB to establish a means (mechanical system). There are limitations set here that are not the charge of the board or within the legislation of ACT 119. As well, this proposed regulation will not allow for other possible means to ensure the standard.
b. It is not reasonable to state "...ventilation must be achieved through a mechanical system..." There may be other means.
c. This does not allow for a system that may provide for less than 8 or more than 20 air changes.
d. The CHB addresses 'particulate matter'. Particulate matter will affect the accuracy of ammonia readings. This is not within the charge of the CHB. Either way this proposal is far reaching and does not allow for countless variables.

Responses:

1. a. The Canine Health Board and hence the Department as the promulgating agency has the absolute authority, under section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) to set and establish proper ventilation, humidity and ammonia levels. The express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-207(h)(7))

The language is very clear and precise. The Board and the Department have the authority to set "at all times" the proper ventilation, humidity and ammonia standards in commercial kennels. This authority is in addition too, not a modification of the auxiliary ventilation authority and makes it perfectly clear the Department has absolute and specific authority to address proper ventilation, at all times, in commercial kennels. Under the authority set forth at section 221(f) of the Dog Law (3 P.S. 459-221(f)) these standards have to be and are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels. As set forth in answers to previous comments, the Department researched and consulted with engineers and architects that build and design kennel buildings, animal scientists from the Pennsylvania State University and department and Canine Health Board veterinarians in establishing the proper ventilation, humidity and ammonia ranges. It was determined by the engineers and architects consulted, that the proper rates of ventilation could not be achieved or properly maintained without a mechanical means of air circulation. Various factors, including wind, wind direction and inverse convection to name a few, make it impossible for any kennel building to be designed in a manner that would allow it to obtain the proper ventilation levels, on a consistent and necessary basis, without mechanical means.

1. b. As set forth in the response to 1.a., it was determined by the engineers and architects consulted, that the proper rates of ventilation could not be achieved or properly maintained without a mechanical means of air circulation. A holistic approach or one that incorporates kennel housing facility location and natural wind or convection will not work and will not achieve the levels of ventilation necessary to assure the welfare of the dogs housed in commercial kennel housing facilities. There is no other technology that the engineers or architects are aware of, or this Department for that matter, that will achieve the appropriate ventilation rates. If a new technology becomes available the Department can amend the regulation to add that technology. Until then, in order to properly clarify the standards established by the regulation, stating that a mechanical ventilation system must be utilized is necessary.

1. c. The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. This was done after consultations with an engineer and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building, along with a professional engineer's certification. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientist, Dr. Ken Kephart of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on the capacity information on the ventilation equipment, certification by a professional engineer chosen by the kennel owner and information supplied by the kennel owner and verified a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing

facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to increase or decrease the amount of air flow based on the number of dogs housed in the kennel and thereby utilize only that capacity necessary to achieve the required circulation rates for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

1. d. The Department has removed this provision from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation requirements of the regulations were being met, particulate matter would not pose a problem in the kennel.

ANNEX A

1. General Comment on 28a.2.
Generally it is not the charge of the CHB to establish a means (mechanical system). There are limitations set here that are not the charge of the board or within the legislation of ACT 119. This proposed regulation will not allow for other possible means to ensure the standard.
It is not reasonable to state "...ventilation must be achieved through a mechanical system..." There may be other means.
This does not allow for a system that may provide for less than 8 or more than 20 air changes.
The CHB addresses 'particulate matter'. This is not within the charge of the CHB.
Either way this proposal is far reaching and does not allow for countless variables, and is sustained by the CHB via conjecture.
Point: It is not the charge of the CHB to establish a means. Natural conditions may exist (frequently) that will allow for any standards to be met. This clearly states "MUST".
There are limitations set here that are not the charge of the board or within the legislation of ACT 119. As well, this proposed regulation will not allow for other possible means to ensure the standard.

2. Section 28a.2(1)
This does not allow for the simple 'opening of a window'. When such may be perfectly effective to lower the temperature. The charge of the CHB was not to establish a standard BELOW 86 degrees. Quite the opposite. The charge was to establish a standard for above 85 degrees. The CHB response to ACT 119 here is "...not ever allowed to happen..." rather than creating an effective standard.

3. Section 28a.2(2)

Point: It is not the charge of the CHB to establish methods of enforcement. The request for 10% measurements goes to enforcement of which is not the charge of the board. The 10% requirement is entirely arbitrary, and has absolutely no support to sustain its proposal.

Point: The CHB sets a minimum humidity level as a requirement. Lower humidity levels may be perfectly acceptable for the health and well being of the dog. Data for this standard was derived from research of other non-dog animals. Additionally, information offered to the CHB...confirms the data used to establish 'guidelines' could not be used as it was not derived from 'dog' research.

The CHB illustrates that humidity levels below 40% shall not be acceptable.

Also...we see this as excessive. There are too many variables and ranges.

These humidity levels were established on conjecture not data. It was stated by the CHB that there will be a need to collect data on this regard and revisit this issue next year.

There was excessive information offered by industry representatives to confirm this.

The standards do not address the needs for varied humidity levels for whelping, orphaned or ill puppies.

<u>The requirement of 10% of the dogs in the kennel being selected is:</u>

- Entirely arbitrary-there is no data or experimental results to support this amount.
- Does not require the inspector to vary the locations of an individual room...only requires the random selection of dogs within that room. This is not to say all of the dogs may be in one section of the individual room.
- Does not require various breeds with various shoulder heights.
- Does not dictate the methods of random selection
- Does not consider if the kennel is one room.
- There will be increased need for documentation and paperwork

This goes to inconsistency and enforcement and confusion.

4. Section 28a.2(4)

<u>The CHB demands that the ammonia levels are THE MOST IMPORTANT foundation to establishing the level of proper housekeeping and maintenance of a kennel although not a consistent measure for the health of a dog.</u>

It is important to know that detailed information and research about ammonia readers was offered at the CHB meetings. The CHB would want the report to reflect the ease of use and expense of ammonia readers. We find information contrary to this. See the report attached.

Research into the costs of the equipment needed does NOT reflect the estimates of the CHB. The cost of equipment that will be enforceable far exceeds the cost of equipment that might be used for non enforceable needs.

The time needed for enforcement by the officers far exceeds the estimates of the CHB. While it is quoted "all of these reading can be taking in less than a minute" this is not true for enforceable needs. The readings time constraint directly relate to the quality of equipment used. This in turn is grossly reflected in its increased cost.

<u>The issue of calibration, full calibration and a 'snap test' was not addressed which will add to the time for enforcement and cost for use of the equipment.</u>

There was minimal discussion for Dog warden training regarding the use of this equipment.
Point: It is the charge of the CHB to establish the standard. This temporary guideline goes to enforcement of which there is controversy and well as jurisdiction of the charge of the board.
The requirement of 10% of the dogs in the kennel being selected is the same as stated above.

5. Section 28a.2(5)
This is not the charge of the CHB. Observation of the activity of the CHB showed a definite attempt to address the entire range of "the health and well being" of a dog and subsequently goes outside the scope of Act 119.
Although, 'odors' are addressed in ACT 119...Carbon monoxide is NOT a charge of the CHB. Although we agree this may create a safety standard...it is not a charge of the board...creates undue levels of inspection and additional paperwork (reminding that paperwork is stated by the CHB as not increased) additional unenforceable levels for enforcement.
We suggest this be omitted in full.

6. Section 28a.2(6)
Point: It is NOT the charge of the Board or their expertise to establish a means or mechanical system. In one section the CHB state that a mechanical system "must' be used. It is not stated as to the relationship of the mechanical malfunction and its concern. The law needs to be precise. It is not the charge of the board to insist on what the kennel 'must have' as stated above.
This does not allow for a back up system, a natural system ,...secondary system or consideration for use of a generator.
Further, we find it absurd that the kennel, "... shall contact the Bureau of Dog Law and consult on the steps to be taken..." as stated above. We are entering into a realm of needed education, enforcement and liability to which I have confidence the department is not prepared for...nor will the cost allow.
The Bureau of Dog Law Enforcement are not experts and they are not trained in mechanical systems. They are solely trained as to the requirements set forth by law for kennel facilities and to inspect those facilities respectfully.
There is no evidence of a 'standard'.
This is not the charge of the board and request this be omitted in full.

7. Section 28a.2(7)
Point: It is not the charge of the CHB to establish a standard for particulate matter. This goes beyond the scope of the charge of the CHB. Regardless, the attempt to address particulate matter is vague, arbitrary, and does not address external variables.
Observation of the activity of the CHB showed a definite attempt to address the entire range of "the health and well being" of a dog and subsequently goes outside the scope of Act 119.
The requirement of 10% of the dogs in the kennel being selected is the same as stated above.
This is not the charge of the board and request it be omitted in full.

8. Section 28a.2(8)(i)
Point: This must state 'when needed' with regard to maintaining the set standards. If the standards are met, regardless of the means, this must not be a requirement unless an adverse situation exists...given the corrected and accepted requirements.
However, if presented as a means for PREVENTION...we recommend a minimal air changes are required with the ability to increase. Such will have to be a demand 100% of the time ...if that exists.
Barring the creating of excessive wind in the kennel, if a kennel owner sees fit to increase the air changes, this must not be limited. There may be such an air exchange unit that allows this. I.e. only a minimum ought to be set.
The demand for 8-20 insists for adverse conditions exist. We also insist that a minimum of 8 air changes per hour is excessive.
We need a definition and/or better understanding for fresh air. There is a concern for the availability of filtered air and its being accepted legally. We show...what if the outside "fresh air" conditions are adverse. We must also consider the realistic capability to adjust the 'fresh air' to meet acceptable temperature and humidity levels.
The CHB does not address the different needs of a dog regarding whelping, geriatric, orphaned puppies or breed etc...

9. Section 28a.2(8)(i)(A)(I-V)
This is incomplete in its request for "...intake and exhaust..." Do we take into account for windows, doorways or other openings? There are too many variables.
Is there also a need to include number of dogs or puppies in the indoor facility? There is a need to calculate the type of primary enclosure structure and whether or not the sides are solid or open. All of these can be factors to consider.
This simply goes to excessive over burdensome record keeping. By virtue of an inspection as required by ACT 119, this will ensure the facility is kept in compliance. Submission of the specifics of the measurements needed to be the responsibility of the inspector not the inspected. The calculations needed for enforcement of prosecution must be taken and confirmed by the issuing officer of a citation.
This is not the charge of the board and request it be omitted in full.

10. Section 28a.2(8)(ii)
This goes to definition of proper ventilation and is NOT the charge of the board. Simply, the Standard for ventilation is the charge...additional factors go to enforcement, systems and means.
This goes to inspections which is not the charge.
The requirement of 10% of the dogs in the kennel being selected is the same as stated above.

11. Section 28a.2(8)(iii)(A)(B)(C)(1-7 and 9-12) and (iv)
The entire preceding five paragraphs ought not to be addressed. And immediately discarded as such goes to enforcement. Enforcement and inspections is not the charge of the CHB. Although the kennel owner is responsible for any compliance needs, the kennel owner must not be required to submit data that may incriminate.
This is not the charge of the board and we request this be omitted in full.

12. Section 28a.2(8)(v)
A search warrant is required if the 'engineer' is not a full time employee of the Department.
The CHB failed in their research for this information and misquoted the requirements for an engineer to have the jurisdiction to enter a kennel.
Contrary to the CHB statements, there will be fiscal impact. There was no information offered as to the cost of an engineer. The only mention was that of a per diem. However this is not the charge of the board and request this be omitted in full.

13. Section 28a.2(9)(i-xvii)
Although we understand, we find this section misdirected and not the charge of the CHB. We agree the signs ought to be trained to the inspector. We see that these sign ought to be foundation for the very charge that the CHB failed to address. However this is not the charge of the board and request this be omitted in full.

14. Section 28a.2(10)(11) and (12)
We find the preceding three paragraphs go to discussion, enforcement, means and inspections. Although this may be interesting and informative...or may be discussion that may lead to a conclusion.The CHB report was only to have dealt only with standards. We suggest this be omitted in full.

RESPONSES

1. The Canine Health Board and hence the Department as the promulgating agency has the absolute authority, under section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) to set and establish proper ventilation, humidity and ammonia levels. The express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-207(h)(7))

The language is very clear and precise. The Board and the Department have the authority to set "at all times" the proper ventilation, humidity and ammonia standards in commercial kennels. This authority is in addition too, not a modification of the auxiliary ventilation authority and makes it perfectly clear the Department has absolute and specific authority to address proper ventilation, at all times, in commercial kennels. Under the authority set forth at section 221(f) of the Dog Law (3 P.S. 459-221(f)) these standards have to be and are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels. As set forth in answers to previous comments, the Department researched and consulted with engineers and architects that build and design kennel buildings, animal scientists from the Pennsylvania State University and department and Canine Health Board veterinarians in establishing the proper ventilation,

humidity and ammonia ranges. It was determined by the engineers and architects consulted, that the proper rates of ventilation could not be achieved or properly maintained without a mechanical means of air circulation. Various factors, including wind, wind direction and inverse convection to name a few, make it impossible for any kennel building to be designed in a manner that would allow it to obtain the proper ventilation levels, on a consistent and necessary basis, without mechanical means.

A holistic approach or one that incorporates kennel housing facility location and natural wind or convection will not work and will not achieve the levels of ventilation necessary to assure the welfare of the dogs housed in commercial kennel housing facilities. There is no other technology that the engineers or architects are aware of, or this Department for that matter, that will achieve the appropriate ventilation rates. If a new technology becomes available the Department can amend the regulation to add that technology. Until then, in order to properly clarify the standards established by the regulation, stating that a mechanical ventilation system must be utilized is necessary.

2. The final-form regulation establishes ventilation and humidity standards for kennel housing facilities when the temperature within a facility is 85 degrees Fahrenheit or below. The final-form regulations also establish a humidity level standard for kennel housing facilities when the temperature within a facility goes above 85 degrees Fahrenheit. This is within the statutory authority set forth in section 207(h)(7) of the Dog, which requires, "...The relative humidity must be maintained at a level that ensures the health and well-being of dogs housed therein. The appropriate ventilation, humidity and ammonia ranges shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)).

With regard to the levels established for animal health reasons, the Department consulted with engineers and architects that design and build dog kennels, had discussions with veterinarians - including Department and Canine Health Board veterinarians - and with animal scientists, such as Dr. Kephart at the Pennsylvania State University. The results of those discussions were that a humidity range of thirty to seventy percent (30%-70%), when temperatures are at 85 degrees Fahrenheit or below, are normal animal husbandry practices and are proper levels to control for disease and assure the health, safety and welfare of dogs confined in kennels. It should be noted this is also the standard established in the Federal Code of Regulations associated with the Animal Welfare Act (9 CFR § 1.1). The definition of indoor housing facility establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. Many of these experts in fact suggested an even narrower range of humidity levels that would have capped out at sixty percent (60%) humidity. The Department, however, chose to utilize the minimum standards.

In addition, with no temperature control, the Department sought to ascertain the proper humidity levels and auxiliary ventilations standards that would assure the health, safety and welfare of dogs confined to kennels when temperatures rise above 85 degrees Fahrenheit. Kennel owners and others have asserted in their comments that their kennel buildings can be made to "feel cooler" through the use of additional air circulation/ventilation or the mere increase of fan speed and the amount of air being pulled through the kennel building. However, science does not support such a comment or conclusion.

The Department, with the assistance of veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture on the tongue of the dog has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and therefore the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for heat indexes above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

3. The measurement standards that were part of the proposed regulation are no longer necessary because of changes made to the final-form regulation and have been eliminated from the final-form regulation. In addition, the humidity levels have been amended and are based on animal husbandry practices associated with dogs, including AWA standards and heat and humidity studies done on dogs, as well as, expert input from engineers that design and build kennel housing facilities and animal scientists and veterinarians. The information on humidity standards is set forth more specifically in the response to comment 2 above.

4. The language that was contained in section 28a.2(4) of the proposed regulation has been eliminated from the final-form regulation. The final-form regulation, for clarity now sets forth the ammonia level requirements in a separate section – 28a.5.

With regard to ammonia levels being the most important measurement, the Department believes, based on its consultations with engineers, architects and animal scientists, that there is link between ventilation, temperature, humidity and ammonia levels and therefore it is importance that all of those parameters be properly regulated. The response to previous comments sets forth in detail the research and science behind the Department's humidity and ventilation requirements in the final-form regulation and the fact the Department realizes that without the ability to set a specific air temperature cap, it must address ventilation and humidity control in a manner that will protect the health of the dogs housed in commercial kennels. The final-form regulation does provide the proper standards – through ventilation and humidity ranges and controls - to assure the health and welfare of the dogs housed in commercial kennels.

With regard to ammonia levels specifically, the Department consulted with engineers and architects related to the ammonia levels established by the proposed regulation and with regard to the ability to measure ammonia levels. In addition, the Department consulted with veterinarians and animal scientists and did its own research with regard to commonly accepted levels of ammonia in animal operations such as swine operations. The engineers and architects all believed that if kennels were properly ventilated and achieved the air circulation values established in the regulations, then ammonia levels should not be a problem in the kennel. The Act, however, requires the Department to establish the proper ammonia levels for dogs housed in kennels. Discussions with veterinarians and research done by veterinarians on the Canine Health Board affirm that ammonia levels of 20 part per million or higher will cause respiratory and eye irritation and problems in animals. The veterinarians suggested the levels be set at some point below 20 parts per million and the consensus was that a level of 15 parts per million would both account for proper animal health and welfare and would be measurable. Ammonia levels are measured in the swine industry and can be accurately measured at levels of 15 parts per million. The Department's research also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel. That Act establishes parameters that do not allow dogs in kennels to be housed in any primary enclosure that is more than 48 inches high for dogs under twelve weeks of age or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department believes ammonia measurements should be taken at the height of the dogs.

Part of writing regulations is to establish clear and objective standards that will allow for the regulated community and the regulator to assess compliance. The final-form regulations set more objective and measurable standards. However, there is no longer a requirement that 10% of the dogs be tested and there are no parameters within the

regulation setting standards or protocol for the number or the place of measurements. Dog warden training and protocol will be undertaken by the Department, just as in any other agency that enforces regulations, but should not be set forth in a regulation.

5. The language that was contained in section 28a.2(4) of the proposed regulation has been eliminated from the final-form regulation. The final-form regulation, for clarity now sets forth the ammonia level requirements in a separate section – 28a.6.

With regard to the authority to regulate and the standards themselves, the common definition of ventilation, which is set forth in the final-form regulation, establishes the purposes for which ventilation is utilized and one of those purposes is to remove gases such as carbon dioxide and carbon monoxide. The Canine Health Board and the Department realize that some kennels heat the kennel with equipment that produces carbon monoxide, which is odorless and colorless and therefore is best measured or monitored by a device such as a carbon monoxide detector. The engineers the Department consulted believe that carbon monoxide levels will take care of themselves if the kennel is properly ventilated and meets the air exchange rate criteria of the regulations. However, carbon monoxide gas can build up in any enclosed building where carbon based mechanical ventilation or heating equipment is in use. Carbon monoxide is colorless and odorless and is deadly. The regulations only require that carbon monoxide detectors be installed. If carbon monoxide levels rise to the point the detectors are triggered the kennel has a problem with ventilation or air exchange in that part of the kennel housing facility and needs to take action to assure the health, safety and welfare of the dogs housed in that area of the kennel. Section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)) states in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and prevent moisture condensation ...the appropriate ventilation...ranges shall be determined by the Canine Health Board. One of the purposes of ventilation is to exchange or re-circulate air in a manner that removes pathogens, including carbon monoxide and replenishes oxygen. The regulatory requirement is inexpensive and necessary to assure the health, safety and welfare of dogs housed in kennels, which is the general overall duty and authority of the Canine Health Board under section 221(f) of the Act (3 P.S. § 459-221(f)).

6. As set forth in the Department's response to comment 1 above, the Canine Health Board and hence the Department as the promulgating agency has the absolute authority, under section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) to set and establish proper ventilation, humidity and ammonia levels. The express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-207(h)(7))

The language is very clear and precise. The Board and the Department have the authority to set "at all times" the proper ventilation, humidity and ammonia standards in commercial kennels. This authority is in addition too, not a modification of the auxiliary ventilation authority and makes it perfectly clear the Department has absolute and specific authority to address proper ventilation, at all times, in commercial kennels. Under the authority set forth at section 221(f) of the Dog Law (3 P.S. 459-221(f)) these standards have to be and are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels. As set forth in answers to previous comments, the Department researched and consulted with engineers and architects that build and design kennel buildings, animal scientists from the Pennsylvania State University and department and Canine Health Board veterinarians in establishing the proper ventilation, humidity and ammonia ranges. It was determined by the engineers and architects consulted, that the proper rates of ventilation could not be achieved or properly maintained without a mechanical means of air circulation. Various factors, including wind, wind direction and inverse convection to name a few, make it impossible for any kennel building to be designed in a manner that would allow it to obtain the proper ventilation levels, on a consistent and necessary basis, without mechanical means.

A holistic approach or one that incorporates kennel housing facility location and natural wind or convection will not work and will not achieve the levels of ventilation necessary to assure the welfare of the dogs housed in commercial kennel housing facilities. There is no other technology that the engineers or architects are aware of, or this Department for that matter, that will achieve the appropriate ventilation rates. If a new technology becomes available the Department can amend the regulation to add that technology. Until then, in order to properly clarify the standards established by the regulation, stating that a mechanical ventilation system must be utilized is necessary.

Nothing the regulation, requires or prohibits a back up system or the use of a generator to run the mechanical system or any other system the kennel owner may utilize. The kennel owner is free to install a back up system if they so choose and free to utilize a generator.

The final-form regulations, at section 28a.2(g) establishes the specific steps and criteria that must met by the kennel owner if there is a mechanical malfunction. One of the criteria is that there be windows, doors or other openings that can be opened to provide natural ventilation in the case of a system failure. Natural ventilation is allowed in that instance. In addition, the final-form regulation requires that the kennel owner notify the Department of the malfunction, notify and consult his veterinarian regarding dog health issues that may occur because of the malfunction and provide other information. The kennel owner must also notify the Department when the malfunction has been corrected. The kennel owner is free to consult any professional necessary to correct the problem. There is no need to "consult" with the Department.

7. The Department has removed this provision from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation requirements of the regulations were being met, particulate matter would not pose a problem in the kennel.

8. The language and requirements of section 28.2(8)(i) of the proposed regulation, has been eliminated from the final-form regulation. The final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. Although 100% air exchange is not prohibited, the change was made after consultations with engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility.

The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, animal scientist from the Pennsylvania State University.

"Fresh air circulation" is defined in the final-form regulation and a kennel is only required to provide at least 30 CFM per dog of fresh air. The filtration standards have been revised and are based on the input from the engineering firms consulted. Fresh air circulation may adjusted upwards, but may never fall below 30 CFM per dog.

9. The provisions of section 28.2(8)(i)(A)(I-V) of the proposed regulations have been either eliminated or extensively modified in the final-form regulation. The provisions were modified to account for the information needed to verify and calculate the cubic feet per minute (CFM) per dog standard of the final-form regulation, which replaced the air exchanges per hour standard. The information requested is based on consultations with and approved by the kennel housing facility engineers consulted by the Department. The specific rational for the change to CFM per dog is set forth more fully below, but includes the fact that in utilizing the CFM standard the kennel owner can design to meet the highest rate of circulation necessary to meet the minimum standards, but can also then utilize only that amount of capacity necessary to meet the CFM rate for the number of dogs in the kennel. The kennel owner can add capacity for auxiliary ventilation.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services. Additional, standards related to circulation of the air, minimum fresh air rates and filtration have been established by subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established the final-form regulation.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. Although 100% fresh air circulation is not prohibited the change to the regulation was made after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive and difficult to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The ventilation standards now established in the final-form regulation are more easily measured and verified, continued to account for the health and safety of dogs housed in commercial kennels and allow kennel owners to increase or reduce the air circulation in a kennel based on the number of dogs housed in the kennel facility. This is a more equitable and proper manner by which to regulate ventilation.

There are two general reasons behind these changes. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by the professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have the total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design and less costly to operate. While still requiring the system to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility, it will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. This not only lowers operation costs, but sets a proper standard to assure dogs are not subjected to a circulation standard that is too strong or unable to be enforced. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

10. The provisions of section 28a.2(8)(ii) of the proposed regulation, have been deleted from the final-form regulation. As stated previously, all language and requirements related to requiring the Department to measure at least 10% or measuring the air velocity at intake and exhaust vents or shoulder level of the dogs in the kennel have been removed from the final-form regulation.

11. The provisions of section 28a.2(8)(iii)(A)(B)(C) and (iv) of the proposed regulation, have been deleted from the final-form regulation.

12. Section 28a.(2)(v) of the proposed regulation, which allowed the Department to hire or consult with an engineer to recommend improvements to a kennel to meet compliance levels, has been removed from the final-form regulation. There is no such requirement or standard in the final-form regulation.

13. Section 28a.2(9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress has been substantially modified in the final-form regulations. The corresponding provisions of the final-form regulation are found at subsection 28a.2(h).

The Department discussed these issues with Dr. Mikesell and Dr. Kephart of the Pennsylvania State University, as well as, with Department and Canine Health Board veterinarians. The number and type of conditions in dogs that may denote poor ventilation has been reduced and are consistent with the suggestions of the experts consulted. In addition, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

14. Although for reasons other than those stated by the commentator, what were subsections 28a.2(10)(11) and (12) of the proposed regulation, have been deleted from the final-form regulation.

Comments: Lighting - Section 28a.3. Annex A provisions

ANNEX A

1. General Comment on Section 28a.3.
Act 119 clearly states "OR" artificial light not "AND". We see this as a basis for an entirely misleading proposal.

2. Section 28a.3(1)(i-ii)
This states, "...all external..." and therefore does not allow for an area above the minimum to be unobstructed as needed.
Also, 'Unobstructed' is vague. We need to consider window shading, sunlight and weather condition variables.
The CHB was only to establish a standard...not where that standard arises from.

3. Section 28a.3(1)(iii).
Although we agree with this statement. This does NOT go to a standard. This goes to enforcement and Dog Warden training if the standards are not met. This is vague and undefined. We suggest this be omitted in full.

4. Section 28a.3(1)(iv)
The charge was to set a standard for lighting ---ACT 119 clearly refers to inside standards. The outside environment goes to Dog Warden enforcement. This is NOT the charge of the CHB. We suggest this be omitted in full.

5. Section 28a.3(1)(v) and (vi)
There is not a standard set here which is the only charge of the CHB. The term 'full spectrum' has not been properly addressed. Certain lighting that emits 'full spectrum' is completely useless...without a full understanding of the other variable needed to know. Many are not aware that the distance that one is from the light source has to do with the effectiveness of the source. Such that although there is a demand here for 'full spectrum' without a complete knowledge of this source the efforts may be useless.

6. Section 28a.3(2)(i-ii)

a. Please refer to above statements in red regarding full spectrum.
NO data is offered to understand the needs for full spectrum lighting. Many do not understand the needed environment and location of lighting relative to the animal to benefit from "full spectrum" lighting. This does not allow for more lighting if needed.

b. Why must indoor artificial lighting be full spectrum if natural lighting is also available that offers the accepted standard?

c. The charge of the board, is to establish the 'lighting ranges' not the means or methods regarding artificial or natural.

(i) Does this suggest that 80 foot candles are the maximum and a citation may be issued above that?

(ii) Or, does this suggest that regardless of the natural lighting via window...that an additional maximum of 80 foot candles of artificial lighting is required.This statement of the board also lends us to believe that the CHB understands 'artificial lighting'. However, the CHB sets 'guidelines' that "windows will be required". This is confusing.

d. This needs to state 'shall be a minimum'...the current guideline suggests that if the lights are on at night---a warden may issue a citation.

(i) As well, this infers that if an inspection is done at night the lighting must be 1-5 foot candles. This does not consider 'winter hours' for inspections.

(ii) Is lighting not allowed to be 6 foot candles?
We understand the desire for a minimum. However, we find this too restrictive and does not allow for variables.

7. Section 28a.3(iii)
"Must" and "approximately" contradict each other. This is vague and confusing.

8. Section 28a.3(iv)
There is ABSOLUTLEY NO justification for this. I accuse an undertone of predjudice.
It is not the charge of the board and request this be omitted in full.

9. Section 28a.3(v)
Although we may agree that this address safety issues...this is not a standard of 'lighting needs'.
Goes to enforcement and safety codes--- although we agree this may be a safety factor. This is not the charge of the board and request this be omitted in full.

10. Section 28a.3(v)(3)
Goes to enforcement and safety codes--- although we agree this may be a safety factor. This is not the charge of the board and request this be omitted in full.

RESPONSES

1. The final-form regulation deletes the requirement for kennels to provide both artificial and natural light. The language now mirrors the language of the statute with regard to providing light through natural or artificial light. The final-form regulation sets general standards that apply to lighting whether provided by artificial or natural light and also sets forth standards that apply specifically to either natural or artificially provided light. The final-form regulation does require some natural lighting source in kennels that were provided an exemption from outdoor exercise. It requires the light to reach each dog, but does not require the window or skylight to be directly over or in front of the primary enclosure. The Department agrees, from its research into the heat index that such exposure may not only violate the provisions of the lighting section related to "excessive light", but would run the risk of increasing temperatures – on a hot day – within the primary enclosure to levels that would be detrimental to the dogs' health. However, research done by the Canine Health Board indicates the exposure to natural light is vital to the health and welfare of dogs. The need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight.

In addition, this requirement is congruent with the requirement that kennels buildings have operational windows, doors and other openings that can be opened in the event of a mechanical malfunction of the ventilation equipment.

2. With regard to the language of subsection 28a.3(1)(i) of the proposed regulations (now 28a.7(b)(1)(i) of the final-form regulation) the final-form regulation no longer requires natural light to be provided, however, where a kennel chooses to provide natural light then that light must allow each dog to have some exposure – not necessarily direct exposure – but "Each dog shall have exposure to light from natural sources passing through external windows, external skylights or other external openings." The amount of light must meet the general lighting standards established by the final-form regulations,

which mirror the language of the Act with regard to requiring the light be diffused evenly throughout the kennel, not expose a dog to excessive light and be in the foot candle range established by the final-form regulation.

With regard to subsection 28a.3(1)(ii) of the proposed regulation, that language has been deleted from the final-form regulation. There is no standard for the total amount of external openings and no requirement for a net glazed area. The language in the final-form regulation (at 28a.7(b)(1)(ii)) regarding the covering of external openings is consistent with the language of the Federal Animal Welfare Act regulations (9 CFR § 1.1), definition of indoor housing facility, part (3) with regard to the coverings that must be on windows or openings that provide natural sunlight.

3. Subsection 28a.3(1)(iii) has been eliminated from the final-form regulations. The final-form regulations do still address "excessive light" in the "General standards" at subsection 28a.7(a)(4), but do so by merely mirroring the language of the statute. The Department has the authority to enforce the statutory standard and has set it forth in the regulation to add clarity to the regulation and inform the regulated community of the standards they must meet.

In addition, the Department, as requested by numerous commentators, has provided a detailed definition of "excessive light." The added detail is based upon discussions with members of the Canine Health Board (Board) and research undertaken by Dr. Karen Overall (who is a member of the Board). The research and citation is that light of 130-270 lux above the light intensity under which an animal was raised damages retinas in albino rats. Albino rats are actually a good model for dogs because of the genetics of coat color and tapetal color. Dogs, especially those with complex color patterns, do not have the same pigmented retinas that we are accustomed to seeing in humans. The reference for this discussion is: Guide for the Care and Use of Laboratory Animals, Institute of Laboratory animal Resources, Commission on Life Science, National Research Council, National academy Press, Washington, DC, Chapter 2: Animal Environment, Housing, and Management, page 35. (http://www.nap.edu/readingroom/books/labrats/).The original reference is: Semple-Rowland, SL, Dawson WW. 1987. Retinal cyclic light damage threshold for albino rats. Lab. Anim. Sci. 37(3):289-298. Only an abstract, Attached as Exhibit A, is readily available.

4. The language that was part of subsection 28a.3(1)(iv) of the proposed regulation has been removed from the final-form regulation.

5. Full spectrum lighting is now defined in the final-form regulation. In addition, it is not a new form of lighting. Some type of full spectrum lighting has been in use and available since the 1930s. Full spectrum lighting is the only lighting that even closely simulates the wavelengths of natural sunlight.

With regard to authority, the Canine Health Board and hence the Department have the authority to set appropriate lighting ranges, but the duty to assure the lighting standards account for the welfare of the dogs (3 P.S. § 459-221(f)). Natural light, providing the full-spectrum of wavelength is necessary for normal eye and brain development in animals. Full spectrum lighting is the only lighting that even closely simulates the wavelengths of natural sunlight. As set forth in previous answers to comments from the Honorable Senator Brubaker and the Independent Regulatory Review

Commission, natural sunlight is important for the health of dogs housed in kennels – for vitamin D levels and eye development among other issues. The need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight.

6. Natural light, providing the full-spectrum of wavelength is necessary for normal eye and brain development in animals. Full spectrum lighting is the only lighting that even closely simulates the wavelengths of natural sunlight. As set forth in previous answers to comments from the Honorable Senator Brubaker and the Independent Regulatory Review Commission, natural sunlight is important for the health of dogs housed in kennels – for vitamin D levels and eye development among other issues. The need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight. In the final-form regulations, at subsection 28a.7(b)(2), full-spectrum lighting is required where light is provided by means of artificial lighting.

The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with an Engineer who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

The confusing standard regarding "window will be required" has been eliminated from the final-form regulation.

Nighttime lighting, which had been required by subsection 28a.3(2)(ii) is no longer required in the final-form regulation.

7. The language of subsection 28a.(2)(iii) of the proposed regulation has been deleted from the final-form regulation. The language in the final-form regulation, regarding diurnal lighting (28a.7(a)(3)) is consistent with the diurnal language of the Act and requires "Areas of the kennel and housing facility where dogs are housed, kept or present shall be provided a regular diurnal cycle through natural or artificial light or both."

8. The Department has modified the language of what was subsection 28a.3 (2)(iv) of the proposed regulation, in a manner to better clarify its intent. The word "flicker" is no longer set forth in the final-form regulation. The modified language appears in subsection 28a.7 (b)(2)(ii) of the final-form regulation. The focus is on the lighting being kept in good repair. The language will actually effectuate the intent of the Canine Health Board. In speaking to members of the Canine Health Board, it became clear the intent of the Canine Health Board was to assure the lighting fixtures were kept in good repair and were functioning properly. The reference to a "visible flicker" was important to the veterinarians on the Canine Health Board, because they assert that flickering lights – such as the flickering caused by defective ballast – can result in seizures in some dogs. Therefore, in order to assure the health, safety and welfare of the dogs through proper animal husbandry related to lighting, it is important that artificial lighting sources within the kennel building be kept in good repair and not result in problems such as a "flickering" light source. The revised language of the final-form regulation requires lighting to be kept in good repair and sets forth – among other examples - such as emitting irregular bursts of light, as when a ballast is in disrepair.

9. The language contained in subsection 28a.3 (2)(v) of the proposed regulation related to light sources being set or employed in such a manner as to prevent injury to the dog has been modified for clarity, but not removed from the final-form regulation. The modified language is contained at subsection 28a.7(b)(2)(iii). The Department believes it is within the scope of the authority of the Act. Specifically, the Canine Health Board was to establish Guidelines for lighting standards that based on animal husbandry practices provided for the welfare of dogs in kennels (3 P.S. § 459-221(f)). This regulatory requirement, while the Department agrees kennel owners should already be adhering to standards that would prevent such harm and therefore the provision should not be necessary, is essential to assure proper animal husbandry practices with regard to the lighting placement and standards. It merely requires kennel owners to not place or provide artificial lighting in such a manner that it would cause injury to the dogs.

10. Subsection 28a.3(v)(3) of the proposed regulations related to "applicable codes" has been removed from the final-form regulation, as has been any reference to "applicable codes" throughout the final-form regulation.

Comments: Flooring – Section 28a.4. Preamble and Annex A provisions

PREAMBLE

1. The Preamble to the proposed regulations states that, the Board through this proposed regulation has approved solid flooring to be appropriate for use in Class C kennels as well as the flooring already approved in the legislation in accordance with section 207(i)(3) of the act. The proposed regulation establishes the standards to be met if solid flooring is utilized.

As solid flooring is currently accepted in Act 119 we find;

a. The CHB proposal is redundant to the law. This does not illustrate that the Board addressed the use of alternative flooring.
b. Essentially reading "The Board has approved solid flooring … as well as the (SOLID) flooring…"
c. The CHB failed to identify ADDITIONAL flooring for primary enclosures.
d. The request from one of the CHB members to ask for this expert testimony was discounted by the statement from another CHB member, "We do not need experience we need data". This statement is on record.
e. The CHB failed to address any commercial breeders, dog kennel builders, or non solid flooring experts.

RESPONSES

1. a. and b. Regulations can and often are somewhat redundant to the requirements of the Act. In fact, in response to a clarification comment submitted by the Independent Regulatory Review Commission (IRRC), regarding the necessity to set forth all the flooring standards, the Department restructured the final-form flooring regulations to include the specific language of the Dog Law.

As stated in response to IRRC's comment, the Department has taken the Independent Regulatory Review Commission's suggestion and restructured the section related to flooring, section 28a.8 of the final-form regulation. In restructuring this section the Department felt it would be even more helpful to the regulated community if all the flooring standards established by the Act, were also delineated in the regulation. Therefore, the Department established two new subsections which reiterate the language contained in sections 207(i)(3)(i)(related to general flooring standards) and (i)(3)(ii)(related to slatted flooring) of the Act (3 P.S. §§ 459-207(i)(3)(i) and (ii)). In addition, the Department had to then modify the language of the proposed regulations which sought to espouse the additional flooring options. In doing so, the Department established subsection 28a.8(c), which sets forth the language of the statute allowing the Canine Health Board to approve additional flooring options, and delineates the authority and duty of the Canine Health Board to assure the additional flooring standards adhere to the general requirements established by section 207(i)(3)(i) of the Act and that additional flooring options, based on proper animal husbandry practices, provide for the health, safety and welfare of the dogs confined to these kennels, as required by section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 459-221(f)). The Department included the standards set by the Canine Health Board in the proposed regulations – such as requiring

proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department veterinarians and some Canine Health Board veterinarians, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practice

1. c., d. and e. The Board has the authority, but is under no obligation, to address individual alternative flooring requests or types under section 207(i)(3)(iii) of the Dog Law. That provision clearly states the Board "may" address. The Board is under no obligation to address such requests, either through the regulations or through another avenue such as a public meeting or hearing of the Board. (3 P.S. § 459-207(i)(3)(iii)). If the Board chooses to address a particular type of flooring, the Board can determine based on its expertise whether or not that particular type of flooring meets the standards of the Act, set forth at section 207(i)(3)(i) and the animal husbandry and welfare requirements established at section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 221(f)).

The Department, in the final-form regulation, has set forth the specific parameters of the Act and the authority of the Board and has established a subsection that delineates specific alternative flooring requirements based on the Board's authority and duty at section 221(f) of the Act related to animal husbandry practices and the welfare of dogs (3 P.S. § 459-221(f)). These requirements continue to utilize many of the same parameters established in the proposed regulation, but add language that further clarifies and objectifies the standards. Any additional standards are based on discussions and consultations with Canine Health Board and Department veterinarians.

ANNEX A

1. General Comment on 28a.4.

a. Point: As solid flooring is currently accepted in Act 119 we find;
The CHB proposal is redundant to the law. This does not illustrate that the Board addressed the use of alternative flooring. Essentially reading "The Board has approved solid flooring … as well as the (SOLID) flooring…" POINT: The CHB failed to identify ADDITIONAL flooring for primary enclosures. The request from one of the CHB members to ask for this expert testimony was discounted by the statement from another CHB member, "We do not need experience we need data". This statement is on record.

b. POINT: The CHB failed to bring in any commercial breeders, dog kennel builders, or non solid flooring experts. The CHB enjoys going into detail regarding enforcement, descriptions, applications, and other variables when considering the construction of flooring…all the while not addressing their very charge; which is the acceptance of ADDITIONAL flooring.

2. Section 28a.4(1)
Point: As solid flooring is accepted in Act 119 we find:
By virtue of the fact the solid flooring is allowed in ACT 119 the above statement as delivered by the CHB is redundant…
"The Board has approved solid flooring … as well as the (SOLID) flooring approved.
This does not illustrate that the CHB addressed the use of alternative flooring.
The CHB failed to identify additional flooring for primary enclosures.
The words 'in addition to' are used…however there is NO Additional flooring mentioned.

3. Section 28a.4(2)
This does not go to additional flooring. This is an attempt to regulate current law and attempt to regulate enforcement. This is not the charge of the board and request this be omitted in full.

4. Section 28a.4(3)
This does not go to additional flooring. This is an attempt to regulate current law and attempt to regulate enforcement. This is not the charge of the board and request this be omitted in full.

5. Section 28a.4(4)
This does not go to additional flooring. This is an attempt to regulate current law, inspections and attempt to regulate enforcement. We see no reason for this exclusion. We also see no reason for a possible list of inclusion. Innovations in materials occur regularly. This does not properly address the issue as requested from the CHB hypothetically; we can begin a list of common sense flooring that may not be used. Stainless steel flooring is commonly used. This is not the charge of the board and request this be omitted in full.

6. Section 28a.4(5)
This does not go to additional flooring. This is an attempt to regulate current law, inspections and attempt to regulate enforcement. This is not the charge of the board and request this be omitted in full.

7. Section 28a.4(6)
First…the use of 'examples' may lead to confusion and a false lead to acceptance that may include or restrict other possible accepted applications. This does not go to additional flooring. This is an attempt to regulate current law, inspections and attempt to regulate enforcement. This is not the charge of the board and request this be omitted in full.

8. Section 28a.4(7)
This does not go to additional flooring. This is an attempt to regulate current law, inspections and attempt to regulate enforcement. This is not the charge of the board and request this be omitted in full.

9. Section 28a.4(8)

The charge of the board was to discuss what additional flooring is accepted. Not to discuss what is not accepted. We do not understand why the CHB introduce into a proposed regulation that a dog breeder may not place a dog on poison. This would go to an animal cruelty issue. This is an attempt to re write law that has already been addressed. This is also an obvious attempt to generate excessive restrictions opposed to additional practices. The words 'in addition to' are used...however there is no additional flooring mentioned. This does not go to additional flooring. This is an attempt to regulate current law, inspections and attempt to regulate enforcement. This is not the charge of the board and request this be omitted in full.

RESPONSES

1. The Board has the authority, but is under no obligation, to address individual alternative flooring requests or types under section 207(i)(3)(iii) of the Dog Law. That provision clearly states the Board "may" address. The Board is under no obligation to address such requests, either through the regulations or through another avenue such as a public meeting or hearing of the Board. (3 P.S. § 459-207(i)(3)(iii)). If the Board chooses to address a particular type of flooring, the Board can determine based on its expertise whether or not that particular type of flooring meets the standards of the Act, set forth at section 207(i)(3)(i) and the animal husbandry and welfare requirements established at section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 221(f)).

To the extent the Canine Health Board, and hence the Department, did address alternative flooring in the final-form regulation, it did so by establishing requirements that are based on animal husbandry, their expertise as veterinarians and input received during their deliberations on the Guidelines. The Department included the standards set by the Canine Health Board in the initial guidelines and the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – in the final-form regulations, but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department veterinarians and veterinarians from the Canine Health Board, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices. This should add some clarity to the requirements for alternative flooring.

2. Regulations can and often are somewhat redundant to the requirements of the Act. In fact, in response to a clarification comment submitted by the Independent Regulatory Review Commission (IRRC), regarding the necessity to set forth all the flooring standards, the Department restructured the final-form flooring regulations to include the specific language of the Dog Law.

As stated in response to IRRC's comment, the Department has taken the Independent Regulatory Review Commission's suggestion and restructured the section related to flooring, section 28a.8 of the final-form regulation. In restructuring this section

the Department felt it would be even more helpful to the regulated community if all the flooring standards established by the Act, were also delineated in the regulation. Therefore, the Department established two new subsections which reiterate the language contained in sections 207(i)(3)(i)(related to general flooring standards) and (i)(3)(ii)(related to slatted flooring) of the Act (3 P.S. §§ 459-207(i)(3)(i) and (ii)). In addition, the Department had to then modify the language of the proposed regulations which sought to espouse the additional flooring options. In doing so, the Department established subsection 28a.8(c), which sets forth the language of the statute allowing the Canine Health Board to approve additional flooring options, and delineates the authority and duty of the Canine Health Board to assure the additional flooring standards adhere to the general requirements established by section 207(i)(3)(i) of the Act and that additional flooring options, based on proper animal husbandry practices, provide for the health, safety and welfare of the dogs confined to these kennels, as required by section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 459-221(f)). The Department included the standards set by the Canine Health Board in the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department veterinarians and some Canine Health Board veterinarians, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practice

The Board has the authority, but is under no obligation, to address individual alternative flooring requests or types under section 207(i)(3)(iii) of the Dog Law. That provision clearly states the Board "may" address. The Board is under no obligation to address such requests, either through the regulations or through another avenue such as a public meeting or hearing of the Board. (3 P.S. § 459-207(i)(3)(iii)). If the Board chooses to address a particular type of flooring, the Board can determine based on its expertise whether or not that particular type of flooring meets the standards of the Act, set forth at section 207(i)(3)(i) and the animal husbandry and welfare requirements established at section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 221(f)).

3. The Canine Health Board and the Department in promulgating the regulation, is under a duty to assure any alternative flooring established for alternative flooring would be based on animal husbandry practices that account for the welfare of dogs housed in commercial kennels (3 P.S. § 459-221(f)). The standards established in the proposed regulations and again set forth in the final-form regulations effectuate and carry out that duty and authority. Requiring that drains be provided to eliminate waste and wash water to name a few and that those drains be properly functioning is certainly within that very duty.

4. The Canine Health Board and the Department in promulgating the regulation, is under a duty to assure any alternative flooring established for alternative flooring would be based on animal husbandry practices that account for the welfare of dogs housed in commercial kennels (3 P.S. § 459-221(f)). The standards established in the proposed

regulations and again set forth in the final-form regulations effectuate and carry out that duty and authority. Requiring that drains be covered and the coverings be secure is certainly within that very duty.

5. The Canine Health Board may approve additional flooring options that meet the general requirements of subparagraph 207(i)(3)(i) of the Dog Law, but also has the authority and duty to assure such additional flooring, based on animal husbandry practices, will account for the welfare of the dogs housed on that flooring, as required by section 221(f) of the Dog Law (3 P.S. § 459-221(f)). The section 221(f) standards are the very reason the flooring alternatives must be reviewed by the Canine Health Board, which is comprised of nine veterinarians. Otherwise, the task would be to merely assure the flooring meets the very general standards of section 207(i)(3)(i), which in and of themselves do not assure or account for the health, safety and welfare of the dogs housed on the flooring. In doing so, the Board and hence the Department has the authority and duty to set forth standards that will account for the welfare of the dog. The standard in subsection 28a.4(4) of the proposed regulations, now subsection 28a.8(c)(3) of the final-form regulation, does not prohibit a flooring type or option, it merely sets a standard for any flooring type presented to the Board for approval. The language has been modified to assure it sets a standard, and does not prohibit any particular type or style of flooring. In addition, it is certainly within the duty and authority of the Board under section 221 of the Dog Law. The Canine Health Board and the Department in promulgating the regulation, is under a duty to assure any alternative flooring established for alternative flooring would be based on animal husbandry practices that account for the welfare of dogs housed in commercial kennels (3 P.S. § 459-221(f)). The standards established in the proposed regulations and again set forth in the final-form regulations effectuate and carry out that duty and authority.

6. The Canine Health Board and the Department in promulgating the regulation, is under a duty to assure any alternative flooring established for alternative flooring would be based on animal husbandry practices that account for the welfare of dogs housed in commercial kennels (3 P.S. § 459-221(f)). The standards established in the proposed regulations and again set forth in the final-form regulations effectuate and carry out that duty and authority. This provisions in fact allows kennel owners the option of providing radiant heating or cooling in the floor system. It does not prohibit, but in fact enhances the options for a kennel owner.

7. Although the Department does not agree with the general premise that examples lead to confusion or should not be utilized in regulations, and we note that many agencies and regulations utilize examples, the examples set forth in this subsection of the proposed regulation have been removed in the final-form regulation.

The Canine Health Board may approved additional flooring options that meet the general requirements of subparagraph 207(i)(3)(i) of the Dog Law, but also has the authority and duty to assure such additional flooring, based on animal husbandry practices, will account for the welfare of the dogs housed on that flooring, as required by section 221(f) of the Dog Law (3 P.S. § 459-221(f)). The section 221(f) standards are the very reason the flooring alternatives must be reviewed by the Canine Health Board, which is comprised of nine veterinarians. Otherwise, the task would be to merely assure the flooring meets the very general standards of section 207(i)(3)(i), which in and of

themselves do not assure or account for the health, safety and welfare of the dogs housed on the flooring. In doing so, the Board and hence the Department has the authority and duty to set forth standards that will account for the welfare of the dog. The standard in subsection 28a.4(6) of the proposed regulations, now subsection 28a.8(c)(6) of the final-form regulation, does not prohibit a flooring type or option, it merely sets a standard for any flooring type presented to the Board for approval. The language has been modified and the wording "good footing" has been replaced with more descriptive language to assure it sets a more objective standard. The standards established in the final-form regulations effectuate and carry out the duty and authority imposed by section 221(f) of the Dog Law. It does not prohibit a flooring type but sets common sense animal husbandry standards that will account for the welfare of the dogs.

8. In the final-form regulation, the Department has modified the language of what is now subsection 28a.8(c)(7), which was 28a.4(7) of the proposed regulations, by specifically removing the language "and may be subject to microbial assessment" and replacing that language with clear and distinct language regarding the ability of the flooring to be cleaned and sanitized in concurrence with the Act and current Department regulations. The language now reiterates standards set forth in the Dog Law, at 3 P.S. § 459-207(h)(14) and the current regulations at 7 Pa.Code § 21.29. The standards established in the final-form regulations effectuate and carry out the duty and authority imposed by section 221(f) of the Dog Law. It does not prohibit a flooring type but sets common sense animal husbandry standards that will account for the welfare of the dogs and which are required by the Act.

9. The language of the subsection comment on reiterates some of the standards of section (i)(3)(i) of the Dog Law (3 P.S. § 459-207(i)(3)(i)) and the standards established in the final-form regulations effectuate and carry out the duty and authority imposed by section 221(f) of the Dog Law. It does not prohibit a flooring type but sets common sense animal husbandry standards that will account for the welfare of the dogs.

II. AMERICAN CANINE ASSOCIATION, INC.

Commentator:

Submitted by: BobYarnall, Jr., President and CEO
American Canine Association, Inc.

General Comments

Comment:

There are several broad comments regarding the overall impact that the proposed regulations would have on dog breeding operations in Pennsylvania. Before analyzing the specific regulatory sections that the Department has proposed, the process of determining how to adequately address the issue of the inhumane treatment of dogs must start with an understanding of the problem.

For far too long, government has engaged in a "solution looking for a problem" public policy making position. Emotionally charged issues are given an emotional response, and unintended negative consequences emerge. It appears that this is precisely the issue in this instance.

When the General Assembly enacted Act 119 of 2008 (Act 119), it did so in response to Governor Rendell's promise to "shut down puppy mills" in Pennsylvania. The Governor, alongside other animal rights activists, claimed that large breeding operations were detrimental to the health, safety and welfare of dogs and, as such, needed to be regulated into nonexistence. Using the moniker "puppy mills," they declared war on large breeders and successfully enacted sweeping changes to Pennsylvania's Dog Law.

Act 119 enacted severely restrictive requirements on Class C kennel operations, which were clearly targeted by the new law. Large breeding operations are now required to comply with a vast majority of new, extraordinary and costly mandates, and are subject to a myriad of additional requirements that are not imposed on other dog breeders. The American Canine Association (ACA) strongly believes that many of these requirements are invidiously discriminatory and violate both the Pennsylvania and United States constitutions.

RESPONSE

Governor Rendell has always stated that the purpose of moving forward with amendments to the Dog Law was not to close Pennsylvania kennels or commercial kennels, but to ensure better and more humane conditions for dogs housed in commercial kennels. The amendments to Act were supported by and nearly unanimously passed by the Pennsylvania General Assembly. In addition, the constitutionality of the provisions of the Dog Law has been litigated and the amended language has been found to be constitutional.

Comment:
The proposed regulations that have now been promulgated are a continuation of the efforts of the Rendell administration to "strangle" large breeding operations. Before the enactment of Act 119, the Department of Agriculture submitted Regulation No. 2-152 which went well beyond the Department's authority and provided for unworkable, non-science based punitive restrictions. So egregious were these regulations that they generated an unprecedented number of comments to the Independent Regulatory Review Commission (IRRC). Recognizing that it could not respond to all the valid concerns raised, the Department decided to pursue a legislative path to accomplish its goals. Unfortunately, it was successful.

RESPONSE

This comment does not address any substantive provision of the current regulations and is merely the commentators own opinion. Nothing in the proposed or final-form regulation is intended to close or shut down a commercial kennel. The standards are based on research, science and expert advice from engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians. The final-form regulation is within the scope of the authority established by the Dog Law and effectuates standards that will carry out the duty imposed on the Department to account for the welfare of the dogs.

The commentator is incorrect with regard to the rationale behind the withdrawal of regulation 2-152 and in fact, of the nearly 16,000 comments submitted with regard to that proposed regulation, over 12,000 were positive and supportive comments.

Comment:
Now, IRRC must consider Regulation No.2-170, which represents the Department's further efforts to enact by regulation what it failed to achieve in the legislative process. These regulations contain much of the same deficiencies that Regulation No. 2-152 suffered from, and the ACA again raises legitimate concerns with the Department's proposal.

RESPONSE

The commentator fails to point out the deficiencies asserted in either regulation and there is no information or determination to support the contention that regulation 2-152 contained any deficiencies that would have prevented its passage if introduced as a final-form regulation.

With regard to the current regulations being proposed, the Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels. The regulation applies equally to all commercial kennels in the Commonwealth.

Comment:

The ACA believes that public policy issues should be addressed reasonably, rationally, and logically. There is no dispute that dogs should be treated humanely; indeed, all reputable breeders believe that the care and attention to their dogs is of the utmost importance. However, when cases of abuse arise, breeders who deeply care for their animals are unfairly targeted.

It is the Department's duty to enforce the Dog Law, and it appears that the current approach used by the Department is flawed. The result of this is Proposed Regulation No.2-170, under which the Department seeks to further regulate dog kennels and to criminalize certain aspects of breeding as well as implement punitive measures to ensure compliance.

While not expressly enumerated, there can be little doubt that these regulations are intended for one specific purpose: **to put legitimate dog breeding operations out of business.** In order to achieve this, the Department violated their statutory authority to impose restrictions not authorized by law, did not consider the financial impact to businesses, as required by the Regulatory Review Act (1982, P.L. 633, No. 181), and failed to consider proper animal husbandry practices and veterinary science standards. Such efforts are so readily apparent that even the Attorney General's Office in reviewing Regulation No.2-170 for form and legality noted in its reply to the Department:
This office notes, however, that there is some dispute regarding the Department's authority to enact certain provisions of this proposed regulation. Accordingly, we urge the Department to carefully consider all comments received for this regulation and, if appropriate, to make changes in response to those comments. We will revisit this issue once the regulation is returned for final-form review.

RESPONSE

There are no "punitive" provisions in the proposed or final-form regulation. No fees, fines or criminal or civil penalties are established by or set forth in the proposed or final-form regulation.

The regulation, as required by the Act and as required of all regulations, is intended to further regulate commercial kennels in the areas of ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, as well as, establish standards for alternative flooring. All duties imposed by the Act.

With regard to the current regulations being proposed, the Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations

were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels. The regulation applies equally to all commercial kennels in the Commonwealth.

Specific Section Comments

Comments: Section 28a.2. Ventilation.

This section is intended to address poor ventilation conditions that, "cause health and welfare problems in dogs," by establishing specific ventilation standards, including a requirement that ventilation must be achieved through a mechanical system that will allow for 8 to 20 air changes per hour, keep consistent moderate humidity, institute auxiliary ventilation when the temperature rises above 85 degrees F, keep ammonia levels and particulate matter at established levels and keep odor minimized.

1. **Section 28a.2, paragraphs (1), (2) and (3)**

a. These provisions set forth temperature requirements for Class C kennels. The specific requirements outlined in the regulation require the mechanical regulation of temperature and relative humidity. While Act 119 requires mechanical ventilation to be implemented if the temperature exceeds 85 degrees F, the Department's mandates under these paragraphs go beyond that requirement by declaring that, "If the ambient temperature in any portion of the facility is 86 degree F or higher, despite mechanical ventilation utilized, dogs may not be present in those portions of the facility." Clearly the statute does not allow the Department to enact such a rule.

b. The Department's requirements under these paragraphs fails to recognize that new born puppies cannot maintain their own body temperature until after 10 to 14 days of age. Supplemental radiant heat or infer red heat lamps are routinely utilized to create an average air temperature between 91 and 96 degrees F in the whelping pen area. This is done for the safety, health and well being of the young litter of puppies. Under the Department's proposed rulemaking, providing this essential life support would constitute a separate violation for each puppy and the mother of the litter.

c. The costs of implementation of these three paragraphs alone would be extremely costly. In order to meet just these standards, without considering the remaining requirements, it is estimated that the cost to an average commercial kennel would exceed $119,000 for installation of proper HVAC equipment and an ongoing operational cost of nearly $35,000. Total first year installation and operational costs would run in excess of $181 ,000 - just for this one requirement.

2. **Section 28a.2, paragraph (4)**

This paragraph sets forth an acceptable ammonia level of 10 ppm or less. The ACA questions the development of this standard, and recommends that the Department provide some scientific justification for how it arrived at this figure. Does the Department have appropriate justification that dictates that ammonia levels above 10 ppm are directly threatening to a dog's health, safety or welfare? On what basis was this figure determined?

3. **Section 28a.2, paragraph (5)**

The ACA believes that section 28a.2, paragraph (5) relating to carbon monoxide levels is a reasonable standard and recommends its adoption.

4. **Section 28a.2, paragraph (7)**

This paragraph requires that, "The means of ventilation employed must ensure that particulate matter (PM) from dander, hair, food, bodily fluids, and other sources in a primary enclosure are below 10 milligrams per meter cubed." Wood shaving or shredded paper is routinely used as bedding in kennels, and it is not possible to expect that a dog would not move within these areas or play; yet, the Department's standard would make unlawful the natural movement of these shavings or paper, and even the natural shedding of certain breeds of dogs. Simply put, the standard is not achievable.

5. Section 28a.2, paragraph (8)
This paragraph provides detailed mandates for air changes. The ACA notes that at temperatures below 40 degrees F, three complete air changes per hour is sufficient. Further, the enumerated requirements under subparagraph (C) may violate the Federal Animal Welfare Act, which mandates that dogs must be protected from drafts while in the primary enclosure. Subparagraph (C) sets forth that the 8 to 20 air changes must be measured in the primary enclosure, at the shoulder of the dog. A 40 foot by 100 foot building having 10 air changes an hour would be required to circulate *5,300* cubic feet of air per minute through the facility, resulting in a violation of the federal statute.

6. Section 28a.2, paragraph (9)
This paragraph sets forth a listing of conditions (or signs of illness or stress) that dogs may not exhibit for the purposes of determining whether poor ventilation conditions exist. Based on the conditions listed, the ACA believes that the violations, fines, civil penalties and a potential lifetime criminal record would result from any of the following:
1.A dog is playing outside on a warm day and comes into the primary enclosure to get a drink of water and the dog is panting heavily from playing;
2.A dog receives an inoculation booster and develops an elevated temperature;
3.A dog becomes agitated or nervous when inspectors enter the kennel and engages in an avoidance of an area of the kennel, temporary shivering, or grouping with other dogs - all of which are very typical occurrences;
4.Despite being under a veterinarian's care, a dog has a runny nose, redness of an eye or a dog sneezes. Unbelievably, the Department seeks to make these "conditions" prima facie evidence of a violation of the ventilation requirements, yet all mammals, including humans, occasionally develop a cold, allergy or sinus infection.
5.A dog develops cataracts, which is a normal occurrence;
6.A dog licks themselves and then plays with their water; or
7.Despite being under a veterinarian's care, a dog develops a loose stool due to a simple change of diet, despite the fact that all mammals, including children and adults develop an upset stomach or gastrointestinal irritation.
The ACA believes that the ventilation regulations as outlined under section 28a.2 exceed the Department's authority under Act 119, are being imposed without consideration to their practical implementation and do not conform to veterinary science standards.

RESPONSES

1. a. The Department has deleted from the final-form regulation the condition that dogs be removed from a facility when the ambient air temperature goes above 85 degrees. The final-form regulation does not require a reduction in temperature or for dogs to be removed if the temperature in a kennel rises above 85 degrees Fahrenheit. The final-form regulation, allows for air conditioning, but in no manner requires it or temperature reduction. The final-form regulation seeks to add clarity to this and other issues by separating sections related to ventilation, auxiliary ventilation, humidity and ammonia levels and carbon monoxide detection. The auxiliary ventilation provisions set forth several means of auxiliary ventilation that do not require air conditioning. The humidity provisions do not require air conditioning or temperature reduction, and are based on scientific studies and application. Nothing in any of these sections requires the use of air conditioning. The humidity level standards are based on scientific research and will

effectively account for the health and safety of dogs housed in kennels. A more in depth response related to the humidity standards is set forth throughout this comment and response document but can be found in the Department's answer to the Independent Regulatory Review Commission's comments (see Comment 2 - related to section 28a.2 - and the Department's responses to parts a.iii. and c. of that Comment, including the attached literature).

1. b. The final-form regulation does not address a cap or reduction in temperature, but instead sets humidity levels, based on Heat Index values, that must be achieved when the temperature in a kennel housing facility rises above 85 degrees Fahrenheit.

However, based on this and other similar comments related to neonates, which suggested the temperature for neonates should never fall below 90 degrees Fahrenheit, the Department consulted with veterinarians. The consensus among veterinarians was that normal animal husbandry practices dictate that the mother provides the necessary body heat to sustain the neonates/puppies and that no exception should be made to the 85 humidity index, because such an exception would be detrimental to the adult mother dog. Therefore, no changes have been made and the kennel must maintain a heat index value of 85 or below. The Department notes, that the Federal Animal Welfare Act regulations make no such exception for neonates and the Federal Animal Welfare Act regulations, unlike these regulations does set an upward temperature cap of 85 degrees Fahrenheit.

1. c. The Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

The Department consulted with engineers who design and build kennel buildings, to determine the potential cost of the ventilation, auxiliary ventilation, humidity, ammonia and lighting standards of the final-form regulation. The new cost estimates, set forth in the accompanying regulatory analysis form, are based on their input. The final-form regulation, especially the ventilation provisions of the final-form regulation, has reduced the need for some of the measurement equipment that would have been required by the proposed regulation. Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form.

The Department has no baseline data with regard to a kennel's current utility costs, so it is impossible to project the amount of any increase in such costs. However,

the regulatory analysis form accompanying the final-form regulation does estimate the average yearly cost of operating a system that would meet the ventilation, auxiliary ventilation and humidity standards of the regulations. These estimates do not take into account the fact that kennel owners already had previous existing utility costs. Therefore, the estimates set forth in the regulatory analysis form will include those already existing costs. The existing costs for kennels regulated by the USDA will be much less, as those kennels already had to comply with specific heating (50 F) and cooling (85 F) regulations and therefore, should already be operating heating and cooling systems in their kennels. The Federal Animal Welfare Act regulations in fact require the kennel to reduce the temperature to 85 degrees Fahrenheit.

In addition, both the Federal Animal Welfare Act regulations and the Department's current regulations require the use of auxiliary ventilation when temperatures in kennels rise above 85 degrees Fahrenheit.

The utility costs for lighting should not cost any additional amount, since kennels were already required, by the Department's current regulations and USDA regulations to provide enough light to allow for observation of the dogs and normal animal husbandry practices. The new regulations quantify the intensity of the light to be provided and the type of lighting. The regulatory analysis form sets forth the cost estimates to install new lighting, if required, but there should be no additional cost of operating the lighting.

2. The Department consulted with engineers and architects related to the ammonia levels established by the proposed regulation and with regard to the ability to measure ammonia levels. In addition, the Department consulted with veterinarians and animal scientists and did its own research with regard to commonly accepted levels of ammonia in animal operations such as swine operations. The engineers and architects all believed that if kennels were properly ventilated and achieved the air circulation values established in the regulations, then ammonia levels should not be a problem in the kennel. The Act, however, requires the Department to establish the proper ammonia levels for dogs housed in kennels. Discussions with veterinarians and research done by veterinarians on the Canine Health Board affirm that ammonia levels of 20 part per million or higher will cause respiratory and eye irritation and problems in animals. The veterinarians suggested the levels be set at some point below 20 parts per million and the consensus was that a level of 15 parts per million would both account for proper animal health and welfare and would be measurable. Ammonia levels are measured in the swine industry and can be accurately measured at levels of 15 parts per million. The Department's research also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel. That Act establishes parameters that do not allow dogs in kennels to be housed in any primary enclosure that is more than 48 inches high for dogs under twelve weeks of age or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department believes ammonia measurements should be taken at the height of the dogs

3. The Department appreciates the support for this provision. The Department agrees with the commentator and believes that carbon monoxide levels should at the very least be monitored for safety purposes and to assure proper ventilation and air circulation is occurring within a kennel that utilizes a carbon based form of heating or mechanical ventilation. The engineers the Department consulted believe that carbon monoxide levels will take care of themselves if the kennel is properly ventilated and meets the air

exchange rate criteria of the regulations. However, carbon monoxide gas can build up in any enclosed building where carbon based mechanical ventilation or heating equipment is in use. Carbon monoxide is colorless and odorless and is deadly. The regulations only require that carbon monoxide detectors be installed. If carbon monoxide levels rise to the point the detectors are triggered the kennel has a problem with ventilation or air exchange in that part of the kennel housing facility and needs to take action to assure the health, safety and welfare of the dogs housed in that area of the kennel. Section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)) states in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and prevent moisture condensation ...the appropriate ventilation...ranges shall be determined by the Canine Health Board. One of the purposes of ventilation is to exchange or re-circulate air in a manner that removes pathogens, including carbon monoxide and replenishes oxygen. The regulatory requirement is inexpensive and necessary to assure the health, safety and welfare of dogs housed in kennels, which is the general overall duty and authority of the Canine Health Board under section 221(f) of the Act (3 P.S. § 459-221(f))

4. The Department has removed this provision from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation requirements of the regulations were being met, particulate matter would not pose a problem in the kennel.

5. First, engineers consulted (Learned Design and Paragon Engineering Services) on this comment have indicated the cubic foot calculation and the assertion that the air exchange rates originally required by the proposed regulation (8-20 per hour) would create an unreasonable "draft" through the kennel are not correct.

Second, all requirements related to measurement 10% of dogs and measuring at shoulder height within the primary enclosure and other such requirements have been removed from the final-form regulation, with the exception of taking ammonia level reading at the height of the dog (i.e. close to the floor of the kennel).

With regard to the requirement itself, the final-form regulation no longer measures air exchanges per hour, but instead has been modified and the standard is now set as cubic feet per minute per dog. In general, paragraphs (1), (2), (3) and (8) of section 28a.2 the proposed regulations has been extensively modified in the final-form regulation. Air changes per hour have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific in the final form regulation. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions

of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. Although 100% fresh air circulation is not prohibited by the final-form regulation, the change to the regulation was made after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive and difficult to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The ventilation standards now established in the final-form regulation are more easily measured and verified, continued to account for the health and safety of dogs housed in commercial kennels and allow kennel owners to increase or reduce the air circulation in a kennel based on the number of dogs housed in the kennel facility. This is a more equitable and proper manner by which to regulate ventilation.

There are two general reasons behind these changes. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have the total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design and less costly to operate. While still requiring the system to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility, it will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. This not only lowers operation costs, but sets a proper standard to assure dogs are not subjected to

a circulation standard that is too strong or unable to be enforced. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

6. The language that appeared in subsection 28a.2 (9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress, has been substantially modified in the final-form regulations and is now subsection 28a.2(h) in the final form regulation. First, based on discussions with animal scientists, at the Pennsylvania State University and Department and Canine Health Board veterinarians, the number and type of conditions in dogs that may denote poor ventilation has been reduced. Second, and significantly for purposes of authority, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that animal scientists and veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Paragraph (2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Comments: Section 28a.3. Lighting.

The Department declares that, "Natural lighting is important to the development of dogs." As such, it requires that, "Each kennel shall have a mix of natural and artificial light," and sets forth how a kennel operator must provide lighting.

1. Section 28a.3, paragraph (1), clauses (i) and (ii)

a. The Department details how natural light must be provided. However, Act 119 clearly provides that dogs must be provided *either* natural light or artificial lighting to allow for inspection of the facility and for the dogs housed in the facility. Indeed, the statute plainly says:

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Housing facilities for dogs must be lighted well enough to permit routine inspection and cleaning of the facility and observation of the dogs. Animal areas must be provided a regular diumal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs from excessive light. The appropriate lighting ranges

shall be determined by the Canine Health Board. (Sec. 207 (h)(8), *emphasis added).*

As is clearly outlined in the statute, the Canine Health Board is limited in its ability to regulate lighting except to establish lighting ranges, so long as those ranges conform to the other requirements of Act 119. Section 28a.3, paragraph (1) violates the statute by requiring both natural and artificial lighting.

b. The ACA estimates that the costs to design, permit, inspect and provide for glazing of windows for diffraction of direct sunlight for a 40 foot by 100 foot facility (which would require approximately 40 windows to comply with these requirements) would exceed $32,000.
Section 28a.3, paragraph (2), clause (i), requires that artificial, indoor, daytime lighting must provide full spectrum lighting between 50 to 80 foot candles at standing shoulder level of the dogs for daytime lighting. The ACA believes that such excessive amounts oflight are not appropriate, considering that the average residential home's lighting is 12 to 20 foot candles. The average commercial facility's lighting is 15 to 25 foot candles.

c. The ACA alleges that the Department's extreme lighting requirements are a direct violation of the Federal Animal Welfare Act, which expressly prohibits that dogs shall not have excess exposure to lighting. As a proponent of the humane treatment of dogs, the ACA believes that forcing dogs to endure the intensity of 50 to 80 foot candles of lighting is patently inhumane and runs contrary to the purpose of Act 119 and the federal statute.

d. Finally, the ACA again raises the financial implications of such an excessive requirement. Using the 40 foot by 100 foot facility example above, in order to purchase light fixture units, have them installed, make necessary electrical upgrades through an electrical engineer, comport with zoning permitting and inspections, and procure full spectrum florescent tubes to have a diurnal light cycle of 50 to 80 foot candles during the day and 1 to 5 foot candles during the night would exceed a cost of$18,500.

2. Section 28a.3, paragraph 2, clauses (ii) and (iii)
The ACA concurs with the Department's proposals as outlined under section 28a.3, paragraph (2), clauses (ii) and (iii).

3. Section 28a.3, paragraph (2), clause (iv)
The Department mandates that, "All lighting must comply with the latest edition of applicable codes." While the ACA understands the Department's intent, it is more appropriate to detail specifically what "applicable codes" the Department is referring to so as to avoid confusion over this vague reference.

RESPONSES

1. a. The Department has made substantial changes to the lighting provisions of the final-form regulation, including making the language consistent with the provisions of the Dog Law requiring either natural or artificial light. However, both can be utilized if the kennel owner so desires.

Where a kennel owner decides to light the kennel with natural light then that light must allow each dog to have some exposure – not necessarily direct exposure – but "Each dog shall have exposure to light from natural sources passing through external windows, external skylights or other external openings." The amount of light must meet the general lighting standards established by the final-form regulations, which mirror the language of the Act with regard to requiring the light be diffused evenly throughout the kennel, not expose a dog to excessive light and be in the foot candle range established by the final-form regulation.

In general, the following changes have occurred, paragraph (2) is now subsection 28a.7(b)(2) and the language has been significantly amended. The new subsection is now specific to artificial lighting standards and eliminates what were subparagraphs (2)(ii) and (2)(iii). Other provisions of the proposed regulations have been modified to allow for more clarity. There is no longer a requirement that lighting does not "flicker." In speaking with Board members it became apparent they intended that wording to mean the lighting had to be kept in good repair and that lights could not "flicker" or emit irregular bursts of light – such as when a ballast is going bad in a light. The reasoning is that bursts of light or strobe like effects can cause seizures in dogs. The language has been changed to reflect that intent. With regard to authority, the Canine Health Board and hence the Department have the authority to set appropriate lighting ranges, but the duty to assure the lighting standards account for the welfare of the dogs (3 P.S. § 459-221(f)). Full spectrum lighting is the only lighting that even closely simulates the wavelengths of natural sunlight. As set forth in previous answers to comments from the Honorable Senator Brubaker and the Independent Regulatory Review Commission, natural sunlight is important for the health of dogs housed in kennels – for vitamin D levels and eye development among other issues.

In addition, the Department has the duty and authority to enforce and clarify the lighting standards in the Act. The final-form regulations set forth the language of the Act and clarifying standards. The language of the Act requires, "Housing facilities for dogs must be lighted well enough to permit for routine inspection and cleaning of the facility and observation of the dogs. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs from excessive light..." Commentators in fact asked that at least some of these standards be defined in the regulation and clarified. The regulation does add clarity for the regulated community.

1.b. The final-form regulation no longer sets or requires a minimum amount of external windows and skylights in order to aid in meeting the lighting standards of the regulations nor does it require the external openings to be glazed. The language in the final-form regulation (at 28a.7(b)(1)(ii)) regarding the covering of external openings is consistent with the language of the Federal Animal Welfare Act regulations (9 CFR § 1.1), definition of indoor housing facility, part (3) with regard to the coverings that must be on windows or openings that provide natural sunlight. Light may be provided by artificial or natural light, as set forth, in the answer to part a. above.

With regard to the footcandle requirements, the Department did additional research and modified the standard in the final-form regulation. The Department, with the

assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with an Engineer who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting (set forth by Dr. Kephart), which are also 50 footcandles. This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

1. c. With regard to the footcandle requirements, the Department did additional research and modified the standard in the final-form regulation. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers who design kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting (set forth by Dr. Kephart), which are also 50 footcandles. This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

1. d. The footcandle requirement in the final-form regulation has been reduced and is based on studies and consultation with experts. The provision requiring 1-5 footcandles of light at night has been removed from the final-form regulations. With regard to cost associated with meeting the standards, kennel owners are already required by the Animal Welfare Act regulations (9 CFR §§ 3.1(d), 3.2(c) and 3.3(c)), current Department regulations (7 Pa.Code §21.27), and the amendments to the Pennsylvania Dog Law effectuated by Act 119 of 2008, to have ample lighting by natural or artificial means to provide sufficient illumination to allow routine inspection of the kennel housing facility and primary enclosures and observation of the dogs at any time and to assure proper cleaning and good housekeeping practices and for the well-being of the dogs. The Canine Health Board and the Department, based on the information received and research conducted has determined that level of lighting must be between 40-60 footcandles. The Department has set forth the estimates for utility costs to meet that level of lighting in the regulatory analysis form that accompanies the current regulations. However, as stated previously, the utility costs set forth will be total costs and do not take into account the costs the kennel owners should have already been incurring to meet the current regulatory standards. Any failure to comply with current standards or incur the costs of such compliance can not be utilized as a rational measure of increased cost.

The Department has no baseline data with regard to a kennel's current utility costs, so it is impossible to project the amount of any increase in such costs. However, the regulatory analysis form accompanying the final-form regulation does estimate the average yearly cost of electricity. However, as the Department points out, these estimates do not take into account the fact that kennel owners already had previous existing utility costs. In fact, the Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)). Therefore, the estimates set forth in the regulatory analysis form will include those already existing costs. The existing costs for kennels regulated by the USDA will be much less, as those kennels already have to comply with heating (50 F) and cooling (85 F) regulations.

The cost to operate the lighting should not cost any additional amount, since kennels are already required, by the Department's current regulations and USDA regulations to provide a diurnal lighting cycle and enough light to allow for observation of the dogs and normal animal husbandry practices. In fact, the Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)) and "Indoor housing facilities for dogs...must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs...and provide sufficient illumination to aid in maintaining food housekeeping practices, adequate cleaning, and the well-being of the animals (9 CFR § 3.2(c)) The Dog Law sets forth those same standards at section 207(h)(8) (3 P.S. § 459-207(h)(8)). The requirement to and cost of providing adequate lighting is actually established in the Act itself. The regulations merely mirror that language and then set forth a level of lighting as required by the Act.

The new regulations quantify the intensity of the light to be provided and the type of lighting. The regulatory analysis form sets forth the cost estimates to install new lighting, if required, but there should be no additional cost of operating the lighting.

2. Nighttime lighting, which had been required by subsection 28a.3(2)(ii) is no longer required in the final-form regulation.

The language of subsection 28a.(2)(iii) of the proposed regulation has been deleted from the final-form regulation. The language in the final-form regulation, regarding diurnal lighting (28a.7(a)(3)) is consistent with the diurnal language of the Act and requires "Areas of the kennel and housing facility where dogs are housed, kept or present shall be provided a regular diurnal cycle through natural or artificial light or both."

3. The Department has removed all language related to "applicable codes" from the final-form regulation. Any applicable Federal, Commonwealth or local codes will be enforced by the agency with such authority. The Department does not have authority to enforce such codes and has removed the reference to those codes from the final-form regulation.

Comments: Section 28a.4. Flooring.

1. Section 28a.4, paragraph (1)

a. The Department's requirements for solid flooring under section 28a, paragraph (1) raise serious concerns for the ACA. While Act 119 does give the Canine Health Board the authority to permit additional flooring options that (1) are strong enough so that the floor does not sag or bend between structural supports, and (2) is not able to be destroyed through digging or chewing by the dogs housed in the primary enclosure and, (3) does not permit the feet of a dog to pass through any opening and, (4) is not metal strand (without regard to coating), and (5) allows for moderate drainage of fluids and, (6) is not sloped more than 0.25 inches per foot, clearly the General Assembly specifically believed that flooring that allows for the passage of feces and other urine through slats was a preferable approach. *(see* Act 119, Section 207 (i)(3)(ii)).

b. Flooring requirements were a major debate during the passage of Act 119 and the ACA strongly advocated a position against solid flooring, as the ACA believes that solid flooring, no matter how well constructed, represents an unsanitary flooring environment for dogs. Indeed, solid flooring in many respects promotes health problems that could result in further violations of the act.

2. Section 28a.4, paragraph (2)

This paragraph requires that if solid flooring is utilized, that it, " ... must be sloped to a drain that is free of debris and in good repair." This is simply unachievable. A dog may naturally track bedding particles, hair follicles, food, feces, nose or mouth residue, dander or other materials on a regular basis and it is not possible to maintain a drain that is continuously free of debris.

3. Section 28a.4, paragraph (3)
The ACA supports section 28a.4, paragraph (3).

4. Section 28a.4, paragraph (4)
This paragraph requires that, "Flooring may not be metal or any other material with high thermal conductance." The ACA believes that such a broad prohibition has no rational basis and is not based in any verifiable animal science data. In fact, Pennsylvania's own bio-security labs and the United States' licensed inspected research labs would all fail to meet these exorbitant and unreasonable standards set by the Department. The ACA questions under what provision of Act 119 does the Department make this rule?

5. Section 28a.4, paragraph (5)
Like the observations we made concerning section 28a.3, paragraph (2), clause (iv), the ACA believes that section 28a.4, paragraph (5)'s reference to "applicable codes" is vague and should include more appropriate detail.

6. Section 28a.4, paragraph (6)
The ACA concurs with the Department's provisions outlined in section 28aA, paragraph (6).

7. Section 28a.4, paragraph (7)
This paragraph requires that, "Flooring be cleaned in accordance with section 207(h)(l4) of the act and may be subject to microbial assessment." The provision that flooring "may be subject to microbial assessment," is troubling, particularly given commonplace activities that happen in nearly all kennel operations. Consider that if the flooring is properly sanitized under the requirements of the law, but afterwards a dog urinates or defecates on the flooring, it will likely show positive signs based on the digestive tract of the dog. Should a kennel operator be subject to fines, the suspension of his license or even criminal charges because of this natural occurrence? While a kennel operator may meet the requirements of floor cleaning to the letter of the statute, this regulation may result in a violation.

8. Section 28a.4, paragraph (8)
Finally, the ACA believes that section 28a.4, paragraph (8) may, in fact, be in conflict with the requirements of paragraph (6). The Department should not create multiple conflicting standards.

RESPONSES

1. a. The Department disagrees with the interpretation of the statute set forth by this commentator. While a statute should be read in a manner that effectuates its entire intent, the provisions of subsection 207(i)(3)(ii) can not be reasonably seen to show an intent that all flooring must have openings that allow urine and feces to pass through the flooring (3 P.S. § 459-207(i)(3)(ii)). That section only allows openings between slats of no more than .5 inches (not enough for feces to pass through) and slats must be at least 3.5 inches in width, thereby providing for full support of the paw or foot of the dog. In addition, a clear reading of subsection 207(i)(3)(i), which is cited in the comment shows that the general assembly was concerned with the feet of the dogs not passing through the

flooring, which is consistent with the current Dog Law regulations (3 P.S. § 459-207(i)(3)(i)). All of the provisions of (i)(3)(i) are consistent with the General Assembly not wanting dogs to be placed on a wire type flooring that does not support the entire paw and which could allow the dogs feet to pass through the flooring. Experience of the State dog wardens and veterinarians, as well as common sense, denotes that any product that can be manufactured to have holes of a size that is intended to allow the feces of the dog to pass through, would necessarily violate the provision of subsection (i)(3)(i) that prohibits the flooring from allowing the feet of the dog pass through any opening in the floor. Therefore, a reading of all the provisions together, denotes much greater support that the General Assembly was not concerned with feces, that can and should and is required to be cleaned from the primary enclosure at least once per day or as often as necessary to provide a sanitary enclosure. The drainage concern was to allow urine and wash water to be taken away from the primary enclosure and allow it to remain dry. Small holes, such as those allowed in the slatted flooring accomplish that intent. Solid floors that are properly sloped to a drain also accomplish that intent.

The Department does not agree with the assertion that solid flooring is some how prohibited by the Act and does not meet the requirements of section 207(i)(3)(i) of the Dog Law. The plain reading of the language of the Act would not support that contention and furthermore, it could not have been the intent of the General Assembly to outlaw the ability of commercial kennels to place their dogs on a solid surface, such as concrete or tile. Solid surfaces that support the full size of the foot/paw of the dog are much more natural for a dog to walk on and be house on than a coated wire or metal flooring or even the slatted flooring specifically approved by the Act. In addition, a flat, solid surface causes fewer medical problems, such as splaying of the feet or ulceration of the pads of the dog, and are a much more natural surface for dogs to walk or be housed on than is a metal strand, wire or slatted floor.

1. b. The Department disagrees with this contention. The experts, such as the engineers, animal scientists and veterinarians consulted by the Department would not agree that solid flooring causes more medical concerns than wire, strand, or slatted flooring. There is no evidence to suggest that such a contention has any merit. Boarding kennels, humane society and other non-profit rescue kennels, as well as, standard breeding kennels currently house dogs on solid flooring with no ill effects. The commentator expresses a concern for sanitation. Solid flooring can be kept clean and sanitary as witnessed by a large number of kennels across the Commonwealth that currently utilize solid flooring in their kennels.

2. The Canine Health Board and the Department in promulgating the regulation, is under a duty to assure any alternative flooring established for alternative flooring would be based on animal husbandry practices that account for the welfare of dogs housed in commercial kennels (3 P.S. § 459-221(f)). The standards established in the proposed regulations and again set forth in the final-form regulations effectuate and carry out that duty and authority. Requiring that drains be provided to eliminate waste and wash water to name a few and that those drains be properly functioning is certainly within that very duty. To state keeping the drain free of debris is unachievable is to state that no one can maintain a functioning drain. A large number of kennels employ drains in the kennel housing facility. They are able to keep those drains free of debris and functioning. In addition, this same commentator that just opined about the necessity of

assuring feces and urine be removed from a kennel enclosure. Functioning drains are necessary to assure that is achieved. Even if the feces or urine were to fall through an opening in the floor, a functioning drain is essential to assuring the urine can be washed away. Finally, all primary enclosures must be cleaned and sanitize in accordance with the requirements of the Act. Functioning drains are essential to proper cleaning and maintenance of the kennel.

3. The Department appreciates the support.

4. The Department significantly modified the language of subsection 28a.4(4) of the proposed regulation – now 28a.8(c)(3) of the final-form regulation. The standard in subsection 28a.4(4) of the proposed regulations, now subsection 28a.8(c)(3) of the final-form regulation, does not prohibit a flooring type or option, it merely sets a standard for any flooring type presented to the Board for approval. The language has been modified to assure it sets a standard, and does not prohibit any particular type or style of flooring. In addition, it is certainly within the duty and authority of the Board under section 221 of the Dog Law. The Canine Health Board and the Department in promulgating the regulation, is under a duty to assure any alternative flooring established for alternative flooring would be based on animal husbandry practices that account for the welfare of dogs housed in commercial kennels (3 P.S. § 459-221(f)). The standards established in the proposed regulations and again set forth in the final-form regulations effectuate and carry out that duty and authority.

5. The Department has removed all language related to "applicable codes" from the final-form regulation. Any applicable Federal, Commonwealth or local codes will be enforced by the agency with such authority. The Department does not have authority to enforce such codes and has removed the reference to those codes from the final-form regulation.

6. The Department appreciates the support. The Department has modified the language in the final-form regulation in response to comments from the Independent Regulatory Review Commission that the proposed language needed clarity.

7. In the final-form regulation, the Department has modified the language of what is now subsection 28a.8(c)(7), which was 28a.4(7) of the proposed regulations, by specifically removing the language "and may be subject to microbial assessment" and replacing that language with clear and distinct language regarding the ability of the flooring to be cleaned and sanitized in concurrence with the Act and current Department regulations. The language now reiterates standards set forth in the Dog Law, at 3 P.S. § 459-207(h)(14) and the current regulations at 7 Pa.Code § 21.29.

8. In the final-form regulation, the language of both provisions has been modified to assure there are no conflicting standards.

Comments: General Conclusions

Comment:
As previously stated, the debate over the humane treatment of dogs in large kennel operations has been an emotionally driven, politically difficult course. The ACA, along with many other interested parties, has attempted to maintain civil discourse and science-based policy making as the foundation to the reforms that became necessary after a number of celebrated kennel cases were highlighted.

However difficult, state government agencies cannot and should not be used by any organization(s) or group(s) to legislate and/or regulate legitimate businesses out of existence. Many of the commercial kennels targeted by the proposed regulations have longstanding positive records with the United States Department of Agriculture. Furthermore, many kennels never had issues under Pennsylvania's Dog Law prior to the adoption of Act 119. Now, despite these reputable breeders following the law, they bear the burden of significant, additional rules.

RESPONSE

As previously stated, the regulations do not target any specific kennel. The Act requires the Department promulgate regulations regarding commercial kennels. The regulation, as required by the Act, is intended to further regulate commercial kennels in the areas of ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, as well as, establish standards for alternative flooring. All duties imposed by the Act.

With regard to the current regulations being proposed, the Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In

doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels. The regulation applies equally to all commercial kennels in the Commonwealth.

Comment:

Regulation 2-170 fails on its face to make meaningful legal arguments as to how it works in conjunction with Act 119; instead, it takes the restrictions enacted by the General Assembly and greatly expands and adds to them. Such action is not permitted by law and should be summarily rejected by IRRC. Agencies which cannot achieve policy objectives through the General Assembly should not then attempt to enact those failed objectives by regulation.

RESPONSE

Once again, the Department disagrees and has rectified in the final-form regulation many of the disagreements or assertions related to the proposed regulations. On other points still in disagreement the Department has set forth in its responses the basis for the provision.

The regulation, as required by the Act and is intended to further regulate commercial kennels in the areas of ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, as well as, establish standards for alternative flooring. All duties imposed by the Act.

With regard to the current regulations being proposed, the Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board

veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels. The regulation applies equally to all commercial kennels in the Commonwealth.

Comment:

Regulation 2-170 also clearly ignores the requirement under the Regulatory Review Act, section 5(a)(10), which requires agencies to identify the financial, economic and social impact of the regulation on individuals, business and labor communities and other public and private organizations. The reason for the Department's failure to adequately meet this standard is because of the extraordinary costs that it knows kennel operators will face in attempting to meet the unlawfully promulgated standards. Again, it appears that the goal is to drive commercial kennel operations out of business.

RESPONSE

As set forth in greater detail to other similar comments, the final-form regulatory analysis form has captured the applicable and reasonable cost of the regulation. The Department has consulted with engineers that build and design kennel housing facilities and they have provided the cost estimates of implementing the regulatory provisions, either with regard to retrofitting an existing kennel or building a new kennel. In addition,

the Department has researched once again, the cost of any measurement equipment to be utilized, reviewed training and paperwork costs and other costs estimates required in the regulatory analysis form.

The Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

Comment:

Finally, the Department fails to give appropriate attention to animal science. Regulations without context are arbitrary, and many of the provisions of Regulation 2-170 have no scientific basis for their enactment. In some instances, the requirements run afoul of modem veterinary standards.

For these reasons and more, the ACA strongly encourages IRRC to consider the forgoing in its review of the proposed regulation, giving particular attention to the standards that must be weighed under Section 5 of the Regulatory Review Act, and to reject Regulation No. 2-170 based on the arguments presented here.

RESPONSE

Not one commentator, including this commentator, that has complained about the research or consultation undertaken by the Canine Health Board or the Department has set forth any information that would support contentions that such information or research was flawed.

In contrast, the Department, on the heals of research and consultations done by the Canine Health Board, has done additional research and conducted additional consultations with named engineers and architects, that design and build kennel housing facilities, doctors of animal science, field representatives from kennel organizations and Department and Canine Health Board veterinarians. The regulations have been scrutinized by the engineers and costs have been assessed. The final-form regulation is based on this expertise and research and the provisions are supported by sound animal husbandry practices, expertise of persons in animal science, veterinarians and engineer. The final-form regulation is within the statutory authority of the Department and is supported by science and expert input and opinion.

DOG LAW ADVISORY BOARD MEMBERS COMMENTS

I. MARSHA PERELMAN – General Public Representative

Commentator:

Submitted by: Marsha Perelman
1 Cherry Lane
Wynnewood, Pennsylvania 19096

Comment: Temperature – 85 degree standard

I am writing to support the proposed regulations. Others have argued that the Canine Health Board exceeded its statutory authority by requiring that the ventilation result in temperatures not exceeding 86 degrees. However, the statute states that the ambient temperature must not rise above 85 degrees F when dogs are present, unless the requirements of paragraph 7 are met.

Paragraph 7 gives the board the authority to provide that the housing facilities for dogs are "sufficiently ventilated at all times when dogs are present to provide for their health and well being" The dog's health and well being is jeopardized when the temperature exceeds 85F, due to the risk of heat stroke and death. The statute furthermore states "The Canine Health Board shall determine the auxiliary ventilation to be provided if the ambient air temperature is 85 degrees F or higher" They acted within their authority to specify the type of auxiliary ventilation as a form of mechanical ventilation capable of reducing air temperature not to exceed 86 degrees. This protects the well being of the dog, and is within their charge to select the form of auxiliary ventilation to be utilized. It follows from the statement "that the ambient temperatures may not rise above 85 F when dogs are present unless the requirements of paragraph (7) are met," that dogs may not be present if a form of mechanical ventilation capable of reducing air temperature to no more than 86F is not utilized as required by the regulation.

RESPONSE

The Department agrees that the Canine Health Board, crafted guidelines, promulgated as proposed regulations by the Department with the intent to ensure that the kennels remained "sufficiently ventilated at all times when dogs are present" and to "determine auxiliary ventilation to be provided" if the air temperature reaches or exceeds 85 degrees. The Department, in its consultations with engineers and architects – all of whom design kennel facilities – confirmed that mechanical ventilation systems were necessary to assure the proper ventilation levels in kennel facilities. The proper levels were determined by the research done by the Canine Health Board and additional research done by the Department in drafting the final-form regulation. The research included additional discussions with engineers and architects that design and build kennel facilities, consultations with animal scientists, a meeting with an AKC senior field representative and information and input from Canine Health Board and Department veterinarians.

Although the implementation and use of temperature reducing air conditioning systems is still allowed and preferable, the Department, after viewing the comments submitted by the Office of Attorney General, Independent Regulatory Review Commission and Legislators related to requiring ambient air temperature reduction when kennel housing facilities exceeded 85 degrees Fahrenheit decided to utilize the absolute authority set forth in the statute to regulate humidity levels and thereby assure a proper environment. The authority to regulate humidity levels is absolute. The humidity levels established in the final-form regulation are based on animal husbandry and scientific information related to dog survivability and safety and heat index levels. The rationale for the approach and support for the levels established in the final-form regulation is set forth in previous answers to comments and herein.

With no temperature control, the Department sought to ascertain the proper humidity levels and auxiliary ventilations standards that would assure the health, safety and welfare of dogs confined to kennels when temperatures rise above 85 degrees Fahrenheit. Kennel owners and others have asserted in their comments that their kennel buildings can be made to "feel cooler" through the use of additional air circulation/ventilation or the mere increase of fan speed and the amount of air being pulled through the kennel building. However, science does not support such a comment or conclusion.

The Department, with the assistance of engineers and Department and Canine Health Board veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, swine or cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4

hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for heat indexes above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

Comment: Ventilation – Auxiliary Ventilation types

The board was charged with choosing the form of auxiliary ventilation to be used when the temperature exceeds 85 degrees. They chose a form of mechanical ventilation capable of reducing air temperature. They were well within their authority to do so. There are some forms of auxiliary ventilation that do not reduce air temperature (ceiling fans), and others that do (tunnel ventilation, HVAC). A performance standard of ventilation is temperature modification, and some forms of ventilation can achieve this while others do not. The board stated that the ventilation chosen must meet the temperature performance standard of 86F, by means of the ventilation system chosen.

The board was charged to protect the health and well being of the dogs in the heat, and was well within their authority to select a form of mechanical ventilation capable of reducing air temperature back down to the maximum temperature where dogs would not be at risk of heat stroke or death. This was their charge, and they successfully met it. Furthermore, while the temporary guidelines were written by the Canine Health Board, it is worth noting that these standards are promulgated by the Department of Agriculture who certainly has the authority to set this requirement.

RESPONSE

The final-form regulation now requires a set ventilation standard at all times and in all places where dogs are present, held or kept in a kennel housing facility. The final-form regulation makes it clear that auxiliary ventilation is in addition to the ventilation and humidity standards required to provide a proper environment when the temperature in the kennel housing facility is 85 degrees Fahrenheit or lower. The auxiliary ventilation provisions must be employed, along with humidity reduction, when the temperature goes

above 85 degrees Fahrenheit in the kennel housing facility. The auxiliary ventilation requirements allow, but do not require, temperature reduction through the use of an air conditioning system. The auxiliary ventilation standards and techniques are based on consultations with engineers the design and build kennel housing facilities (Learned Design, Paragon Engineering Services and an engineer from the Pennsylvania State University), as well as, discussion with animal scientists, Department veterinarians and an AKC Senior Breed Field Representative.

Comment: Temperature 85 degree standard and AWA

In addition, federal AWA [Animal Welfare Act] standards do not allow dogs to be in temperatures in excess of 85 degrees for longer than 4 hours. As a matter of practicality, the board was right to not choose a 4 hour window where wardens would have to stay at one kennel for four hours. This is a practical impossibility that would render the law unenforceable.

RESPONSE

The Department agrees with this comment and has set forth the AWA standards in its response to other similar comments. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations. The Department does not believe it should set a standard that would be in absolute conflict with the temperature requirements of the Federal Code of Regulations, and in fact would be less stringent than the Federal Code of Regulations.

However, since the authority to require air temperature reduction has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require temperatures within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from this commentator and from the ASPCA, IRRC and Legislators.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

The Department can now regulate the four hour window because there is technology available to measure temperature and humidity levels in kennels on an hourly basis for up to 3 years at a time. This technology will be employed by the Department, as set forth in the final-form regulation.

In short, the Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

Comment: Temperature – Correct ranges

It is well known that the federal AWA [Animal Welfare Act] standards are meant as minimum standards, and States are encouraged to set more stringent requirements. Dr. Lila Miller her book Shelter Medicine for Veterinarians and Staff states that "These [AWA] guidelines were not developed with shelters in mind and these extremes in temperature should be avoided" (Dr. Miller, 104). Rather she states that the correct range in temperature for housing dogs is 65-75F. "Environmental temperatures should be kept as constant as possible. Humidity levels should be comfortable, and the temperature in rooms housing healthy dogs and cats should be 65-75F" (Miller, 104). Temperature maximums are particularly important for brachycephalic dogs and arctic breeds who would be at particular risk of heat stroke even at temperatures less than 85F, but for all dogs 85 is a maximum value above which their health and well being is in jeopardy, the charge the board was given to protect.

RESPONSE

As stated in responses to previous comments related to temperature requirements and requiring air temperature reduction when temperatures rise above 85, degrees Fahrenheit, the Department believes temperature reduction is the most preferable approach to dog health and safety in any kennel. The Department also agrees that kennels regulated by the United States Department of Agriculture, Animal Welfare Act and regulations, must already engage in such temperature reduction and should have the mechanisms in place to meet those standards.

However, since the authority to require air temperature reduction has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require temperatures within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. Instead, the Department has utilized its absolute authority to regulate humidity levels and

through research and consultation with experts from engineers to animal scientists to veterinarians has established heat index and humidity level requirements. The humidity levels established in the final-form regulation are based on animal husbandry and scientific information related to dog survivability and safety and heat index levels. The rationale for the approach and support for the levels established in the final-form regulation is specifically set forth in previous answers to comments.

Comment: American Veterinary Medical Association Standards (temperature and ventilation)

The PVMA [Pennsylvania Veterinary Medical Association] has argued against aspects of this rulemaking, but the regulations are in line with the PVMA's national organization (American Veterinary Medical Association's) publicized guidelines referenced below:

1. The AVMA [American Veterinary Medical Association] policy Companion Animal Care Guidelines (http://www.avma.org/issues/policy/companion_animal_care.asp) states "Generally for dogs and cats, the ambient temperature should be kept above 60 degrees Fahrenheit (15.5 degrees Celsius), and below 80 degrees Fahrenheit (26.6 degrees Celsius)..."

2. The AVMA [American Veterinary Medical Association] policy Companion Animal Care Guidelines, (http://www.avma.org/issues/policy/companion_animal_care.asp) with regard to air exchanges states, "...Ten to fifteen room air changes per hour are generally considered adequate ventilation for animal facilities. Room air should not be recirculated unless it has been properly treated. If recirculating systems or other energy-recovery devices are used, these systems must be adequately maintained." If the regulations contemplate allowing recirculated air, these guidelines should be followed. The air must be filtered, and systems maintained.

RESPONSES

1. As stated in responses to previous comments related to temperature requirements and requiring air temperature reduction when temperatures rise above 85, degrees Fahrenheit, the Department believes temperature reduction is the most preferable approach to dog health and safety in any kennel. The Department also agrees that kennels regulated by the United States Department of Agriculture, Animal Welfare Act and regulations, must already engage in such temperature reduction and should have the mechanisms in place to meet those standards.

However, since the authority to require air temperature reduction has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require temperatures within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. Instead, the Department has utilized its absolute authority to regulate humidity levels and through research and consultation with experts from engineers to animal scientists to

veterinarians has established heat index and humidity level requirements. The humidity levels established in the final-form regulation are based on animal husbandry and scientific information related to dog survivability and safety and heat index levels. The rationale for the approach and support for the levels established in the final-form regulation is specifically set forth in previous answers to comments.

2. The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. In general, paragraphs (1), (2), (3) and (8) of section 28a.2 the proposed regulations has been extensively modified in the final-form regulation.

Air changes per hour have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in the final form regulation. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. Although 100% fresh air circulation is not prohibited by the final-form regulation, the change to the regulation was made after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate

in Pennsylvania would make it too expensive and difficult to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The ventilation standards now established in the final-form regulation are more easily measured and verified, continued to account for the health and safety of dogs housed in commercial kennels and require or allow kennel owners to increase or reduce the air circulation in a kennel based on the number of dogs housed in the kennel facility.

There are two general reasons behind these changes. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification of a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will require and allow kennel owners to design their ventilation systems to have the total capacity required to assure circulation of the proper amount of air required by the regulations for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs housed or kept in the kennel facility. In other words, the system will be easier to design and less costly to operate. While still requiring the system to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility, it will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. This not only lowers operation costs, but sets a proper standard to assure dogs are not subjected to a circulation standard that is too strong or unable to be enforced. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment: Ventilation – Illness list

The list of illnesses referenced in the proposed regulation is an appropriate performance standard for ventilation because the dogs are subject to increased illnesses when ventilation is inadequate, and disease transmission and stress in dogs increases. Shelters with inadequate air changes experience higher levels of respiratory and other illness. Therefore, I support the use of this list of health complications in dogs to monitor the adequacy of the ventilation.

RESPONSE

Section 28a.2(9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress has been modified in the final-form regulations. The corresponding provisions of the final-form regulation are found at subsection 28a.2(h). The Department discussed these issues with animal scientists from the Pennsylvania State University, as well as, with Department and Canine Health Board veterinarians. The number and type of conditions in dogs that may denote poor ventilation has been reduced and are consistent with the suggestions of the experts consulted. In addition, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel

where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Comment: Solid Flooring and Temperature of Solid Flooring

I support the solid flooring. Many dogs have come from breeding facilities having never set foot on solid ground. Some even have difficulty walking on solid ground. Non-solid surfaces for dogs are unnatural for dogs and risk injury to the feet. In addition, I support that the surface not be metal, as metal surfaces would heat and cool excessively. The rule should also contain a temperature requirement for the floor that it not be too hot or too cold. A floor temperature of 50-85 F should be set to match the ambient air temperature, or more conservatively 65-75 F to protect the health and well being of the dogs.

RESPONSE

The Department agrees that solid flooring is an appropriate and more natural surface for dogs. The Department has seen the injuries that can result from dogs being housed on coated metal strand flooring.

There have been comments that assert either the Board has no authority to approve solid flooring in the regulations or have asserted that the Board must address all alternative flooring types in the final-form regulation. The Department has responded by setting forth the clear language of the Act.

The Board has the authority, but is under no obligation, to address individual alternative flooring requests or types under section 207(i)(3)(iii) of the Dog Law. That provision clearly states the Board "may" address. The Board is under no obligation to address such requests, either through the regulations or through another avenue such as a public meeting or hearing of the Board. (3 P.S. § 459-207(i)(3)(iii)). If the Board chooses to address a particular type of flooring, the Board can determine based on its expertise whether or not that particular type of flooring meets the standards of the Act, set forth at section 207(i)(3)(i) and the animal husbandry and welfare requirements established at section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 221(f)).

To the extent the Canine Health Board, and hence the Department, did address alternative flooring in the final-form regulation, it did so by establishing requirements that are based on animal husbandry, their expertise as veterinarians and input received during their deliberations on the Guidelines. The Department included the standards set by the Canine Health Board in the initial guidelines and the proposed regulations – such

as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – in the final-form regulations, but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department veterinarians and veterinarians from the Canine Health Board, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices. This should add some clarity to the requirements for alternative flooring.

Other commentators have asserted that solid flooring is prohibited by the statute. The Department disagrees and responded stating that subsection 207(i)(3)(ii) can not be reasonably seen to show an intent that all flooring must have openings that allow urine and feces to pass through the flooring (3 P.S. § 459-207(i)(3)(ii)). That section only allows openings between slats of no more than .5 inches (not enough for feces to pass through) and slats must be at least 3.5 inches in width, thereby providing for full support of the paw or foot of the dog. In addition, a clear reading of subsection 207(i)(3)(i), which is cited in the comment shows that the general assembly was concerned with the feet of the dogs not passing through the flooring, which is consistent with the current Dog Law regulations (3 P.S. § 459-207(i)(3)(i)). All of the provisions of (i)(3)(i) are consistent with the General Assembly not wanting dogs to be placed on a wire type flooring that does not support the entire paw and which could allow the dogs feet to pass through the flooring. Experience of the State dog wardens and veterinarians, as well as common sense, denotes that any product that can be manufactured to have holes of a size that is intended to allow the feces of the dog to pass through, would necessarily violate the provision of subsection (i)(3)(i) that prohibits the flooring from allowing the feet of the dog pass through any opening in the floor. Therefore, a reading of all the provisions together, denotes much greater support that the General Assembly was not concerned with feces, that can and should and is required to be cleaned from the primary enclosure at least once per day or as often as necessary to provide a sanitary enclosure. The drainage concern was to allow urine and wash water to be taken away from the primary enclosure and allow it to remain dry. Small holes, such as those allowed in the slatted flooring accomplish that intent. Solid floors that are properly sloped to a drain also accomplish that intent.

The Department does not agree with the assertion that solid flooring is some how prohibited by the Act and does not meet the requirements of section 207(i)(3)(i) of the Dog Law. The plain reading of the language of the Act would not support that contention and furthermore, it could not have been the intent of the General Assembly to outlaw the ability of commercial kennels to place their dogs on a solid surface, such as concrete or tile. Solid surfaces that support the full size of the foot/paw of the dog are much more natural for a dog to walk on and be house on than a coated wire or metal flooring or even the slatted flooring specifically approved by the Act. In addition, a flat, solid surface causes fewer medical problems, such as splaying of the feet or ulceration of the pads of the dog, and are a much more natural surface for dogs to walk or be housed on than is a metal strand, wire or slatted floor.

With regard to metal flooring and thermal conductivity comments, the Department, in response to these comments modified the language of that provision to establish a more objective standard in the final-form regulation.

Comment: Flooring Requirements – Tenderfoot Flooring

Tenderfoot flooring is a form of covered wire, and is prohibited in the statue. It is also not a flat surface and I have concerns about the long term effects of the dog's standing on this rounded surface. In addition the spaces in the tenderfoot flooring will allow some dog's feet to pass through the openings which is strictly prohibited by the statute. Therefore this flooring and other similar open flooring systems should not be considered adequate.

RESPONSE

The Canine Health Board and the Department, under the authority established by sections 207(i)(3)(iii) and 2221(f) of the Dog Law (3 P.S. §§ 459-207(i)(3)(iii) and 221(f)) has addressed and set forth specific standards for alternative flooring in the final-form regulation. The standards are based on animal husbandry practices, expertise of the Canine Health Board veterinarians and expertise of Department veterinarians.

With regard to approval of a specific type or brand of flooring, the Canine Health Board may address requests for alternative flooring (3 P.S. § 459-207(i)(3)(iii)) and has voted to set a date for a public meeting at which it will hear comments on five different types of flooring submitted for its review. Tenderfoot/Dek-Cellent flooring is one of the flooring types that was submitted for review and will be considered at a public meeting of the Board.

As stated in response to the previous comment, if the Board elects to consider such flooring alternatives, it has the authority and duty to review them under the standards of the Act and animal husbandry and welfare standards. If the Board chooses to address a particular type of flooring, the Board can determine based on its expertise whether or not that particular type of flooring meets the standards of the Act, set forth at section 207(i)(3)(i) and the animal husbandry and welfare requirements established at section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 221(f)).

Comment: Lighting – natural light

Finally, windows should be present and operable. PA building code requires that windows are 8% of the floor space, and is a reasonable level.

Natural light is important to the dog's well being. The board was well within their authority to set natural light standards, since it is only the diurnal aspect that is either natural or artificial. This does not excluded that natural light is required and important for the well being of the dogs. The board was within their charge to specify lighting ranges to include a mixture of natural and artificial light to protect their well being. The statute states "Lighting must be uniformly diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals." Since it was the charge of the Canine Health Board to set the appropriate lighting ranges they acted within their authority to require natural and artificial light as a means of

protecting their well being. Again, it is important to note that while these standards are set by the Board they are promulgated by the Department of Agriculture which clearly has the needed authority to set these levels, were there any question of authority. Nevertheless, as previously stated, the board acted within their authority to protect the well being of the dogs.

RESPONSE

The final-form regulation no longer sets or requires a minimum amount of external windows and skylights in order to aid in meeting the lighting standards of the regulations. Under the authority and parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, which is the authority under which this regulation is promulgated, the Department believed it had no statutory authority to require visual access to windows for dogs housed in kennel facilities.

The Department appreciates the support for a requirement for natural light and believes, based on input from veterinarians that natural light is essential to dog health, welfare and proper development. However, consistent with the clear language of the Act, the final-form regulations do not require natural light in kennels where dogs have access to natural light through unfettered access to outdoor exercise areas.

In the case of a kennel that has received permission to house the dogs inside the kennel on a permanent basis, including exercising the dogs indoors, the Department does still requires there by external openings and doors that provide sunlight and can be opened in the case of a mechanical ventilation malfunction.

The need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight.

The final-form regulation does require artificial light to be provided through full spectrum lighting, which is the type of lighting that most closely imitates the spectrum and wavelengths of light receive from the sun. The regulations and the Act require that dogs be given a diurnal cycle of light and thereby allows for proper rest periods over a 24-hour cycle

Comment: Ventilation – Windows

It is important that the windows must be operable in case of a mechanical malfunction. Even a back up generator will not provide the certainty that operable windows provide for ventilation in an emergency.

RESPONSE

The Department agrees with this comment and it is addressed in the final-form regulation – 28a.2(g).

Comment: Lighting – Shade

The amount of shade should be to allow all the dogs to use it simultaneously. This was as written in the temporary guidelines, but weakened when the regulation was promulgated.

RESPONSE

The requirements that were in subsection 28a.3 (i)(iv) related to shading of the outdoor exercise area have been removed from the final-form regulation. The Department agrees it could require such a provision in its general regulations that pertain to all kennels, but has no authority to require shade under the authority of sections 207(h)(6)(7),(h)(8) or (i)(3) (3 P.S. §§ 459-207(h)(6)(7)(8) and (i)(3)), which are the provisions of the Act under which these regulations are required to be promulgated.

Comment: Open Flame

In addition the provision that there be no open flames was stricken from the temporary guidelines when promulgated. This is an important provision in terms of the safety of the dogs that should be reinserted into the final regulation.

RESPONSE

The Department has chosen to address the lighting provisions by setting forth standards that require the appropriate range of lighting (illumination), the appropriate type of artificial lighting for dog health (full-spectrum) and appropriate safety and welfare standards of keeping lighting sources in good repair.

Comment: Lighting – View of outside environment

The board also required that the dogs not having exercise outdoors (by reason of a waiver from the department) be provided with a view of the external environment, to provide for their well being. This was stricken prior to promulgation of the temporary guidelines, and should be added back into the final rule.

RESPONSE

Under the authority and parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, which is the authority under which this regulation is promulgated, the Department believed it had no statutory authority to require visual access to windows for dogs housed in kennel facilities.

Comment: Ventilation – Excess wind

I further believe that the dogs must be protected from excessive wind from the source of the fan. This should be added.

RESPONSE

Engineers consulted by the Department, including one consulted initially by the Canine Health Board, have opined that the ventilation and auxiliary ventilation provisions established by the final-form regulations will not result in excessive wind. If an auxiliary fan is placed in such a manner that it would not allow a dog to find shelter from it in his primary enclosure, then the Department has the authority under its current regulations to take action to correct that problem.

Comment: Definitions added to Guidelines

Furthermore the definitions section appears to be a new addition from the temporary guidelines to the proposed regulations, and should be reviewed.

RESPONSE

The proposed stage of rulemaking provides for such review and comments have been addressed. In addition, based on comment received during the proposed stage of rulemaking and consultation with engineers and Canine Health Board veterinarians, some definitions have been further modified in the final-form regulation and new definitions have been set forth to provide clarity. Furthermore, it should be noted that definitions are intended to add clarity to the substantive provisions of a statute or a regulation and are not themselves substantive provisions.

Comment: Scientific Basis

Some have argued that a scientific basis does not exist for these standards, but the Canine Health Board consulted with numerous engineers, shelter medicine specialists and agricultural experts. They provided an exhaustive list of references that speak to the scientific basis upon which these standards were developed.

RESPONSE

The Department agrees with this comment and not only appreciates but utilized that research in addressing concerns and issues and modifying the final-form regulation. The Department also did additional research and relied upon expert advice from engineers and architects (many of which were consulted by the Board) that design kennel housing facilities, animal scientists and veterinarians, including meeting with Canine Health Board veterinarians to discuss their views and gather their expertise on the comment submitted to the Department. The final-form regulation utilizes the research of the Canine Health Board and additional research to support the requirements of the final-form regulation.

II. THOMAS G. HICKEY, Sr. – General Public Representative

Commentator:

Submitted by: Thomas G. Hickey, Sr.
Member, PA Dog Law Advisory Board and DogPAC Chairman
PO Box 406
Lima, PA 19037-0406

Background

I am a member of the Governor's Dog Law Advisory Board as well as Chairman of DogPAC, an animal-advocacy and political action committee in Pennsylvania and I am writing to support the proposed regulations.

Comment: Ventilation – 85 degree standard

Others have argued that the Canine Health Board (CHB) exceeded its statutory authority by requiring that the ventilation result in temperatures not exceeding 86 degrees. However, the statute states that the ambient temperature must not rise above 85 degrees F when dogs are present, unless the requirements of paragraph (7) are met. Paragraph 7 gives the board the authority to provide that the housing facilities for dogs are "sufficiently ventilated at all times when dogs are present to provide for their health and well being" The dog's health and well being is jeopardized when the temperature exceeds 85F, due to the risk of heat stroke and death. The statute furthermore states "The Canine Health Board shall determine the auxiliary ventilation to be provided if the ambient air temperature is 85 degrees F or higher." They acted within their authority to specify the type of auxiliary ventilation as a form capable of reducing air temperature not to exceed 86 degrees. This protects the well being of the dog, and is within their charge to select the form of auxiliary ventilation to be utilized. It follows from the statement "that the ambient temperatures may not rise above 85 F when dogs are present unless the requirements of paragraph (7) are met," that dogs may not be present if a form of mechanical ventilation capable of reducing air temperature to no more than 86F is not utilized as required by the regulation.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Ventilation – Auxiliary Ventilation types

The CHB was charged with choosing the form of auxiliary ventilation to be used when the temperature exceeds 85 degrees. They chose a form of mechanical ventilation capable of reducing air temperature. They were well within their authority to do so. There are some forms of auxiliary ventilation that do not reduce air temperature (ceiling fans), and others that do (tunnel ventilation). The board was charged to protect the health and well-being of the dogs in the heat, and was well within their authority to select a form of mechanical ventilation capable of reducing air temperature back down to the maximum temperature where dogs would not be at risk of heat stroke or death. This was their charge, and they successfully met it. Furthermore, while the temporary guidelines were written by the CHB, it is worth noting that these standards are promulgated by the Department of Agriculture who certainly has the authority to set this requirement.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Temperature 85 degree standard and AWA

Additionally, federal Animal Welfare Act (AWA) standards do not allow dogs to be in temperatures in excess of 85 degrees for longer than 4 hours. As a matter of practicality, the board was right to not choose a 4 hour window where wardens would have to stay at one kennel for four hours. This is a practical impossibility that would render the law unenforceable.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Temperature – Correct ranges

However, it is well known that the federal AWA standards are meant as minimum standards, and States are encouraged to set more stringent requirements. Dr. Lila Miller her book Shelter Medicine for Veterinarians and Staff states that "These [AWA] guidelines were not developed with shelters in mind and these extremes in temperature should be avoided" (Dr. Miller, 104). Rather she states that the correct range in temperature for housing dogs is 65-75F. "Environmental temperatures should be kept as constant as possible. Humidity levels should be comfortable, and the temperature in rooms housing healthy dogs and cats should be 65-75F" (Miller, 104). Temperature maximums are particularly important for brachycephalic dogs and artic breeds who would be at particular risk of heat stroke even at temperatures less than 85F, but for all dogs 85 is a maximum value above which their health and well being is in jeopardy, the charge the board was given to protect.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Ventilation – Illness list

In addition the list of illnesses is an appropriate performance standard for ventilation because the dogs are subject to increase illnesses when ventilation is inadequate, and disease transmission and stress in dogs increases. I support the use of this list of health complications in dogs to monitor the adequacy of the ventilation.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Solid Flooring and Temperature of Solid Flooring

Furthermore, I wholeheartedly support the solid flooring requirements. Many dogs have come from breeding facilities having never set foot on solid ground. Some even have difficulty walking on solid ground. Non-solid surfaces for dogs

are unnatural for dogs and risk injury to the feet. In addition, I support that the surface not be metal, as metal surfaces would heat and cool excessively. The board should consider a temperature requirement for the floor that it not be too hot or too cold. A floor temperature of 50-85 F should be set to match the ambient air temperature, or more conservatively 65-75 F to protect the health and well being of the dogs.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Flooring Requirements – Tenderfoot Flooring

Tenderfoot flooring is a form of covered wire, and is prohibited in the statue. It is also not a flat surface on which the dog's foot may rest, and will allow for the passage of some dogs feet through the openings. Therefore it is strictly prohibited by the statute.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Lighting – natural light

Finally, windows should be present and operable. PA building code requires that windows are 8% of the floor space, and is a reasonable level.

Natural light is important to the dogs well-being. The board was well within their authority to set natural light standards, since the law only stipulates that that the diurnal aspect be either natural or artificial. The board was within their charge to specify lighting ranges to include natural and artificial light to protect their well being. The statute states "Lighting must be uniformly diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals." Natural light is needed to provide for the well being of the dogs. It was within the authority of the Canine Health Board to set the appropriate lighting ranges and also well within their authority to require natural and artificial light as a means of protecting the dog's well-being.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Ventilation – Windows

It is important that the windows be operable in case of a mechanical malfunction. Even a back up generator will not provide the certainty that operable windows provide for ventilation in an emergency.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Lighting – Shade

The requirement to provide shade from sunlight is also very appropriate when dog's are outside.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Open Flame

In addition the provision that heating sources cannot have open flames needs to be added back into the regulations to protect dog's from fires. It is important to note that for many hours each day there are not people around to monitor the kennels and open flames are a potential disaster waiting to happen. This is an critical provision in terms of the safety of the dogs that should be reinserted into the proposed.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Lighting – View of outside environment

The board also required that the dogs not having exercise outdoors (by reason of a waiver from the department) be provided with a view of the external environment, to provide for their well-being. This was stricken prior to promulgation of the temporary guidelines, and should be added back into the final rule.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Ventilation – Excess wind

I further believe that the dogs must be protected from excessive wind from the source of the fan. This should be added.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

Comment: Definitions added to Guidelines

Furthermore, the definitions section appears to be a new addition from the temporary guidelines to the proposed regulations, and should be reviewed.

RESPONSE

The Department sets forth the same response here as was given to this identical comment set forth by Board Member Marsha Perelman above.

III. JOAN BROWN

Commentator:
Submitted by: Joan Brown
Member, PA Dog Law Advisory Board and CEO, Humane League of Lancaster County

Comment: General in Support

The Humane League of Lancaster County fully supports and urges implementation of Regulation 2785 as developed by the Canine Health board. This is a critical piece of the revised Dog Law, providing for specific standards of ventilation, lighting and flooring in commercial kennels. These standards will protect dogs from excessive heat and cold, life in darkness or glaring artificial light and crippling conditions from standing on wire and other substandard flooring.

RESPONSE

The Department appreciates the support of this commentator. The language of the final-form regulation, although based on and still retaining many of the overall ideas and standards of the proposed regulation, has been significantly modified to provide additional clarity, more objective standards and provisions which allow for more effective and uniform enforcement. The final-form regulation contains additional sections that break the regulation down into the basic elements set forth in the statute (ventilation, humidity, auxiliary ventilation, ammonia levels, carbon monoxide, lighting and flooring.

In addition, the ventilation provisions measure air circulation in cubic feet per minute per dog (CFM) not in exchanges per hour. This measurement is much easier to check, assess and enforce and allows kennel owners to adjust air circulation levels dependent on the number of dogs housed in the kennel housing facility. The ventilation section also sets forth clear standards and guidance for what constitutes a violation and clear standards and guidance with regard to a kennel owner's duty if a mechanical failure should occur.

The humidity section sets forth clear humidity standards that are based on scientific research, data and practices.

The auxiliary ventilation provisions make it clear that air conditioning to reduce temperatures may be utilized when temperatures rise above 85 degrees Fahrenheit, but is not required. It also sets forth examples of other techniques that are currently being utilized in kennels.

The ammonia provisions set forth clear levels and measurement standards, all of which are based on consultation with and research by experts (engineers, animal scientist and veterinarians).

The lighting provisions now establish clear levels and standards for either natural or artificial lighting or both.

Finally, the flooring section is broken down into three subsections. The first two subsections set forth the flooring standards contained in section 207(i)(3)(i) and section

207(i)(3)(ii) of the Dog Law (3 P.S. §§ 459-207(i)(3)(i) and (i)(3)(ii)). The third section delineates the legal authority and the standards for alternative flooring. These changes all incorporate language that is clear and establishes more objective standards.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels. The regulation applies equally to all commercial kennels in the Commonwealth.

IV. JOHN GIBBLE

Commentator:

Submitted by: John Gibble
Member Dog Law Advisory Board
President, Elizabethtown Beagle Club
Past President, Northeast Beagle Gundog Federation
Past President, Pennsylvania Beagle Gundog Association
829 Trail Road North
Elizabethtown, Pennsylvania 17022

Background:

Following are comments on the proposed regulations, developed by the Canine Health Board, to fulfill sections of Act 119 in the Dog Law. I am submitting these comments as a member of the Commonwealth's Dog Law Advisory Board.

Comment:

While I do not operate a licensed kennel, nor do I claim to represent commercial kennel interests, I am heartily concerned that the standards outlined in the proposed regulations would "drift" to affect non-commercial kennels, either officially or informally.

RESPONSE

The standards set forth in the regulations apply and legally can only apply to commercial kennels. While the Department has separate overall authority to promulgate regulations that apply generally to all kennels, these particular regulations are promulgated under the authority established by section 207(h)(6)(7)(8) and (i)(3) and 221(f) of the Dog Law and apply only to commercial kennels.

If the Department chose to revise its current general regulations, such revisions would have to be done through the regulatory process and would have to comport to the authority granted by the Dog Law.

Comment: Cost estimates

In the estimates for costs, I believe the Bureau has woefully underestimated the costs to the Bureau and the Dog Law Restricted Account. Not only will the Bureau need to purchase the necessary equipment to measure temperature, relative humidity, ammonia, airborne particulate matter, and air exchange, the Bureau will also need to train personnel to a reasonable level of competency in taking measurements, and maintain and regularly calibrate equipment. With numerous measurements required at each facility (eg. 10% of dogs in a facility) inspections could take a full day to several days to complete. With the numerous measurements also comes detailed recordation of results.

RESPONSE

The regulatory analysis form that accompanies the final-form regulation does set forth the estimated costs associated with the final-form regulation. The final-form regulations make changes that have reduced the equipment and training costs associated with compliance and enforcement.

The final-form regulation removes the necessity of the Department to purchase any equipment to measure particulate matter or carbon monoxide levels. Standard carbon monoxide monitors will be required to be installed in kennels that utilize a carbon monoxide producing heating or cooling source, but there is no set level to be measured.

The final-form regulation requires air flow to be measured in cubic feet per minute per dog, as was the suggestion of the architects, engineers and animal scientists consulted by the Department. This allows an engineer to verify the ventilation and air circulations systems, as well as the humidity systems meet the standards of the regulation and allows the Department to check the capacity or CFM rating on the ventilation and air circulation equipment employed by the kennel owner to assure it meets the required air circulation values. Therefore, the Department will purchase some equipment to measure air circulation, but such equipment will be utilized to spot check kennel facilities and if the dogs in the kennel exhibit signs of illness or stress that may be associated with ventilation problems, as set forth more fully at subsection 28a.2(h) of the final form regulations.

The Department will have to purchase ammonia level monitors and will purchase temperature and humidity monitoring devices to be installed in kennels as set forth at subsections 28a.4(b)(4) and (5) of the final-form regulation. In deciding to purchase the temperature and humidity monitoring devices the Department took into account the comments of kennel owners and other related to the cost to the kennel owners of having to purchase such equipment to monitor their kennels and the issue of standardization of

such equipment so that measurements are taken in the same manner and by the same type of equipment. The Department will bear the cost of buying, calibrating, replacing and installing the monitors and kennel owners will be able to continually check the monitors to assure their kennel facility is in compliance with the standards of the regulations. regulation.

Finally, light meters will be purchased to assure the lighting in the kennels provides the appropriate footcandle range of lighting.

The total number of all such devices and the costs to buy, calibrate and train wardens in their use is contained in the regulatory analysis form that accompanies the final-form

The Department did not believe it would have to employ any additional dog wardens to carry out inspections under the proposed regulations. The final-form regulations employ means and mechanisms, as set forth above, which will require less time to monitor, inspect and assure compliance during a kennel inspection. The Department has no plans to employ any additional dog wardens, as it believes the current staff of dog wardens is sufficient to assure at least two kennel inspections each year and to respond to complaints or conduct follow-up inspections of non-compliant kennels.

The kennel owner may elect to purchase a light meter or ammonia level meter or both. The kennel owner will be able to utilize the Department's temperature and humidity monitoring devices to assure compliance with those standards and CFM standards for air circulation will be certified by a professional engineer and can be calculated based on the cubic feet of each area of the kennel housing dogs and the total number of dogs housed in that area of the kennel. The capacity rating is listed on fans and other forms of mechanical ventilation and the kennel owner can match those standards without buying any monitoring equipment. The kennel owner can adjust the level of the air circulation based on the number of dogs in the kennel at any one time, and no additional equipment or monitoring devices are necessary for such calculations. Standard carbon monoxide monitors, for those kennels that need to install them, will have to be purchased, but actual carbon monoxide level readings will not have to be taken, so no additional devices are necessary.

The cost of the mechanical ventilation system will vary according to the sophistication and complexity of the system the kennel owner decides to install. However, the Department has consulted several engineers/engineering companies that build kennel buildings and asked them to assess the cost of installing a ventilation system that would meet all the ventilation requirements of the final-form regulation. The costs are based on a kennel owner having to purchase and install all of the equipment, even though most kennel owners, especially those subject to United States Department of Agriculture regulations, should already have some form of mechanical ventilation, auxiliary ventilation and – in the case of USDA – temperature control devices already installed in the kennel. The Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)).The Federal Animal Welfare Act Regulations further require that temperatures in enclosed or partially enclosed housing structures be maintained between 50-85 degrees Fahrenheit (9 CFR §§ 3.2(a) and 3.3(a)) and that proper ventilation and lighting be provided (9 CFR §§ 3.2(b) and (c) and 3.3(b) and (c)). Therefore, the costs estimates, which are set forth in the regulatory analysis form that accompanies the final-form

regulation will necessarily be higher than those incurred by such kennel owners, because they should already have systems in place. The regulatory analysis form will set forth the greatest cost that could be incurred for a system that would meet the standards of the regulations.

Comment: Research and studies justifying requirements
The regulation should cite research or regulation in establishing limits for relative humidity. These ranges of acceptable relative humidity appear arbitrary and at a(2) and a(3) the ranges overlap. Similarly, the limit for ammonia levels (10 ppm) seems arbitrary.

RESPONSE

The regulation itself is not the appropriate place to list the research. However, the preamble describing the changes and reasons for the changes and the regulatory analysis form accompanying the final-form regulation set forth the research and persons consulted regarding each provision. In addition, this comment and response document has set forth information regarding the research done or persons consulted related to specific comments regarding the rationale behind humidity, ventilation or ammonia levels.

For instance, with regard to the humidity standards established by the final-form regulations, the general standard of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

With regard to the humidity levels when temperatures are greater than 85 degrees Fahrenheit, the Department, with the assistance of consultations with the engineers listed above, Department and Canine Health Board veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, swine or cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the

evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for heat indexes above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

With regard to ammonia levels, The Department consulted with engineers and architects related to the ammonia levels established by the proposed regulation and with regard to the ability to measure ammonia levels. In addition, the Department consulted with veterinarians and animal scientists and did its own research with regard to commonly accepted levels of ammonia in animal operations such as swine operations. The engineers and architects all believed that if kennels were properly ventilated and achieved the air circulation values established in the regulations, then ammonia levels should not be a problem in the kennel. The Act, however, requires the Department to establish the proper ammonia levels for dogs housed in kennels. Discussions with veterinarians and research done by veterinarians on the Canine Health Board affirm that ammonia levels of 20 part per million or higher will cause respiratory and eye irritation and problems in animals. The veterinarians suggested the levels be set at some point below 20 parts per million and the consensus was that a level of 15 parts per million would both account for proper animal health and welfare and would be measurable. Ammonia levels are measured in the swine industry and can be accurately measured at levels of 15 parts per million. The Department's research also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel. That Act

establishes parameters that do not allow dogs in kennels to be housed in any primary enclosure that is more than 48 inches high for dogs under twelve weeks of age or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department believes ammonia measurements should be taken at the height of the dogs.

The same type of research and consultation went into establishing the revised ventilation, auxiliary ventilation and lighting ranges and provisions of the final-form regulation. This is in stark contrast to comments received, which disputed or criticized the Canine Health Board and the Department for the standards, but offered no supporting documentation or evidence that refuted the standards established.

Comment: Ventilation – Carbon monoxide detectors

In requiring carbon monoxide detectors, the Canine Health Board exceeded its authority, as there is no mention of regulating carbon monoxide in Act 119.

RESPONSE

The Department agrees with the Canine Health Board, that carbon monoxide levels should at the very least be monitored for safety purposes and to assure proper ventilation and air circulation is occurring within a kennel that utilizes a carbon based form of heating or mechanical ventilation. The engineers the Department consulted believe that carbon monoxide levels will take care of themselves if the kennel is properly ventilated and meets the air exchange rate criteria of the regulations. However, carbon monoxide gas can build up in any enclosed building where carbon based mechanical ventilation or heating equipment is in use. Carbon monoxide is colorless and odorless and is deadly. The animal scientists consulted and the veterinarians believe it is proper to monitor this gas to assure the welfare of the dogs. The regulations only require that carbon monoxide detectors be installed. If carbon monoxide levels rise to the point the detectors are triggered the kennel has a problem with ventilation or air exchange in that part of the kennel housing facility and needs to take action to assure the health, safety and welfare of the dogs housed in that area of the kennel. Section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)) states in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and prevent moisture condensation …the appropriate ventilation…ranges shall be determined by the Canine Health Board. One of the purposes of ventilation is to exchange or re-circulate air in a manner that removes pathogens, including carbon monoxide and replenishes oxygen. The regulatory requirement is inexpensive and necessary to assure the health, safety and welfare of dogs housed in kennels, which is the general overall duty and authority of the Canine Health Board under section 221(f) of the Act (3 P.S. § 459-221(f)).

Comment: Ventilation 28a.2(6) – Mechanical malfunction

At a(6) a commercial kennel operator is required to notify the Bureau in case of a malfunction in a mechanical ventilation system. It might be prudent if the failure resulted in the facility failing to meet temperature or air quality requirements to record such a failure. However, it seems arbitrary that a kennel operator would have to notify the Bureau if a passing thunderstorm caused a temporary power outage. Will the Bureau maintain a 24-hour call-in number for notification or should there be a sufficient time period allowed prior to notification? Will the Bureau be sending out an HVAC

technician to repair the problem, or should the kennel operator call his contractor before he calls the Bureau? If there is a power outage, would it not be difficult for a kennel operator to call the Bureau for notification, since it is likely that his telephone service would be down as well?

RESPONSE

The final-form regulation has significantly modified the provisions of the proposed regulations related to mechanical malfunction. Section 28a.2(g) establishes the specific steps and criteria that must met by the kennel owner if there is a mechanical malfunction and sets reasonable time periods for contacting the Department. One of the criteria established is that there be windows, doors or other openings that can be opened to provide natural ventilation in the case of a system failure. Natural ventilation is allowed in that instance. In addition, the final-form regulation requires that the kennel owner notify the Department of the malfunction, provide other information and notify and consult his veterinarian regarding dog health issues that may occur because of the malfunction. The kennel owner must also notify the Department when the malfunction has been corrected. The kennel owner is free to consult any professional necessary to correct the problem. There is no need to "consult" with the Department.

Comment: Ventilation 28a.2(7) – Particulate matter

At a(7) the proposed regulations would require kennel operators to maintain less than 10 milligrams per meter cubed of particulate matter, including dander, hair, food, bodily fluids, and other sources from the primary enclosure. Again, there should be a reference or citation on the significance of 10 ppm. Further, it is confusing that the regulations should change up metrics from parts per million to milligrams per meter cubed. How will the Bureau determine the source of particulate matter? Will there be a means of distinguishing ambient particulate matter (for instance, if a farmer in the next field is harvesting soybeans, will the Bureau be able to determine the difference in that particulate matter from particulate matter originating from a primary enclosure)?

RESPONSE

The Department has removed this provision from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation requirements of the regulations were being met, particulate matter would not pose a problem in the kennel.

Comment: Ventilation 28a.2(8) - Air Exchange

Paragraph a(8)i is particularly troubling. The proposed regulation would require 8 to 20 complete air changes of 100% fresh air each hour, in each room that houses dogs. It is doubtful that other requirements in Act 119 or the proposed regulations could be met with this rate of outside (assuming that is fresh) air exchange. Is it possible to maintain a required temperature of 50 degrees Fahrenheit in a building while the outside temperature is 15 degrees Fahrenheit and while importing eight air changes per hour? Is it possible to maintain a temperature of 85 degrees and a required range of relative humidity while

completing eight or more air exchanges per hour when the outside temperature is 95 degrees and the relative humidity is 90%? Further, the velocities of air exchange at the upper end of the requirement may in fact be irritating. The regulation requires "fresh air" but does not describe what fresh air may be. Is fresh air allowed to be heated through a furnace or passed through a dehumidifier? Is fresh air to be circulated prior to being cooled? May fresh air be filtered to meet the particulate requirements? Is it possible for recirculated air to be of better quality than outside "fresh air"? Finally under this section, the Bureau wants information related to building sizes and dimensions and requires several measurements. The only measurements relevant to air exchange would be volume of the facility (length by width by height) and the volume of intake or exhaust.

Comment: Ventilation – Measurement of air exchange

The draft regulations propose that air velocity measurements shall be taken throughout the kennel building. The true measurement should be rate of air exchange as velocity is only one of the components in determining air exchange, volume being the other factor.

RESPONSE TO BOTH COMMENTS

The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. In general, paragraphs (1), (2), (3) and (8) of section 28a.2 the proposed regulation have been deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific in the final form regulation. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would

already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility.

The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment: Ventilation - Enforcement

The draft proposes that the kennel operator shall be in violation if air exchange rates do not meet 8-20 required changes per hour. While a ventilation system may be designed by an HVAC technician to achieve the required air exchange, is it the operator's responsibility if the Bureau's technician observes an inadequate air exchange rate? We do not know what protocol or equipment the Bureau will be using to measure air exchange (and based on the requirements to submit facility measurements, one is unsure if the Bureau understands the physics of air exchange). A conflict of interest may arise if the Bureau hires the same HVAC engineer as the facility operator, or even more likely if the Bureau hires a competing HVAC technician to measure or comment on air exchange in a facility. The draft proposes that the Bureau may hire an engineer but does not qualify that the engineer must be certified in HVAC or even hold a professional engineer certification. The draft does not require that the kennel operator conform to the recommendations of the engineer hired by the Bureau. How will a resolution be reached in the situation where a professional engineer retained by the kennel operator disagrees with an engineer hired by the Bureau?

RESPONSE

As stated above, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

In addition, the final-form regulation no longer states that the Department shall hire an engineer to assure compliance with the standards. The more objective CFM requirements and measurement standards, set forth at section 28a.2 of the final-form regulation do not require readings to be taken each time a kennel is inspected and can and will be evaluated and checked through the capacity ratings on the ventilation equipment, certification by a professional engineer and volume and other information supplied by the kennel owner and certified by a professional engineer.

Comment: Ventilation 28a.2(8)(a) – Symptoms list

Section 8(a) lists a broad range of symptoms which dogs shall not exhibit. These symptoms may have a variety of causes, only one of which may be poor ventilation. Anyone involved in animal husbandry realizes that animals (or humans) may become ill and display symptoms of illness. Sometimes those symptoms persist even with the best of professional treatment. It is unrealistic for the Bureau to simply mandate that dogs must be in good health and asymptomatic. If such a mandate were possible and practical, there would be no need for health care for animals or humans.

RESPONSE

Section 28a.2(9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress has been modified in the final-form regulations. The corresponding provisions of the final-form regulation are found at subsection 28a.2(h). The Department discussed these issues with animal scientists from the Pennsylvania State University, as well as, with Department and Canine Health Board veterinarians. The number and type of conditions in dogs that may denote poor ventilation has been reduced and are consistent with the suggestions of the experts consulted. In addition, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Comment: Ventilation 28a.2(10) - Odor

Section 8(a)10 states that the facility shall not have excessive dog odor. Excessive dog odor is a subjective description. What may be excessive to one individual may seem barely noticeable to another. This is unenforceable.

RESPONSE

While the Department believes the Canine Health Board had and the Department has the authority and ability to regulate air flow, stale air, odor and certainly moisture content – all of which are part of ventilation or humidity control – the Department believes these issues have been addressed in the final-form regulation by setting proper ventilation, humidity and auxiliary ventilation standards. Therefore, the Department has removed the language set forth in subsection 28a.2 (10) from the final-form regulation. Except for the moisture condensation, which is a requirement of the Act itself, the Department has removed all provisions regarding the regulation of dog odor, noxious odors and stale air from the final-form regulation.

Comment: Ventilation 28a.2(11) - Air filters
Section 8(a)11 requires "small particle, nonozone producing air filters". Punctuation needs amended to indicate if these are "small, particle filters" or "small-particle filters". Are there filters that produce ozone? Does Act 119 provide authority for the CHB to draft ozone regulations?

RESPONSE

After consultation with engineers and architects the Department broadened the language of what was subsection 28a.2 (11) of the proposed regulations. The new language appears at subsection 28a.2 (b)(5) of the final-form regulation and simply states any filter must have a minimum MERV value of 8 or higher. The kennel owner can choose a variety of filter types and brands, so long as they meet a MERV value of at least 8. There is no nonozone producing language in the final-form regulation.

Comment: Lighting – glazed glass, full spectrum lighting and excessive light
The draft regulations require that based on floor area, at least 8% glazed area shall be provided and that external openings shall be unobstructed. Is glass an obstruction to an external opening? Are shades permitted to assist in keeping temperatures down in hot, sunny weather? If shades are not permitted, how are dogs to be protected from "excessive light"? Must the primary enclosure be dark if it is to be protected from the direct light of the sun or a light bulb? May window panes be tinted to provide some reduction in "excessive light" and ensure privacy, or would tinting affect the requirement for "full spectrum" lighting? A specific definition of "full spectrum" should be required, citing the range of wavelengths expected, otherwise, full spectrum should be considered to approximate the range of light wavelengths from ultraviolet to infrared in ambient sunlight. There are no artificial lighting systems which provide such ranges of light.

RESPONSE

With regard to the 8% glazed area that requirement has been removed from the final-form regulation. Under the authority and parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, which is the authority under which this regulation is promulgated, the Department believed it had no statutory authority to require visual access to windows for dogs housed in kennel facilities that had received an exemption from outdoor exercise. The Department still requires natural light be provided in such kennels and

agrees that actual access to windows during exercise is a good idea, but not one that can be mandated by these regulations.

The final-form regulation eliminates the language set forth in the comment. The final-form language now utilizes the same language as set forth in the Federal Code of Regulations associated with the Animal Welfare Act (9 CFR § 1.1), definition of indoor housing facility, part (3) with regard to the coverings that must be on windows or openings that provide natural sunlight.

With regard to full-spectrum lighting, full spectrum lighting is a type of lighting system that is available. It is the type of lighting system that most readily mirrors the spectrum of light provided by the sun. The Department has defined the full spectrum lighting in the final-form regulation. From the research done by the Department, some form of full spectrum lighting has been available and in use since the 1930's , so it is not a new or novel type of lighting and it is readily available from various manufacturers.

Comment: Lighting – Foot Candle standards

Where did the foot-candles requirements come from? Is there a specific limiting factor in the growth, development, or behavior of dogs related to 50-80 foot candles? Is there a danger to dogs if lighting exceeds 80 foot candles? Considering the need for humans to visit with dogs or rectify emergencies during dusk or dawn hours, or even through the night, is 1-5 foot candles sufficient to ensure safety of the kennel operator, his employees, or a veterinarian to enter the kennel facility and complete necessary duties?

RESPONSE

The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

The nighttime lighting provision has been removed from the final-form regulation. However, for clarity purposes the nighttime lighting standard was consistent with studies done that show dogs need a minimum level of nighttime lighting (1-5 footcandles) to allow a natural startle response. The nighttime lighting standard was for the welfare of the dogs. Kennel owners can turn on or add additional light at nighttime if there is a need for them to be in the kennel.

Comment: Lighting – diurnal cycle

The draft requires that lighting "must approximately coincide with the natural diurnal cycle". At what latitude is the "natural diurnal cycle" supposed to coincide with provided lighting? Would it be better to require a certain number of hours of darkness or reduced light in the kennel, rather than expect the kennel operator to understand diurnal cycles and install a sophisticated lighting system to mimic changes in day length? Are there specific studies which indicate that a "natural diurnal cycle" is better for dogs than a set schedule of lighting? Lighting is considered one factor that triggers estrous in female dogs. How will approximating a natural diurnal cycle affect estrous cycles and the productivity of a kennel?

RESPONSE

The Act requires that a diurnal light cycle be provided for dogs housed in kennels. The regulation mirrors that provision and now defines a diurnal cycle as a 12 hour cycle. According to the Department and Canine Health Board veterinarians and animal scientists consulted, there is no adverse effect of a 12 hour cycle.

Comment: Flooring 28a.4 – Flooring examples

Section 28a(4) provides examples of flooring that are suitable for commercial kennels. Several examples are not necessarily good examples. Sealed tile and sealed concrete are poor choices for kennel flooring as they reduce traction, especially when wet. Imagine a kennel full of dogs at feeding time, jumping up and down on a sealed or painted concrete floor. It is not unreasonable to expect excited dogs to slip, fall, and sustain injuries. It has further been my experience that solid flooring, such as concrete or tile, leads to foot and leg degeneration, including arthritis before dogs reach advanced age.

RESPONSE

The flooring examples of sealed concrete, painted concrete, epoxy flooring, sealed wood, textured and sealed tile have been removed from the final-form regulation. Some new examples of flooring are set forth in subsection 28a.8(c)(8) and are based on examples of flooring received from the engineers consulted, both of whom design kennel housing facilities.

With regard to the flooring provisions that are contained in the final-form regulation, they establish standards and the restructuring of the provisions are based on suggestions made by the Independent Regulatory Review Commission. In restructuring this section the Department and the Commission felt it would be even more helpful to the regulated community if all the flooring standards established by the Act, were also delineated in the regulation. Therefore, the Department established two new subsections which reiterate the language contained in sections 207(i)(3)(i)(related to general flooring

standards) and (i)(3)(ii)(related to slatted flooring) of the Act (3 P.S. §§ 459-207(i)(3)(i) and (ii)). In addition, the Department had to then modify the language of the proposed regulations which sought to espouse the additional flooring options. In doing so, the Department established subsection 28a.8(c), which sets forth the language of the statute allowing the Canine Health Board to approve additional flooring options, and delineates the authority and duty of the Canine Health Board to assure the additional flooring standards adhere to the general requirements established by section 207(i)(3)(i) of the Act and that additional flooring options, based on proper animal husbandry practices, provide for the health, safety and welfare of the dogs confined to these kennels, as required by section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 459-221(f)). The Department included the standards set by the Canine Health Board in the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department veterinarians and some Canine Health Board veterinarians, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices.

The requirements continue to utilize many of the same parameters established in the proposed regulation, but add language that further clarifies and objectifies the standards. Any additional standards are based on discussions and consultations with Canine Health Board and Department veterinarians and are based on their expertise and experience related to animal husbandry practices and the welfare of dogs.

Comment: Flooring 28a.4 – microbial assessment

This section also notes that flooring may be subject to "microbial assessment". Again, the CHB may be exceeding its authority in trying to regulate "microbes". What would be the standard for microbial populations? Are there specific microbes that are regulated or are all microbes proposed to be regulated? Who would make the "microbial assessment" and at what level or metric would a kennel be in violation?

RESPONSE

In the final-form regulation, the Department has modified the language of what is now subsection 28a.8(c)(7), which was 28a.4(7) of the proposed regulations, by specifically removing the language "and may be subject to microbial assessment" and replacing that language with clear and distinct language regarding the ability of the flooring to be cleaned and sanitized in concurrence with the Act and current Department regulations.

Comment:

In general, this draft of proposed regulations appears to be forwarded by persons who may be highly qualified in their particular field of expertise but have little specific knowledge outside of those fields. The minutes of the Canine Health Board meetings

indicate widespread disagreement on these standards, and further indicate that the Board was unwilling to consult appropriate resources (in any field, including their own area of expertise) that would result in reasonable, practicable, consistent, or enforceable standards and regulations. The point of these regulations appears to be an effort to drive kennel operators out of business by instituting standards that cannot be met; not to promote and protect the health and well-being of individual animals.

RESPONSE

The minutes of the Canine Health Board reveal that engineers, architects, animal scientists and a myriad of persons with experience related to kennel design and animal science were consulted by the Canine Health Board. Disagreement or more appropriately debate on issues is a normal dynamic on any Board and witnesses there was a debate of issues.

The Department has no intention of crafting regulations for the purpose of putting commercial kennels out of business. The regulation, as required by the Act and as required of all regulations, is intended to set forth standards and carry out the duties imposed by the statute. These regulations, as directed by the statute, further regulate commercial kennels in the areas of ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, as well as, establish standards for alternative flooring. All duties imposed by the Act.

With regard to the current regulations being proposed, the Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the

final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels. The regulation applies equally to all commercial kennels in the Commonwealth.

Comment:

The Department of Agriculture should be cautious about implementing such vague and ill-considered regulations as they are likely to become standards for other forms of agriculture, including dairy, swine, and poultry production. Kennel operators across the United States should also be concerned as we have seen the very same standards from drafts of Act 119 (some deleted) appear in new kennel laws and regulations in a large number of states. And since selling even one dog to a commercial kennel or person with a dealer license triggers these requirements for any individual, any citizen that owns and breeds dogs should be concerned.

RESPONSE

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes

ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

As for this draft, it is suggested that the Canine Health Board should be dismissed and new members should be screened for experience, competency, and willingness to work on a concise draft, within the limits of the enabling legislation to address the three distinct areas outlined in the regulatory product expected by Act 119.

RESPONSE

The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department, being the promulgating agency, decided to proceed with the proposed rulemaking realizing that, as with nearly all regulations, changes would most likely have to be made to the final-form regulation. In addition, the Department felt this was the best mechanism to assure a more timely set of regulations and to comply as nearly as possible with the mandate of the Act. The Department consulted with the Canine Health Board members, as well as, with Department veterinarians, architects, engineers, a regulated community group and animal scientists, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations. The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

V. MARLENE LIPPERT – Commercial Kennel Representative Commentator:

Submitted by: Marlene Lippert
Member Pennsylvania Dog Law Advisory Board
1849 Meiser Road
Thompsontown, Pa 17094

Background:

As a long time breeder of quality dogs and also as a commercial kennel owner who is in complete compliance with the new Pennsylvania State laws. I submit the following on the Canine Health Boards current findings.

Comment: Ventilation – Need for Standards

Concerning the Canine Health Board and the matter of Ventilation in commercial kennels:

The CHB addressed ventilation as if it only relates to INDOOR facilities. ACT 119 requires the OUTSIDE exercise area. The dogs will go outside. The majority of the feces will be outside. The majority of the urine will be outside. The REAL point that seems to be being overlooked IS that ACT 119 changes all of the old ways.

With the new law in effect having all commercial kennels charged with having their dogs on solid flooring (no more wire cages) AND having them have unfettered access to the outside for exercise. The BIG issue being overlooked is that AIR exchange or ventilation WAS a problem for kennels in the OLD way that they were allowed to do things. As wardens would go into a kennel that was a building that housed dogs--on wire....allowing them to urinate and defecate through the wire... and ALL the smell stayed INSIDE the building....which most DEFINITELY caused ventilation problems.... I have been in kennels such as these that overwhelmed the nose with the smell of URINE and DISINFECTANT...because ventilation was not adequate by any means. I see the REASON why ventilation WAS a concern.

RESPONSE

The Canine Health Board and hence the Department as the promulgating agency, is required by section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) to set and establish proper ventilation, humidity and ammonia levels. The express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases on animal husbandry practices to provide for the welfare of dogs

under section 207(h)(7)...." (3 P.S. § 459-207(h)(7)) The standards established in the final-form regulation are based on research and consultation with experts such as engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

Comment: Ventilation – Cost and Calibration of Equipment

What I have seen unfold is somewhat a lack of COMMON SENSE where this is concerned. In getting very technical--with "meters" to measure air exchange in kennels... that seems to ME to be overkill and unenforceable ---charging wardens with calibration of this equipment as well as having kennel owners having the same equipment--something many wardens tell me is going to be a nightmare for them to do. I have been assured that this equipment will not be expensive or hard to use. However all the data I have collected on it says just the opposite--it WILL be expensive.... hard to keep calibrated and hard to use.

RESPONSE

The standards established in the final-form regulation are based on research and consultation with experts such as engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The final-form regulation, especially the ventilation provisions of the final-form regulation, has reduced the need for some of the measurement equipment that would have been required by the proposed regulation. However, with regard to any equipment that may still be necessary, such as temperature and humidity monitors, ammonia monitors and light meters, the Department has researched the various makes and models available to determine the equipment that will meet its needs and has listed the estimated costs of buying, calibrating and maintaining such equipment in the regulatory analysis form that accompanies the final-form regulation.

Comment: Ventilation – Outdoor Area alleviates stringent requirments

However as the new law goes into effect--the two things IN STONE in the law--- the flooring and outside exercise are going to take care of the ventilation problem. Dogs --- if left with a place to eat and sleep and get warm and get cool (the INSIDE of their enclosure) and a place to go outside for exercise AND to urinate and defecate---WILL go OUTSIDE... in fact they will go as far away as they can from their "sleeping" and "living quarters" to do this... with RARE exceptions.. It will then be the kennel owners responsibility to clean up the OUTSIDE enclosure and of course keep the inside clean also. I have ALWAYS raised my dogs like this.... because I WANTED TO --not because of the law. and I can tell you this is a FACT... not something I made up.. I ask you look to "Boarding" kennels--which do not fall under this law.... but look at how they have an "inside" place for the dogs.... and an "outside" run, most of them.... Very few I have been in HAVE a ventilation problem... as the dogs go outside to do their business.... In MY kennel... the most you will smell is on a rainy day---you might get a wiff of "wet dog" but you will NOT smell the ammonia that comes with urine buildup... I use ceiling fans to circulate air 365 days a year.... PLUS the dogs going in and out the dog doors allows good air exchange.

RESPONSE

As stated in response to the first comment by this commentator, the Canine Health Board and the Department as the promulgating agency are required by the statute to address ventilation within the kennel housing facility. Section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) requires the Department to set and establish proper ventilation, humidity and ammonia levels in kennel housing facilities. The express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-207(h)(7)) The standards established in the final-form regulation are based on research and consultation with experts such as engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

Comment: Requirements Putting Commercial Kennels Out of Business

As the commercial kennel Dog Law advisory Board member.... I can tell you --for the LARGE kennels previously in operation in this state.... those that housed 100 to 500 dogs in one building...ventilation ASIDE.... the flooring and outside access rules are either putting them out of business or making them GREATLY reduce the amount of dogs they can raise and conform to the law. What is going to remain in Pennsylvania when the dust settles on this law... are those who were

willing to make these changes.... and realize that "business as usual" is over. There will be very few kennels still in operation with HUNDREDS of dogs in this state and if they DO exist then their dogs are going to have to be able to go OUTSIDE when they want to... which makes this ventilation issue more or less a NON issue...

RESPONSE

The Act and not the regulations impose the basic flooring and outdoor exercise standards, as well as, the size requirements for the primary enclosures are requirements and costs imposed by the Act and not the regulations. The regulations are required to and do address ventilation, auxiliary ventilation, humidity, ammonia and lighting standards. The flooring standards in the final-form regulation reiterate the flooring requirements of the Act and (in part (c) of section 28.8a) establish standards for alternative flooring that carry out the duty of the Canine Health Board to assure alternative flooring standards are based on animal husbandry practices that protect the welfare of the dogs housed on that flooring (3 P.S. § 459-221(f)).

Comment: Ventilation – Air Exchange Rates

I was going to bring to the attention of the parties concerned that nursing homes etc... do not require this many air exchanges... I knew however that the "counter" on that would be the sanitary conditions are not the same for human beings--having access to bathrooms etc. I submit to you that the NEW requirements for kennels DO now provide for an actual "bathroom" for the dogs. I implore the CHB to ASK the dog wardens who currently inspect kennels that already have the new regulations in place (for flooring and outside access) if what I am saying is not absolute fact. The current proposed regulation will force 8 to 20 air exchanges when they are NOT needed.

RESPONSE

The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the

regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation.

In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel

housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility

Comment:

The new law was enacted to "raise the bar" on commercial kennels in this state. To stop Pennsylvania from being labeled the "puppymill capitol of the east" and it has ACHIEVED that goal. I respectfully submit that the Canine Health Board--made up of Veterinarians--with NO input from GOOD dog breeders--may be well meaning... but they overreach on this "ventilation" issue. Making rules that are unenforceable... and in the end in almost ALL cases not at all necessary. A GOOD dog warden--upon inspecting the commercial kennels that have complied with the new law--or those that were already IN compliance... would be able to KNOW upon entering the building if the ventilation was adequate, without complicated equipment to aid them.

RESPONSE

The Department agrees that State dog wardens can ascertain, to some extent, whether a kennel is properly ventilated through their own sense of smell and other senses, such as irritation to their eyes and nose related to ammonia levels and a sense of humidity and temperature. However, with no set standards, enforcement is subjective. Without standards there are no actual and clear objective criteria and no proof – other than the testimony of both parties as to the ventilation conditions. One result is that commercial kennel owners have been able to successfully challenge citations based on the State dog wardens' personal evaluations related to ventilation issues. By setting fixed standards for ventilation, such as, air exchange rates, humidity and ammonia levels, temperature and particulate matter levels, both the Department and commercial kennel owners now have objective standards that are known to all, are uniform across the board and can be accurately measured, attained and maintained.

VI. MARY REMER

Commentator:
Submitted by: Mary Remer
Member Pennsylvania Dog Law Advisory Board

Comment:

I have reviewed the General Provisions of the Canine Health Board Standards for Commercial Kennels and am in support of the Ventilation, Lighting and Flooring proposals. I have bred Bull Terriers for 33 years and as a breeder find these proposals basic for adequate standard of care. I fully support the Canine Health Board and their efforts to raise the bar for how dogs are forced to live in commercial kennels. Raising the standard increases quality of life and thus quality of product and really what we are talking about here is product: puppies.

A lot of income is generated by these large kennels as a result of puppy production, lets take another step forward and increase quality.

RESPONSE

The Department agrees with the comment and appreciates the support for the regulations. The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

KENNEL AND PET INDUSTRY ASSOCIATION COMMENTS

I. PENNSYLVANIA PROFESSIONAL DOG BREEDERS ASSOCIATION (PPDBA)

Commentator:

Submitted by: Walt Peechatka, Senior Consultant
Versant Strategies
On behalf of Pennsylvania Professional Dog Breeders Association

Background: The Pennsylvania Professional Dog Breeders Association submits the following comments on the above subject proposed rulemaking issued by the Department of Agriculture on behalf of the Canine Health Board. The regulation propose to establish minimum standards for ventilation, lighting and flooring for dog kennel operations regulated as commercial kennels under Pennsylvania's Dog law (as amended by Act 119 of 2008).

Our comments will illustrate how this proposed rulemaking will essentially force a number of small businesses out of business by making it economically impossible for these businesses to meet the requirements while placing them at an economic disadvantage to similar businesses in other states. If these rules are adopted without change Pennsylvania will lose these businesses arid similar businesses in other states will meet the need by sending dogs raised in those states with less regulation into Pennsylvania to meet the need.

Cost of Regulation

Comments:

1. Initially, our comments are focused on the Regulatory Analysis Form completed by the Department for this proposed rulemaking. In that analysis the Department provides, in response to Question 17, a specific estimate of the costs and/or savings to the regulated community associated with compliance. We submit that those estimates are unrealistic and that they underestimate the costs to the regulated community by as much as ten-fold. For example, the Department's analysis estimates that most kennels are less than 5000 square feet and proceeds to use that square footage in developing estimated costs for compliance.

The analysis concludes by providing estimates as follows: I) average optional cost of equipment to provide mechanical means of ventilation and recirculating air would be $10,000; 2) the cost of meeting all applicable code upgrades would be $5000; 3) the cost of purchasing equipment to assess temperature, humidity, ventilation, air velocity, ammonia, and particulates, while not required, would be $2995. It concludes with an estimate that the total optional cost would be $12,995, assuming $10,000 spent on a ventilation/filtration system.

We dispute these estimates without equivocation. A typical commercial breeding operation recently received an estimate from a licensed refrigeration business for one building with only 4000 square feet which is less than the size used in preparing the Department's estimate. This firm estimated that in order to meet all of the new

requirements, the base bid for the HVAC system would be $118,905 and additional circulating fans would be $13,653. Further, heating costs would be $14,022 and estimated electrical operating costs would be $34,954. TOTAL: $181,534.

2. In addition, the Department minimizes the need for kennel operators to purchase monitoring equipment similar to that used by the Department's kennel inspectors by stating that the equipment is not required. We question the Department's conclusion. If kennel operators are to achieve compliance, they must be in a position to make those readings on a frequent basis and to double check the readings obtained by the kennel inspectors when conducting their inspections. Therefore, this is really not an option.

3. In response to Question 23 of the Regulatory Analysis Form the Department responds that "the guidelines were published and comments were received from members of the regulated community and others". This is true. However, the Department acknowledged in at least one meeting with members of the regulated community that those comments, which the Department received, were not considered in developing the proposed rulemaking. We submit that had those comments been considered the proposed rulemaking would have been modified to bring them in compliance with the statute, which in many instances they are not, and would have been modified to make it possible for the regulated community to meet the requirements. As currently written these regulations are not realistic, they exceed the ability of most commercial kennel operators to meet them, and they will result in the loss of many kennel operators in this industry due to their inability to meet the new standards. The adoption of these regulations will have a devastating affect on agriculture in the Commonwealth.

RESPONSE

1. The final-form regulation contains no requirement for temperature reduction. Air conditioning or HVAC is allowed but not required. The ventilation system language and requirements are based on consultations with and were reviewed by engineers – that design and build kennel housing facilities – and discussions with animal scientists. The humidity levels are based on consultations with animal scientists from the Pennsylvania State University, Canine Health Board and Department veterinarians, scientific research undertaken by Dr. Overall of the Canine Health Board, standards already contained in the Federal Animal Welfare Act and the experience and expertise of engineers that design and build kennel housing facilities.

The final-form regulation implements changes, such as establishing ventilation standards in cubic feet per minute per dog instead of air exchanges per hour and allowing up to seventy percent of the air to be re-circulated, as opposed to 100% fresh air, that will reduce the necessity to purchase monitoring equipment, provides an objective measurement of air circulation and reduces the cost of operation to the kennel owner. The changes were contemplated in response to issues set forth in the comments received and were made pursuant to the Department's consultation with animal scientists and engineers – Learned Design and Paragon Engineering Services – that design and build kennel housing facilities.

The final-form regulation requires air flow to be measured in cubic feet per minute per dog, as was the suggestion of the architects, engineers and animal scientists consulted by the Department. This allows the Department to check the CFM or capacity

rating on the ventilation and air circulation equipment employed by the kennel owner to assure it meets the required air circulation values. It also allows the kennel owner and engineer or architect to design and base the ventilation system on an objective capacity rating as opposed to a more subjective air exchange rate. In addition, a professional engineer must certify the ventilation, auxiliary ventilation and humidity systems to be utilized will meet the standards of the regulation.

The cost of the mechanical ventilation system will vary according to the sophistication and complexity of the system the kennel owner decides to install. However, the Department has consulted several engineers and engineering companies that build kennel buildings and asked them to assess the cost of designing and installing a ventilation system that would meet all the ventilation requirements – including auxiliary ventilation and humidity levels - of the final-form regulation. The costs are based on a kennel owner having to retrofit or build from the ground up and include the cost of installing all of the equipment, even though most kennel owners, especially those subject to United States Department of Agriculture regulations, should already have some form of mechanical ventilation, auxiliary ventilation and – in the case of USDA – temperature control devices already installed in the kennel.

The Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)).The Federal Animal Welfare Act Regulations further require that temperatures in enclosed or partially enclosed housing structures be maintained between 50-85 degrees Fahrenheit (9 CFR §§ 3.2(a) and 3.3(a)) and that proper ventilation and lighting be provided (9 CFR §§ 3.2(b) and (c) and 3.3(b) and (c)). Therefore, the costs estimates, which are set forth in the regulatory analysis form that accompanies the final-form regulation will necessarily be higher than those incurred by such kennel owners, because they should already have systems in place. The regulatory analysis form will set forth the greatest cost that could be incurred for a system that would meet the standards of the regulations.

With regard to the cost to operate the system, kennel owner regulated by the USDA are already incurring electrical or other operating cost, because they are required to provide proper ventilation and lighting and they must maintain the temperature of the kennel facility between 50 and 85 degrees Fahrenheit (9 CFR § 3.2(a)(b) and (c)), which does require some use of a mechanical system. In addition, the Federal Animal Welfare Regulations require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)).

The Department will purchase temperature and humidity monitoring devices to be installed in kennels as set forth at subsections 28a.4(b)(4) and (5) of the final-form regulation. In deciding to purchase the temperature and humidity monitoring devices the Department took into account the comments of kennel owners and other related to the cost to the kennel owners of having to purchase such equipment to monitor their kennels and the issue of standardization of such equipment so that measurements are taken in the same manner and by the same type of equipment. The Department will bear the cost of buying, calibrating, replacing and installing the monitors and kennel owners will be able to continually check the monitors to assure their kennel facility is in compliance with the standards of the regulations.

Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form. The kennel owner may elect to purchase a light meter or ammonia level meter or both. The kennel owner will be able to utilize the Department's temperature and humidity monitoring devices to assure compliance with those standards and capacity or CFM standards for air circulation will be certified by a professional engineer and can be calculated based on the cubic feet of each area of the kennel housing dogs and the total number of dogs housed in that area of the kennel. The capacity or CFM rating is listed on fans and other forms of mechanical ventilation and the professional engineer, State dog warden and kennel owner can match those standards without buying any monitoring equipment. The kennel owner can adjust the level of the air circulation based on the number of dogs in the kennel at any one time, and no additional equipment or monitoring devices are necessary for such calculations. Standard carbon monoxide monitors, for those kennels that need to install them, will have to be purchased, but actual carbon monoxide level readings will not have to be taken, so no additional devices are necessary.

The Department has no baseline data with regard to a kennel's current utility costs, so it is impossible to project the amount of any increase in such costs. However, the regulatory analysis form accompanying the final-form regulation does estimate the average yearly cost of operating a system that would meet the ventilation, auxiliary ventilation and humidity standards of the regulations.

The Department's estimates will be high, because they do not take into account the fact that kennel owners already had previously existing utility costs as set forth above. Therefore, the estimates set forth in the regulatory analysis form will include those already existing costs. The existing costs for kennels regulated by the USDA will be much less, as those kennels already have to comply with heating (50 F) and cooling (85 F) regulations.

Finally, compliance with the lighting requirements should not generate any additional operational cost, since kennels are already required, by the Department's current regulations and USDA regulations to provide a diurnal lighting cycle and enough light to allow for observation of the dogs and normal animal husbandry practices. In fact, the Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)) and "Indoor housing facilities for dogs...must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs...and provide sufficient illumination to aid in maintaining food housekeeping practices, adequate cleaning, and the well-being of the animals (9 CFR § 3.2(c)) The Dog Law sets forth those same standards at section 207(h)(8) (3 P.S. § 459-207(h)(8)). The requirement to and cost of providing adequate lighting is actually established in the Act itself. The regulations merely mirror that language and then set forth a level of lighting as required by the Act.

The new regulations merely quantify the intensity of the light to be provided and the type of lighting, if provided by artificial means. The regulatory analysis form sets forth the cost estimates to install new lighting, if required, but there should be no additional cost of operating the lighting.

2. Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form. The kennel owner may elect to purchase a light meter or ammonia level meter or both. The kennel owner will be able to utilize the Department's temperature and humidity monitoring devices to assure compliance with those standards. The capacity or CFM standards for air circulation can be calculated based on the cubic feet of each area of the kennel housing dogs and the total number of dogs housed in that area of the kennel and are required to be certified by a professional engineer as meeting the standards of the regulation. The capacity or CFM rating is listed on fans and other forms of mechanical ventilation and the professional engineer, State dog warden and kennel owner can match those standards without buying any monitoring equipment. The kennel owner can adjust the level of the air circulation based on the number of dogs in the kennel at any one time, and no additional equipment or monitoring devices are necessary for such calculations. Standard carbon monoxide monitors, for those kennels that need to install them, will have to be purchased, but actual carbon monoxide level readings will not have to be taken, so no additional devices are necessary.

3. The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted with the Canine Health Board members, as well as, with Department veterinarians, architects, engineers, a regulated community group and animal scientists, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the

health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

The following are our comments regarding the proposed rulemaking on a Section by Section basis.

Section 28.1 Ventilation

Comments.

1. Under Section 207 of the statute the Canine Health Board is authorized "to determine auxiliary ventilation to be provided if the ambient air temperature is 85 degrees Fahrenheit or higher". The proposed rulemaking exceeds the authority provided to the CHB by requiring a "mechanical" ventilation, heating and cooling system. Further, the proposed rulemaking exceeds the authority in the statute by requiring that "cooling must be used to keep the temperature below 86 degrees Fahrenheit".

2. The rulemaking further exceeds the statutory authority by requiring that "dogs may not be present when temperature in any portion of the facility is 86 degrees or higher" including those instances where a mechanical system malfunction might occur.

3. Temperature requirements for newborn puppies are ignored by the CHB's proposed rulemaking. For example, the requirement that at no time may the temperature in the kennel exceed 85 degrees completely ignores the fact that newborn puppies cannot maintain their own body temperature until after 10 to 14 days of age. Supplemental

radiant heat or heat lamps must be used to create an average air temperature between 91 and 96 degrees Fahrenheit during the first 10 to 14 days of a puppy's life. The requirements of this section would expose newborn puppies to harsher conditions than is appropriate and increase the risk and danger to those puppies.

4. Please note our comments on the previous page as they relate to the costs of achieving compliance with the new requirements as they relate to heating and air conditioning. When relative humidity outside the kennel nears 100% during a rain event, requiring the kennel to achieve relative humidity in the 40-60% range while requiring 8-20 air exchanges per hour is not only nearly impossible but also is excessively costly to the kennel operator.

5. Regarding the requirement in subsection (4) of this section we question the scientific source of the requirement that "ammonia levels be less than 10 ppm". How was this standard determined?

6. In subsection (7) we believe that it would be impossible to meet the requirements that particulate matter be maintained below 10 milligrams per meter cubed when the bedding provided for dogs is a potential source of particulates. Wood shavings and shredded paper are routinely used as bedding and healthy dogs are constantly moving their bedding.

7. In subsection (8) we believe that the requirement that "the kennel shall provide between 8-20 air changes per hour" is excessive and far exceeds the need for air changes. For the record, most regulatory laboratories of the Department of Agriculture, Penn State and the University of Pennsylvania probably do not meet this standard. This requirement, we believe, exceeds the requirement for BSL-3 laboratories which are the next to the highest level of bio-secure laboratories. Further, meeting this requirement would create drafts, which are prohibited under the Federal Animal Welfare Act. We recommend that this requirement not exceed three air exchanges per hour.

8. We believe that the requirements of subsection (9) are absurd since dogs may exhibit nearly any of these conditions for a variety of reasons having nothing to do with the conditions in the kennel. For example, diarrhea, bloody diarrhea, and vomiting may occur due to a change in diet or upset stomach or gastrointestinal irritation for any number of reasons. We submit that other mammals, including human beings, have these symptoms from time to time for a variety of reasons, which have nothing to do with the environment in which they live. The same is true for the other conditions or signs of illness or stress, which the proposed rulemaking states are "associated with poor ventilation". To impose penalties on kennel owners who have dogs that exhibit these conditions is unrealistic and excessively burdensome to the regulated community.

RESPONSES

1. The final-form regulations no longer sets a temperature cap of 86 degrees Fahrenheit, nor does it require a reduction in the ambient air temperature in the kennel housing facility.

Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

However, since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from numerous commentators, including the Independent Regulatory Review, the Honorable Senator Brubaker and the Honorable Members of the Pennsylvania House of Representatives.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

The Department can now regulate the four hour window because there is technology available to measure temperature and humidity levels in kennels on an hourly basis for up to 3 years at a time. This technology will be employed by the Department, as set forth in the final-form regulation.

In short, the Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and

scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

2. The final-form regulation does not require dogs to be removed when temperatures exceed 85 degrees Fahrenheit. The final-form regulation in fact allows a four hour window to meet the humidity and heat index levels established. In addition, the final-form regulation modifies the notification requirements related to a mechanical malfunction.

3. The final-form regulation does not set a temperature cap or require a reduction in the air temperature in the kennel housing facility, but instead sets humidity levels, based on heat index values, that must be achieved when the air temperature in a kennel housing facility rises above 85 degrees Fahrenheit.

However, based on this and other similar comments related to neonates, which suggested the temperature for neonates should never fall below 90 degrees Fahrenheit, the Department consulted with veterinarians. The consensus among veterinarians was that normal animal husbandry practices dictate that the mother provides the necessary body heat to sustain the neonates/puppies and that no exception should be made to the 85 humidity index, because such an exception would be detrimental to the adult mother dog. Therefore, no changes have been made and the kennel must maintain a heat index value of 85 or below. The Department notes, that the Federal Animal Welfare Act regulations make no such exception for neonates and the Federal Animal Welfare Act regulations, unlike these regulations, does set an upward temperature cap of 85 degrees Fahrenheit.

4. First of all, the final-form regulations no longer require 100% fresh air, but provide that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing facility.

With regard to the humidity standards established by the final-form regulations, the general standard of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

With regard to the humidity levels when temperatures are greater than 85 degrees Fahrenheit, the Department, with the assistance of consultations with the engineers listed above, Department and Canine Health Board veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of

the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, swine or cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

The Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards.

In conclusion, the Department's research and discussions support the humidity levels established in the final-form regulation. The humidity levels are necessary and proper for the health, safety and welfare of dogs confined to kennels. The range or humidity levels established for kennels when the temperature is 85 degrees Fahrenheit or below is within normal animal husbandry practices and is set at the least stringent levels suggested. Humidity levels and the time period of exposure established in the final-form regulations for heat indexes above 85 degrees Fahrenheit are supported by scientific research performed on animals with more efficient cooling mechanisms than dogs or are based on scientific research specifically done on dogs. Finally, the engineers and architects consulted believe the requirements established by the final-form regulation are attainable and the Department has set forth the cost estimates in the regulatory analysis form that accompanies the final-form regulation.

5. With regard to ammonia levels specifically, the Department consulted with engineers and architects related to the ammonia levels established by the proposed regulation and with regard to the ability to measure ammonia levels. In addition, the Department consulted with veterinarians and animal scientists and did its own research

with regard to commonly accepted levels of ammonia in animal operations such as swine operations. The engineers and architects all believed that if kennels were properly ventilated and achieved the air circulation values established in the regulations, then ammonia levels should not be a problem in the kennel. The Act, however, requires the Department to establish the proper ammonia levels for dogs housed in kennels. Discussions with veterinarians and research done by veterinarians on the Canine Health Board affirm that ammonia levels of 20 part per million or higher will cause respiratory and eye irritation and problems in animals. The veterinarians suggested the levels be set at some point below 20 parts per million and the consensus was that a level of 15 parts per million would both account for proper animal health and welfare and would be measurable. Ammonia levels are measured in the swine industry and can be accurately measured at levels of 15 parts per million. The Department's research also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel. That Act establishes parameters that do not allow dogs in kennels to be housed in any primary enclosure that is more than 48 inches high for dogs under twelve weeks of age or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department believes ammonia measurements should be taken at the height of the dogs.

6. The Department has removed the provision related to standards for particulate matter from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation requirements of the regulations were being met, particulate matter would not pose a problem in the kennel.

7. The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too

burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. Although 100% fresh air circulation is not prohibited by the final-form regulation, the change to the regulation was made after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive and difficult to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The ventilation standards now established in the final-form regulation are more easily measured and verified, continued to account for the health and safety of dogs housed in commercial kennels and require or allow kennel owners to increase or reduce the air circulation in a kennel based on the number of dogs housed in the kennel facility.

There are two general reasons behind these changes. First, CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on the capacity or CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will require and allow kennel owners to design their ventilation systems to have the total capacity required to assure circulation of the proper amount of air required by the regulations for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs housed or kept in the kennel facility. In other words, the system will be easier to design and less costly to operate. While still requiring the system to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility, it will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. This not only lowers operation costs, but sets a proper standard to assure dogs are not subjected to a circulation standard that is too strong or unable to be enforced. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

8. The language that appeared in subsection 28a.2 (9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress, has been substantially modified in the final-form regulations and is now subsection 28a.2(h) in the

final form regulation. First, based on discussions with animal scientists, at the Pennsylvania State University and Department and Canine Health Board veterinarians, the number and type of conditions in dogs that may denote poor ventilation has been reduced. Second, and significantly for purposes of authority, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that animal scientists and veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Paragraph (2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Section 28a.3. Lighting

Comments:

1. This section requires that "each kennel shall have a mix of natural and artificial light". This requirement exceeds the authority provided in the statute which states "Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light". We recommend that this section be amended to read the same as the statute.

2. Subsection (I) (ii), we believe, exceeds the Department's authority since such authority does not appear in the statute. It is unrealistic and economically burdensome to require retrofitting existing structures or requiring new structures to achieve the 8% of floor space requirement.
Subsection (2) Artificial Light, requires that daytime lighting must provide between 50-80 foot candles at standing shoulder level of the dogs. We have taken light readings in offices at the State Capitol and have found those readings to be in the 12-20 range. The same thing is true of the average home. We believe this requirement is in direct contradiction with the statute, which states "Primary enclosures must be placed so as to protect the dogs from excessive light."
Further, the economic impact for purchasing light fixtures and retrofitting electrical circuits plus the additional cost of electricity is prohibitive to a small business. We recommend that this requirement be changed to coincide with lighting conditions in typical homes or offices.

3. Subsection (2) (ii) should be changed to read "Night time artificial lighting must be 1-5 foot candles of lighting at standing shoulder level of the dogs" rather than the way it currently reads.
Subsection (2) (iv) as currently written does not adequately define the term "visible flicker". This term should either be defined or this subsection should be deleted.

RESPONSES

1. The section has been amended to read the same as the statute. The final-form regulation deletes the requirement for kennels to provide both artificial and natural light. The language now mirrors the language of the statute with regard to providing light through natural or artificial light. The final-form regulation sets general standards that apply to lighting whether provided by artificial or natural light and also sets forth standards that apply specifically to either natural or artificially provided light. The final-form regulation does require some natural lighting source in kennels that were provided an exemption from outdoor exercise. It requires the light to reach each dog, but does not require the window or skylight to be directly over or in front of the primary enclosure. The Department agrees, from its research into the heat index that such exposure may not only violate the provisions of the lighting section related to "excessive light", but would run the risk of increasing temperatures – on a hot day – within the primary enclosure to levels that would be detrimental to the dogs' health. However, research done by the Canine Health Board indicates the exposure to natural light is vital to the health and welfare of dogs. The need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight. In addition, this requirement is congruent with the requirement that kennels buildings have operational windows, doors and other openings that can be opened in the event of a mechanical malfunction of the ventilation equipment.

2. First, the requirement that 8% of the floor space be utilized to provide natural light has been removed from the final-form regulation.

Second, the lighting levels in the regulation are established because of and in accordance with the requirements of the Act which states, "Housing facilities for dogs must be lighted well enough to perform routine inspection and cleaning of the facility and observation of the dogs...and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals..." (3 P.S. § 459-207(h)(8)). This language mirrors the language of the Federal Animal Welfare Regulations (9 CFR § 3.2(c)).

However, as noted in previous responses, the level of light that must be provided has been modified in the final-form regulation. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor

the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues, as required by section 207(h)(8) of the Dog Law. The NIH standards are attached to this document as Exhibit D.

Finally, the operation of the lighting should not add any additional cost, since kennels are already required, by the Department's current regulations and USDA regulations to provide a diurnal lighting cycle and enough light to allow for observation of the dogs and normal animal husbandry practices. In fact, the Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)) and "Indoor housing facilities for dogs...must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs...and provide sufficient illumination to aid in maintaining food housekeeping practices, adequate cleaning, and the well-being of the animals" (9 CFR § 3.2(c)). The Dog Law sets forth those same standards at section 207(h)(8) (3 P.S. § 459-207(h)(8)). The requirement to and cost of providing adequate lighting is actually established in the Act itself. The regulations merely mirror that language and then set forth a level of lighting as required by the Act.

The new regulations quantify the intensity of the light to be provided and the type of lighting, if provided by artificial light. The regulatory analysis form sets forth the cost estimates to install new lighting, if required, but there should be no additional cost of operating the lighting.

3. First, the nighttime lighting provision has been removed from the final-form regulation. However, for clarity purposes the nighttime lighting standard was consistent with studies done that show dogs need a minimum level of nighttime lighting (1-5 footcandles) to allow a natural startle response. The nighttime lighting standard was for the welfare of the dogs. Kennel owners can turn on or add additional light at nighttime if there is a need for them to be in the kennel.

Second, the term "visible flicker" has been removed from the final-form regulation. The Department has modified the language of what was subsection 28a.3 (2)(iv) of the proposed regulation, in a manner to better clarify its intent. The term "visible flicker" is no longer set forth in the final-form regulation. The modified language appears in subsection 28a.7 (b)(2)(ii) of the final-form regulation. The focus is on the

lighting being kept in good repair. The language will actually effectuate the intent of the Canine Health Board. In speaking to members of the Canine Health Board, it became clear the intent of the Canine Health Board was to assure the lighting fixtures were kept in good repair and were functioning properly. The reference to a "visible flicker" was important to the veterinarians on the Canine Health Board, because they assert that flickering lights – such as the flickering caused by defective ballast – can result in seizures in some dogs. Therefore, in order to assure the health, safety and welfare of the dogs through proper animal husbandry related to lighting, it is important that artificial lighting sources within the kennel building be kept in good repair and not result in problems such as a "flickering" light source. The revised language of the final-form regulation requires lighting to be kept in good repair and sets forth – among other examples - such as emitting irregular bursts of light, as when a ballast is in disrepair.

Section 28a.4. Flooring

Comments:

1. In Subsection (I) we believe that the addition of solid flooring increases the risk to the dogs of an unsanitary flooring environment. We recommend that this section be revised to eliminate the risk of an unsanitary condition for the animals.

2. In Subsection (2) we believe that it will be impossible to maintain a drain that is free of debris because dogs will continually track bedding particles and other materials to the drain area. We recommend that this problem be addressed and this subsection revised accordingly.

3. The standards established in Subsection (4) exceed those found in most biosecurity laboratories operated by the Department of Agriculture and its academic partners at Penn State and the University of Pennsylvania. This subsection should be revised to address these exorbitant and onerous standards.

4. In Subsection (5) the appropriate sources of the "latest edition of applicable codes" should be identified to properly clarify which codes this section is alluding to.

5. We believe that the standards established in Subsection (7) will be impossible to attain. When kennel owners clean the flooring in accordance with 207 (h)(l4) of the statute, the floor condition may immediately be impacted by the urination and defecation of the dogs and thus not meet the standards for microbial assessment established in this subsection. We recommend that the potential for this condition to occur be addressed and this subsection be rewritten.

6. Regarding Subsections (6) and (8) we believe that the standards established in these two sections may be in conflict with one another. We recommend that this potential be eliminated and these two subsections be rewritten accordingly.

RESPONSES

1. The Department first points out that solid flooring is not required, but is only an option available to the kennel owner. So long as the solid flooring meets the criteria of section 207(i)(3)(i) of the Act and the additional flooring requirements of the regulations, as well as, the approval of the Canine Health Board, it may be utilized.

Second, the Department disagrees that solid flooring is inherently unsanitary. There is no evidence to suggest that such a contention has any merit. Boarding kennels, humane society and other non-profit rescue kennels, as well as, standard breeding kennels currently house dogs on solid flooring with no ill effects. The commentator expresses a concern for sanitation. Solid flooring can be kept clean and sanitary as witnessed by a large number of kennels across the Commonwealth that currently utilize solid flooring in their kennels.

2. The Canine Health Board and the Department in promulgating the regulation, is under a duty to assure any alternative flooring established for alternative flooring would be based on animal husbandry practices that account for the welfare of dogs housed in commercial kennels (3 P.S. § 459-221(f)). The standards established in the proposed regulations and again set forth in the final-form regulations effectuate and carry out that duty and authority. Requiring that drains be provided to eliminate waste and wash water to name a few and that those drains be properly functioning is certainly within that very duty. The language of the final-form regulation has been modified for clarity purposes. It is also fully consistent with the standards established by section 3.1(f) of the Animal Welfare Act (9 CFR § 3.1(f)).

3. What was subsection 28a.4(4) of the proposed regulations (now 28a.8(c)(3) of the final-form regulations) has been revised in the final-form regulation to add clarity and objectivity and so as to not absolutely eliminate a particular substance. However, the basic animal welfare requirements – that the flooring material when exposed to a heat source can not rise to temperatures that would be harmful to the dog – has been kept in place. It is a reasonable standard that should already be part of any kennel owners consideration of the very surface upon which their dogs are housed.

4. All language referring to the "latest edition of applicable codes" has been removed from the final-form regulation.

5. The language related to "microbial assessment" has been deleted from the final-form regulation. In the final-form regulation, the Department has modified the language of what is now subsection 28a.8(c)(7), which was 28a.4(7) of the proposed regulations, by specifically removing the language "and may be subject to microbial assessment" and replacing that language with clear and distinct language regarding the ability of the flooring to be cleaned and sanitized in concurrence with the Act and current Department regulations.

6. The two subsections comment on, have been rewritten in the final-form regulation and there is no conflict in the language.

General Comments

Comment: Additional Input

We recommend that the Department utilize additional expertise readily available from our land grant university and the animal scientists at that institution, as it works with the Canine Health Board to revise the regulations. The regulations as currently written illustrate the absence of input from animal scientists and agricultural engineers and therefore lack reasonable and realistic standards that can be achieved by the regulated industry. The costs to the regulated industry to meet the standards in the proposed rulemaking as currently written will essentially eliminate this important small business industry from Pennsylvania and the agricultural community.

RESPONSE

As set forth in previous responses, in redrafting the final-form regulations the Department did its own additional research and consulted animal scientists and an engineer from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, an AKC Senior Field AKC Representative and Canine Health Board and Department veterinarians. The consultations included verification that the ventilation, auxiliary ventilation, ammonia and lighting level and flooring ranges and standards established were attainable, based on current practices, scientific information and/or animal husbandry practices and would account for the welfare of the dogs. The consultations also resulted in regulations that decreased the cost of compliance and set more objective, attainable and verifiable standards.

Comment: Cost of Regulation

In summary, it is also important to note that the requirements in the proposed rulemaking will force these small businesses to become large businesses and as a result may exceed what many local governments in Pennsylvania will consider as small businesses. This industry has always been considered as a small business and it may disappear if these rules and regulations are not modified. The costs associated with meeting these requirements will put the commercial breeding industry in Pennsylvania at an economic disadvantage with other states. The result will be the loss of Pennsylvania businesses and dogs will be coming from other states into Pennsylvania to meet the need.

RESPONSE

The Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the

statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels

II. PENNSYLVANIA FARM BUREAU- Comments-General and Specific

Commentator:

Submitted by: John Bell, Esq.
Governmental Affairs Counsel
Pennsylvania Farm Bureau
510 South 31st Street
Camp Hill 17001-8736

Background:

Pennsylvania Farm Bureau submits the following comments to the Department's proposed rulemaking governing minimum standards of ventilation, lighting and flooring for dog kennel operations regulated as commercial kennels under Pennsylvania's Dog Law, as amended by Act 119 of 2008. The provisions of Act 119 direct the Department to establish minimum standards for ventilation, lighting and flooring for commercial kennels. Pennsylvania Farm Bureau is a statewide farm organization with a membership of nearly 47,000 farm and rural families in the Commonwealth

Many farm families who are members of Farm Bureau operate commercial kennels as a means of earning the family's principal livelihood or as a means of providing the family with needed supplemental income to sustain their farms. Without this opportunity to operate and receive income from operating commercial kennels, these farm families will struggle to viably maintain their farms. This is especially true in the wake of the extreme economic downturn, in which traditional farm commodity prices paid to farmers, such as milk prices, have been slashed to levels where farmers are now operating at a severe economic loss.

Comment: General – Department's Duty

We are disappointed with the Department's failure in its proposed rulemaking to make any meaningful changes to the standards proposed in the temporary guidelines that were developed and issued by the Canine Health Board.' Although the Department is directed in Act 119 to promulgate regulations after CHB's development of temporary guidelines, Act 119 does not require the Department to adopt or substantially endorse the standards that the CHB established temporarily for commercial kennel.

We had hoped that the Department would make a conscious effort than the CHB did to understand that the proposed standards will establish unfair and unworkable mandates for kennel operations, will likely have repercussions beyond the canine industry, and may have serious adverse impacts on agriculture and the future existence of numerous family farms in the Commonwealth. Unfortunately, so far, the Department in its proposed rulemaking has decided to rubber stamp the CHB's unworkable guidelines and the seriously flawed process of fact-finding and decision-making in which the guidelines are based. Because of this, many of the same criticisms we offered to the CHB in February will again be restated in these comments.

We recognize that some revisions in the Dog Law and in standards applicable to regulated kennel operations were needed to deter the seriously irresponsible conduct of some commercial kennel operators in the industry. We do not condone the inhumane treatment of dogs by commercial kennel operators. We particularly denounce the type of

substandard care in kennels sporadically reported in newspaper accounts. Such conduct should have been violative of the Dog Law, and was in fact violative of the Dog Law even before the enactment of Act 119's statutory amendments.

But fundamental fairness, as well as statutory and constitutional principles, also requires that standards to be established by the Board not be arbitrary or based on what an individual may subjectively believe to be "good" for the animals. Animal husbandry standards should be based on sound and objective scientific analysis, and should provide a consistent and definitive way for those subject to regulations to measure and determine they are complying or not complying with the standards. Standards that essentially make it impossible for responsible commercial kennel operators to feasibly comply or to reasonably determine whether or not they are in compliance are not acceptable.

RESPONSE

The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the general public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted architects and engineers that design and build kennel housing facilities, a regulated community group, an AKC Senior Kennel Field Representative, animal scientists from the Pennsylvania State University and Department and Canine Health Board veterinarians, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations.

The Department has made substantial and substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into

sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels

Comments: General – Flaws in the Regulation

The Department's proposed rulemaking suffers from the same afflictions as many of the mandates adopted by the CHB, including:

1. Failure to meet basic statutory and constitutional obligations provided to persons who will be subject to the regulations' standards;

2. Establishment of standards that are not supportable by reasonable or verifiable scientific study or empirical justification;

3. Failure to make a reasonable attempt to verify or quantify the accuracy or reliability of the few sources of information that were heavily relied upon as the supporting basis for the standards proposed;

4. Virtually no effort to analyze the practical ability or feasibility of regulated persons to comply with the standards proposed; and

5. Extreme failure in the proposed standards to establish any clearly defined method to be applied by enforcement personnel in determining "compliance" with standards which will avoid arbitrariness in determinations of compliance and ensure the standards will be measured and enforced in an objective and consistent manner.

RESPONSE

1.-5. The assertions made in the comment are very general nature and point to no specific provisions within the proposed regulations. However, in drafting and reformulating the final-form regulations, the Department did go back to sources utilized by the Canine Health Board and to literature utilized by the Canine Health Board for the purpose of asking questions and verifying information. Some of the information and research was utilized and some of the information and research was set aside. In addition, the Department consulted engineers, architects and a regulated group to request input. The Department consulted with engineers from the private sector (Learned Design and Paragon Engineering Services) and an engineer from the Pennsylvania State University, as well as animal scientists from the Pennsylvania State University and Department veterinarians and also did additional research of it own so that it had a better understanding of ventilation standards and measurement criteria, humidity, ammonia and lighting levels and requirements, as well as, the interrelationship and interaction between these ventilation, humidity, temperature and auxiliary ventilation and there relationship to animal health and welfare. The majority of the questions asked and issue raised and reviewed were based on the comments received from the general public, the General Assembly and the Independent Regulatory Review Commission.
In addition, the Department reviewed the statutory authority behind the criteria established in the proposed regulation.

As a result of the information gained, the Department has made substantial and substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act, are attainable, comport with science, animal husbandry practices and expertise and experience of people in the field of kennel design and dog health issues and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels.

The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In

doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

Comment: General - Impossible Standards

We firmly believe that if the proposed rulemaking is adopted without serious change, the standards to be established will make it practically impossible for any responsible commercial kennel operator to meet, thereby prompting the elimination of commercial kennel operations altogether in the Commonwealth. The irony of such a result would be the proliferation of commercial dog breeding operations in states with far fewer regulatory standards than Pennsylvania - a scenario that is likely to seriously hurt the "wellbeing" of dogs in the long run.

RESPONSE

As set forth more specifically above, the final-form regulation has undergone significant and substantive changes based on expert input and analysis. Engineers that design and build kennels provided input with regard to the proper ventilation, auxiliary ventilation, humidity and ammonia level standards and assured the standards established by the final-form regulation were practical, attainable, objective and measurable. The Department received input from animal scientists and veterinarians regarding animal husbandry practices, research and scientific studies (where available) and utilized and integrated that information into the final-form regulation.

The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable, based on the expert input set forth above, are attainable and verifiable and will be enforceable.

Comment: General – Abuse of Discretion

In development of its temporary guidelines, it was readily apparent that the majority of the members of the CHB believed that the "well-being" of the dogs was the only legal consideration to be made. Throughout the process, several CHB members continuously and exclusively referenced the "well-being" of kennel-housed dogs as the sole purpose for establishment of its temporary guidelines. Such a belief by the CHB majority that "wellbeing" of dogs is the CHB's sole consideration constitutes an abuse of the CHB's discretionary authority. Action by the Department to blindly ratify the CHB's standards would equally constitute an abuse of the Department's discretionary authority. Statutory provisions and case law clearly require regulatory agencies to make a legitimate effort to address reasonable concerns of those persons to be regulated in promulgation of regulatory standards, and to develop and promulgate regulatory standards that are not unduly vague and provide a genuine opportunity for the regulated community to comply.

RESPONSE

The Department, during the actual regulatory review process and in the promulgation of the final-form regulations, has made a legitimate effort to address the concerns of all commentators, including the persons to be regulated and has made

substantive changes to the proposed regulations, so that the final-form regulation provides standards that are not unduly vague and provide a genuine opportunity for the regulated community to comply.

The Department followed all of the mandates of the Act and the regulatory process in promulgating the regulation. As stated previously, the Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the general public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted architects and engineers that design and build kennel housing facilities, a regulated community group, an AKC Senior Kennel Field Representative, animal scientists from the Pennsylvania State University and Department and Canine Health Board veterinarians, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations.

Again, in drafting and reformulating the final-form regulations, the Department did go back to sources utilized by the Canine Health Board and to literature utilized by the Canine Health Board for the purpose of asking questions and verifying information. Some of the information and research was utilized and some of the information and research was set aside. In addition, the Department consulted engineers, architects and a regulated group to request input. The Department consulted with engineers from the private sector and an engineer from the Pennsylvania State University, as well as animal scientists from the Pennsylvania State University and Department veterinarians and also did additional research of it own so that it had a better understanding of ventilation standards and measurement criteria, humidity, ammonia and lighting levels and requirements, as well as, the interrelationship and interaction between these ventilation, humidity, temperature and auxiliary ventilation and there relationship to animal health and welfare. The majority of the questions asked and issue raised and reviewed were based on the comments received from the general public, the General Assembly and the Independent Regulatory Review Commission. In addition, the Department reviewed the statutory authority behind the criteria established in the proposed regulation.

Based on all the input and expert advice, the Department made substantial and substantive changes to the final-form regulation. The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act, establishes objective, measurable and attainable standards and carries out the duty to assure that ventilation,

auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Regulatory Review Act Standards

Section 5.1 of the state Regulatory Review Act specifically requires governmental agencies in development of regulatory standards to consider and demonstrate consideration of:

- The need for the regulation;

- The costs that the agency's regulatory standards will cause the private sector to bear;

Any special provisions that meet the particular needs of small businesses and farmers;

Alternative and less-burdensome regulatory measures that the agency considered but rejected;

Development of the least burdensome regulation alternative.

And our courts have also recognized where the Commonwealth exercises regulatory power that is not reasonably necessary to accomplish a public purpose or that is unduly oppressive, such exercise of power is invalid. The Commonwealth may not, under the guise of protecting the public interests, arbitrarily interfere with private business or impose unusual and unnecessary restrictions upon lawful occupations. See, Department of Environmental Resources v. Pennsylvania Power Company, 490 Pa. 399, 416 A.2d 995 (1980), citing Nebbia v. New York, 291 U.S 502 (1934).

Nothing on the record shows any effort made by the CHB to identify or consider any feasible alternatives to the standards it adopted in its temporary guidelines or shows the regulatory scheme that the CHB did adopt is not unduly oppressive or arbitrary or represents the least burdensome means to accomplish the Dog Law's purposes.

RESPONSE

The regulatory analysis form that accompanies the final-form regulation addresses the issue set forth in this comment. However, the Department will attempt to address the comments in this document.

The Pennsylvania General Assembly, by nearly unanimously passing the amendments to the Dog Law established in Act 119 of 2008, established the duty and necessity to regulate ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels. The Legislature, in sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, imposed the authority and the absolute duty on the Canine Health Board to develop and the Department to promulgate such regulations.

The Department has set forth and considered the costs to the regulated community and the private sector to the best of its ability. However, the mere existence of a cost to the regulated community or private sector does not mean the regulations themselves can not or should not be promulgated. The Independent Regulatory Review Commission

(IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

The statute does not provide any special exception and the Department believes that when promulgating regulations that are to set health and welfare standards for dogs housed in commercial kennels there is no rational basis for promulgating disparate or separate regulatory standards for small commercial kennels and large commercial kennels. The standards set forth in the final-form regulation establish basic and minimum standards for ventilation, auxiliary ventilation, humidity, ammonia, lighting and additional flooring options that account for the welfare of dogs housed in commercial kennels. There are no lower standards that would be acceptable based on the size or make-up of the business entity and the Department does not think it prudent to set higher standards for kennels that do not fall within a small business definition. In addition, there is no provision in the Dog Law that would allow the Department to assist commercial kennels that fall within a small business definition by providing grants or loans. Dog kennels are not considered normal agricultural operation and therefore do not fall within the category of a farm.

Comments: General – Cost of Regulation

Kennel operators will not only face extreme costs in construction and reconstruction of buildings and structures and in designing, purchasing and installing coordinated climate control systems for these facilities. They will also face oppressive energy costs in operating the climate control systems within these facilities. The guidelines standards for atmospheric control, together with the Dog Law's requirements for "unfettered access" of dogs within these facilities to the outside, will severely compromise the ability of commercial kennel operators to devise or operate systems that manage temperature, humidity and air exchange with any feasible degree of cost-efficiency. Kennel operators will not be able design or operate cost-efficient systems in kennel buildings that will require multitude of openings in the building walls to provide outside access for dogs.

The CHB should have been able, and the Department should have been able by now, to get at least some understanding of the degree of economic hardship that the guidelines' standards would impose by reviewing cost-estimates submitted by commercial and noncommercial kennel operators in their comments to the Department's proposed rulemaking of December 2006 (later rescinded) to augment regulatory kennel standards. But the process leading to the CHB's adoption of guidelines, which the Department is suggesting in its proposed rulemaking to be finally adopted without

change, is totally devoid of analysis or consideration of these comments or any other quantified analysis of adverse economic impacts likely to result from the regulatory standards to be permanently established.

RESPONSE

The Department considered the concerns expressed by this commentator related to the design and operational costs to commercial kennels when consulting with engineers and architects that design and build (including retrofitting) kennel housing facilities. The engineers took the unfettered access to outdoor exercise into consideration when providing input to the Department, verifying the final-form regulatory requirements could be attained and implemented and in providing cost estimates that are contained in the regulatory analysis form accompanying the final-form regulation.

In addition, the final-form regulation makes substantial and substantive changes, such as, not requiring air conditioning or setting an ambient air temperature cap, changing the ventilation standards to cubic feet per minute per dog which allows air flow to be based on the volume of the kennel building and the number of dogs, allowing for re-circulation of air as opposed to 100% fresh air, allowing a four hour window to come into compliance with the humidity and heat index standards, setting a top heat index standard during that four hour window which is the minimum standard to allow for survivability and safety of the dogs and allowing a wide range of options to attain the standards. All of these changes reduce the costs, make system design more flexible, provide more objective standards and according to the engineers consulted are attainable. The kennel owner has the flexibility to decide what if any other changes he would like to make to the kennel building to increase the efficiency of the ventilation system and humidity controls.

The second part of the comment is without merit regarding the Department's actions. The regulatory review process does not allow, nor does the Department suggest, that the proposed rules establish the final promulgated standards. The Department gained control of the promulgation process, once the proposed regulations were published and has responded in this document and by making substantial and substantive changes in the final-form regulation to every comment and concern expressed by all commentators.

Comments: Ventilation Standards – Section 28a.2

1. We particularly object to the regulatory posture in proposed regulation 28a.2 to require commercial kennel operators to separately meet each condition of temperature, humidity and air flow prescribed. During the period in which the CHB's temporary guidelines were being developed, several veterinarians serving on the CHB offered supportable evidence of scientific study of other species of animals that animals' climate control needs can be met through a holistic consideration of conditions of temperature, humidity and air flow together, even though one of these conditions was not individually meet the prescribed standard for that condition. But this evidence was summarily rejected by the CHB majority, without any scientific analysis, meaningful consideration or legitimate explanation.

2. The CHB's flat and unexplained rejection of the information and evidence that some CHB members tried to bring to the table exemplifies the arbitrariness that the CHB majority applied in the consideration and development of its temporary guidelines. By

blindly adopting CHB's guidelines without meaningful consideration and analysis of the empirical evidence that the knowledgeable and experienced veterinarians on the CHB tried to bring forth in development of regulatory standards, the Department would be equally culpable of acting arbitrarily and abusing its regulatory discretion.

3. We also strongly object to the rulemaking's proposed establishment in regulation 28a.2 of an absolute maximum temperature of 85 degrees for kennels, without exception. While the proposed rulemaking has made some cosmetic changes to the language adopted by the CHB in its temporary guidelines, the practical and legal effect of the standard will be no different from the standard established in the guidelines

It is clear from amendments made by the General Assembly to the version of House Bill 2525 originally introduced that Act 119 was not intended by the legislature to establish a static maximum temperature of 85 degrees for commercial kennels. The enacted version of House Bill 2525 (Printer's Number 4524) amended the bill's original provision, which did prescribe an absolute maximum of 85 degrees. The amended version of Section 207(h)(6) enacted by the legislature in Act 119 provides that the ambient temperature in commercial kennel housing facilities could not be above 85 unless auxiliary ventilation is provided. Furthermore, the amended version of Section 207(h)(7) specifically directed and required the CHB to establish standards for auxiliary ventilation when the ambient temperature in the housing facility is 85 degrees or higher. The common meaning and understanding of these provisions clearly establishes that kennel areas may operate at temperatures above 85 degrees with proper auxiliary ventilation.

Especially in light of the amendments to Sections 207(h)(6) and 207(h)(7) made by the General Assembly in the course of House Bill 2525's legislative process, no one can reasonably read these provisions in any other way than to conditionally allow the ambient temperature of a facility to be above 85 degrees if auxiliary ventilation is being used. The Department's establishment an unequivocal and absolute standard of 85 degrees and disregard of the General Assembly's clear statutory direction to provide and establish a standard for conditional allowance of housing facilities to be operated at temperatures above 85 degrees upon use of auxiliary ventilation systems is an abuse of the Department's discretionary authority.

4. We also take serious issue with proposed provisions for "measurement" of whether a commercial kennel is in compliance with the guidelines' prescribed minimum standards. There was no conscious effort made by the CHB, and apparently none was made by the Department in its proposed rulemaking, to identify any empirical or historical basis on which the "measurement" formula is based. Neither CHB's guidelines nor the Department's proposed regulations attempted to identify, standardize or regulate the calibration of devices that Dog Law wardens will use, or that regulated kennel operators may use, in determining whether kennel facilities are meeting or failing to meet the minimum atmospheric and other standards prescribed in the guidelines. Furthermore, no effort was made to consider or adopt safe harbor provisions which would provide commercial kennel operators with some assurance that they will be considered to be in compliance upon the performance and maintenance of specified climate control measures. And Dog Law wardens will be able apply a multitude of methods to "measure" compliance, anyone of which can individually doom a kennel operator who is making a

responsible effort to comply and whom the overwhelming majority of reasonably minded persons would conclude should be treated as being in compliance. The measure formula itself is arbitrary, and the lack of clarity in the measurement provisions of the guidelines will inherently lead to inconsistent and arbitrary application among enforcement officers, and will provide ample opportunity for abuse of enforcement authority.

5. We expect other organizations to describe in greater detail the gravity of economic hardship that responsible commercial kennel operators will face in complying with the standards prescribed in the guidelines. But we would offer comments we received from a reputable and responsible kennel operator who described in detail the impacts the CHB guidelines are having and proposed rulemaking will have on his kennel operation

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His insightful comments noted, among other things, the impracticality (and we would describe as impossibility) in complying with the rulemaking's proposed carbon monoxide standard. Under this standard, a kennel would be required to be maintained "below detectable levels" of carbon monoxide. Yet the atmosphere in the county where the operator is located by its very nature has "detectable" levels of carbon monoxide. Even under optimum conditions of climate control, the operator will need to further purify the air within kennel areas to meet this "below detectable level" standard. But with the additional requirement imposed under Act 119 for each housing area within a kennel to have unfettered access to the outside, it is practically impossible for a responsible kennel operator providing dogs with "unfettered access" to fully comply at all times with the carbon monoxide standard in any area where carbon monoxide exists in the atmosphere. And it is our understanding that the areas where detectable levels of carbon monoxide normally exist in the atmosphere is far more the rule than the exception.

6. He also noted the impracticality with the guidelines' and proposed rulemaking's standard for ammonia. Levels of ammonia will be required to be at all times below 10 parts per million. But kennels are most often located on farms or in rural areas in very close proximity to farms, where levels of ammonia commonly exist because of storage and use of manure as fertilizer. Kennel owners have no real control over what neighboring farmers do and how they operate their farms. When a neighboring farmer spreads manure on land or is storing manure in large quantities in close proximity, chances are high that the levels of ammonia will be exceeded. As with the carbon monoxide standard, kennel operators will need to design air control systems in housing structures that reduce ammonia levels. But the additional need to provide a multitude of openings in these structures in order to meet Act 119's requirement for "unfettered access" of dogs to the outside makes nearly impossible and definitely infeasible for an air system to be designed that will fully comply with this standard.

7. He also offered some significant insights with respect to the guidelines' and proposed rulemaking's heat, humidity and air flow standards. He estimates that the "most economical" design of a structure housing approximately 50 dogs with a heating, cooling and air flow system having a chance to comply with the proposed rule making's 8-to-20-exchanges-per-hour requirement and Act 119's "unfettered access" requirement would add nearly $200,000 to the total cost of a more commonly designed structure that provides fewer rates of air exchange, bringing the total cost of this structure to well over $1 million. In addition, this structure would need to operate heating and cooling systems

at settings of 105 degrees F during much of the winter and at minus 10 degrees F during much of the summer in order to come close to complying with the guidelines' and proposed rulemaking's temperature requirements. The system would also have to include dehumidifiers to Significantly reduce humidity during summer periods to meet the below 50% humidity requirement and humidifiers to significantly add humidity during winter periods to meet the 40%-60% humidity requirement that the guidelines and proposed rulemaking would impose.

RESPONSES

1. The Department in its research and consultations came to recognize the link between temperature, humidity and ventilation and the absolute importance of regulating those parameters properly and as an entire system. The response to the previous comments sets forth in detail the research and science behind the Department's humidity and ventilation requirements in the final-form regulation and the fact the Department realizes that without the ability to set a specific air temperature cap, it must address ventilation and humidity control in a manner that will protect the health of the dogs housed in commercial kennels. The final-form regulation does provide the proper standards – through ventilation and humidity ranges and controls - to assure the health and welfare of the dogs housed in commercial kennels.

A mechanical ventilation system is still required in order to meet the ventilation standards of the regulations. As set forth in previous responses, to the Independent Regulatory Review Commission for instance, it was determined by the engineers and architects consulted, that the proper rates of ventilation could not be achieved or properly maintained without a mechanical means of air circulation. A holistic approach or one that incorporates kennel housing facility location and natural wind or convection will not work and will not achieve the levels of ventilation necessary to assure the welfare of the dogs housed in commercial kennel housing facilities. Changes in wind direction and speed and inverse convection to name a few problems cited by the engineers, will lead to stagnant air and no air flow or circulation. There is no other technology that the engineers or architects are aware of, or this Department for that matter, that will achieve or assure the appropriate ventilation rates. If a new technology becomes available the Department can amend the regulation to add that technology. Until then, in order to properly clarify the standards established by the regulation, stating that a mechanical ventilation system must be utilized is necessary.

2. As evidenced by the responses to comments received and the substantial and substantive changes to the final-form regulation, the Department did not blindly, arbitrarily or capriciously adopt any standard set forth in the Canine Health Board Guidelines or the proposed regulations. The Department consulted engineers (Learned Design, Paragon Engineering Services, Pennsylvania State University), animal scientists from the Pennsylvania State University, had meetings with members of the Canine Health Board and conferred with Department veterinarians to address ventilation, auxiliary ventilation, humidity and ammonia level and lighting standards. The Department did its own research and eventually had the engineers verify that the standards established were congruent, attainable, minimal, objective, measurable and comported with animal husbandry practices and science and design incorporated in the kennel buildings they design, build and retrofit.

3. The final-form regulations no longer sets a temperature cap of 86 degrees Fahrenheit, nor does it require a reduction in the ambient air temperature in the kennel housing facility.

Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

However, since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from numerous commentators, including the Independent Regulatory Review, the Honorable Senator Brubaker and the Honorable Members of the Pennsylvania House of Representatives.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

With regard to the humidity levels when temperatures are greater than 85 degrees Fahrenheit, the Department, with the assistance of consultations with the engineers listed above, Department and Canine Health Board veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, swine or cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

With regard to ventilation standards, not only does the final-form regulation do away with air exchanges per hour and change to a more objective and defined standard of cubic feet per minute per dog, but the final-form regulation no longer requires 100% fresh air exchange. It now provides that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing facility. These standards will make the system easier to design and install, easier to assure compliance and less expensive to operate because a majority of the air can be re-circulated and the amount of air circulation is based on kennel volume and number of dogs.

In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The

consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

4. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements.

Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. The provisions of section 28.2(8)(i)(A)(I-V) of the proposed regulations have been either eliminated or extensively modified in the final-form regulation. The provisions were modified to account for the information needed to verify and calculate the cubic feet per minute (CFM) per dog standard of the final-form regulation, which replaced the air exchanges per hour standard. The information requested is based on consultations with and approved by the kennel housing facility engineers consulted by the Department.

In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility.

The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to

measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

5. The final-form regulation no longer establishes a carbon monoxide level or standard. The final-form regulation only requires that kennel housing facilities utilizing any carbon monoxide emitting device, functioning carbon monoxide detectors shall be installed and maintained in each room or area of the kennel and kennel housing facility – excluding outdoor runs - in which dogs are housed, kept or present. The carbon monoxide detectors shall meet or exceed the UL standard 2034 or the IAS 6-96 standard, or its successor standards.

6. The ammonia level standards have been changed in the final-form regulation. The Department consulted with engineers and architects related to the ammonia levels established by the proposed regulation and with regard to the ability to measure ammonia levels. In addition, the Department consulted with veterinarians and animal scientists and did its own research with regard to commonly accepted levels of ammonia in animal operations such as swine operations. The engineers and architects all believed that if kennels were properly ventilated and achieved the air circulation values established in the regulations, then ammonia levels should not be a problem in the kennel. The Act, however, requires the Department to establish the proper ammonia levels for dogs housed in kennels. Discussions with veterinarians and research done by veterinarians on the Canine Health Board affirm that ammonia levels of 20 part per million or higher will cause respiratory and eye irritation and problems in animals. The veterinarians suggested the levels be set at some point below 20 parts per million and the consensus was that a level of 15 parts per million would both account for proper animal health and welfare and would be measurable. Ammonia levels are measured in the swine industry and can be accurately measured at levels of 15 parts per million. The Department's research also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel. That Act establishes parameters that do not allow dogs in kennels to be housed in any primary enclosure that is more than 48 inches high for dogs under twelve weeks of age or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department believes ammonia measurements should be taken at the height of the dogs.

In addition, the final-form regulation no longer requires 100% fresh air exchange. With regard to neighboring farms and ammonia levels, the engineers did not believe it should present a problem. The ventilation requirements, if complied with, will alleviate any ammonia level issues.

7. The Department consulted the engineers at Learned Design and Paragon Engineering Services regarding the assertions made in this comment. The engineers stated that even under the proposed regulations a system could have been designed that would have met the requirement and would not have cost more than twenty-five dollars per square foot ($25/square foot). The heating and cooling systems could have been operated at normal rates and a household system could have been employed to meet the requirements. In addition, the heating and cooling system, by its very design accounts for

humidity and humidity rates could have been met. The engineers did believe the humidity levels for temperatures between 50-85 degrees Fahrenheit should be in the 30-70% range.

The cost estimates to design, install and operate a system meeting all the requirements of the final-form regulation is set forth in the regulatory analysis form that accompanies the final-form regulation.

Comment: Veterinary – Air Flow Standards

We have also heard anecdotally from what we consider to be reputable and experienced veterinarians. Ironically, these veterinarians have offered opinions that the objectives of "health and well-being of dogs" in commercial kennels will not be achieved but will be diminished by the excessive air flow and other atmospheric requirements the guidelines and proposed rulemaking will impose.

RESPONSE

The Department has already set forth the additional research and consultations it undertook in responding to comments and drafting the final-form regulation. The ventilation standards have been extensively revised. The ventilation standards of 100 cubic feet per minute per dog and are based on systems already implemented in kennels designed by the engineers consulted and animal husbandry and welfare practices. The standards are consistent with standards suggested by animal scientists and veterinarians consulted by the Department.

Comment: General – Conclusion/Summary

Anyone who has had any experience with Pennsylvania Farm Bureau knows that we are an organization that does not blatantly reject legislative or regulatory proposals, even those that may place additional responsibilities on our industry. Some burdens that legislation or regulations attempt to impose make reasonable sense, and in the long run, benefit the industry by strengthening public confidence in the quality and propriety of the production practices and the resulting product. And we consistently offer constructive criticism of proposed regulatory standards and suggest solutions to concerns we have on regulations to accomplish legitimate public goals in an effective and feasible manner.

But with respect to the proposed rulemaking, it is impossible for us to begin to offer constructive criticism. Like the regulatory embodiment created by the CHB in its temporary guidelines, the Department's proposed rulemaking utterly fails to identify which empirical data, study or analysis - or any empirical data, study or analysis for that matter - that materially forms the basis and justification for the standards proposed. From the Department's continued and pervasive silence in identifying the whats and whys of the decisions leading to the prescribed regulatory standards, we can only conclude - as we did with the CHB's actions - that the Department either had no legitimate basis or is totally indifferent toward providing any justification for the regulatory standards devised.

The Department in its proposed rulemaking has singled out commercial kennels, is attempting to establish atmospheric standards for dogs that far exceed that standards that are required to be provided to humans, has failed to seek or provide meaningful input from those persons who will be directly affected, and is attempting to establish standards that knowledgeable and reputable professionals have serious questions of validity and

effectiveness. The totality of the Department's actions and inactions strongly supports our belief and conclusion that the proposed rulemaking violates the obligations that rule making bodies are legally required to meet in promulgation of regulatory standards.

RESPONSE

The Department has engaged experts in the field of kennel housing facility engineering and design, animal scientists, veterinarians from the Department and the Canine Health Board, met with members of the Pennsylvania Professional Dog Breeders Association and an AKC Senior Field Representative, reviewed research and minutes of the Canine Health Board, done additional research and consulted engineers and veterinarians with regard to that research and met with representatives of the General Assembly and IRRC in responding to the comments and making substantial and substantive changes to the final-form regulation. Any person that requested a meeting was engaged by the Department. In short, the Department has not been silent, nor has it stood pat on the information and research that led to the promulgation of the Guidelines and the proposed regulations. The Pennsylvania Farm Bureau did not request a meeting to discuss their concerns, but the Department has done research and elicited expert opinion and advice with regard to their comments. The Department has met all of the requirements of the Regulatory Review Process in its deliberations and promulgation of this regulation.

As set forth previously, the Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the general public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted architects and engineers that design and build kennel housing facilities, a regulated community group, an AKC Senior Kennel Field Representative, animal scientists from the Pennsylvania State University and Department and Canine Health Board veterinarians, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations.

Comment:

Our recommendation today is the same as the recommendation we made to the CHB per its published guidelines, and is the same as the recommendation that the Independent Regulatory Review Commission (IRRC) made in 2007, in response to the arbitrary and unworkable regulatory standards for kennels that the Department proposed. IRRC's suggestion was essentially for the proposed regulations to be scrapped and for the Department to conduct a process of meaningful dialogue to develop a more definitive, effective and balanced set of standards that materially accomplish the goals of animal welfare without doing so in a manner that shuts down reputable and responsible kennel operators.

RESPONSE

The Department, being the promulgating agency, decided to proceed with the proposed rulemaking realizing that, as with nearly all regulations, changes would most likely have to be made to the final-form regulation. In addition, the Department felt this was the best mechanism to assure a more timely set of regulations and to comply as nearly as possible with the mandate of the Act. As set forth more fully above, the Department engaged experts and professional, met with a major industry group, did additional research and verification and engaged with any person requesting a meeting while drafting the final-form regulation.

Comment:
We would urge the Department to rescind its proposed rulemaking, and reopen its consideration of minimum kennel standards, and devise new standards that reflect a serious and good faith effort by the Department to have discussions with and to meaningfully consider and incorporate input provided from the regulated community.

We are willing to help the Department develop more sensible and scientifically supportable standards for commercial kennels that effectively accomplish the objectives of maintaining the health and well-being of dogs in kennels in a manner that is not punitive to responsible kennel operators and is reasonably responsive to the economic realities and climate uncertainties of kennel operation.

RESPONSE

The Department, being the promulgating agency, decided to proceed with the proposed rulemaking realizing that, as with nearly all regulations, changes would most likely have to be made to the final-form regulation. In addition, the Department felt this was the best mechanism to assure a more timely set of regulations and to comply as nearly as possible with the mandate of the Act. As set forth more fully above, the Department engaged experts and professional, met with a major industry group, did additional research and verification and engaged with any person requesting a meeting while drafting the final-form regulation.

III. PET INDUSTRY JOINT ADVISORY COUNCIL (PIJAC)

Submitted by: Michael C. Maddox, Esq.
Pet Industry Joint Advisory Council
1220 19th Street, N.W., Suite 400
Washington, D.C. 20036

Background:
Statement of Interest
As the world's largest pet trade association, representing the interests of all segments of the pet industry throughout the United States, PIJAC counts among its thousands of members associations, organizations, corporations and individuals across the United States. More specifically, PIJAC represents manufacturers, distributors,

breeders, boarding facilities and retailers throughout the state of Pennsylvania. Nobody cares more about healthy and safe pets, and the safety and welfare of the pet owning public, than does PIJAC. PIJAC has for many years provided a well respected animal care certification program that is widely utilized by not only persons in the commercial pet trade, but also shelters and humane societies as well. Our association has long been recognized as the voice for a responsible pet trade, and we routinely advocate legislative, regulatory and policy proposals that facilitate support by the pet trade for appropriate governmental mandates, whether they come from the international, federal or state level. PIJAC has routinely worked with the USDA to ensure effective enforcement of the federal Animal Welfare Act since its inception, and regularly works with the Centers for Disease Control and other federal and state agencies to promote responsible pet ownership while protecting the public health and safety.

PIJAC actively participated in the process of crafting the Dog Law amendments precipitating this action, and would hope that final regulations adopted by the Department of Agriculture (Department) are consistent with the intent and letter of that statute.

Comment: Statutory Authority

As the Department notes, the Dog Law delegated to the Canine Health Board (Board) the responsibility for developing substantive standards. Various parties involved in the process of crafting House Bill 2525 (which ultimately became Act 119), including PIJAC, failed to reach agreement on certain standards in the bill, which resulted in this legislative mandate. The Board's mandate is specific in nature, and regulations stemming from the Board's recommendations should be consistent with such mandate.

PIJAC joins other stakeholders in its concern that the Board has exceeded its mandate, and that the Department's proposed rule making includes some provisions that are inconsistent with statutory law.

RESPONSE

The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form based on the Guidelines. The Department then received, reviewed and formatted all comments submitted by the general public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted architects and engineers that design and build kennel housing facilities, a regulated community group, an AKC Senior Kennel Field Representative, animal scientists from the Pennsylvania State University and Department and Canine Health Board veterinarians, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the

preamble and regulatory analysis form that accompanies the final-form regulations.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Fiscal Impact

PIJAC questions the impact analysis put forth by the Department. All costs, it asserts, "will be paid for entirely from the Dog Law Restricted Account." Yet the additional inspection costs necessitated by this proposal would be substantial. Revenue will be significantly impacted as well, inasmuch as a sharp reduction in license fees must be anticipated from the substantial reduction in the number of regulated entities. There are

already a large number of licensees who have announced they will relinquish their licenses as a result of the Department's new requirements. This number will undoubtedly increase. Finally, the cost impact to regulated entities themselves under the proposal is woefully understated. Indeed, it is this projected cost that is already driving countless numbers of licenses out of business.

RESPONSE

The regulations, which have not yet been promulgated, have not been the driving force with regard to kennels that have either gone out of business either on their own or because of enforcement action by the Department. The driving force to date has been the cost of compliance with the standards imposed by Act 119 of 2008 and kennel owners failure to take action to comply with those standards.

With regard to the fiscal impact of the regulations, the final-form regulations have been substantially and substantively changed. As set forth in greater detail to other similar comments, the final-form regulatory analysis form has captured the applicable and reasonable cost of the regulation. The Department has consulted with engineers that build and design kennel housing facilities and they have provided the cost estimates of implementing the regulatory provisions, either with regard to retrofitting an existing kennel or building a new kennel. In addition, the Department has researched once again, the cost of any measurement equipment to be utilized, reviewed training and paperwork costs and other costs estimates required in the regulatory analysis form.

The amendments made to the final-form regulation, besides being based on expert input from engineers and architects that design and build kennel facilities, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and the Department, also reduce the cost of compliance with the regulation in several ways.

The final-form regulation contains no requirement for temperature reduction. Air conditioning or HVAC is allowed but not required. The final form regulation focuses on humidity levels in kennel housing facilities, and expands the range of the humidity level to 30%-70% when temperatures are between 50 and 85 degrees Fahrenheit. The final form regulation requires additional humidity reduction when temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, but allow the kennel owner four hours to reach the humidity level necessary to assure an 85 Heat Index value in the facility. The humidity ranges are based on expert analysis and opinion provided by the engineers consulted (Learned Design, Paragon Engineering Services), animal scientists and Canine Health Board and Department veterinarians. The Department with the assistance of Dr. Overall from the Canine Health Board found and utilized a dog survivability study that pinpoints the upper most range of the heat index that would allow for survival of dogs. The Heat Index value is based on the results and recommendations of a survivability study conducted on beagles. The study entitled "A Temperature/Humidity Tolerance Index for Transporting Beagle dogs in Hot Weather", was sponsored by the Federal Aviation Administration and authored by Gerald D. Hanneman and James L. Sershon. The document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.

The Heat Index Value is also based on the Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by in 1998 by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University

School of Veterinary Medicine and first published in "Recognizing and Reporting Animal Abuse: A Veterinarian's Guide." This widely-used scale, one of several canine assessment tools focused on consequences for the dog, indicates that, even with water and shade available as in a commercial kennel setting, a potentially unsafe situation develops above a 90 degree F temperature, especially for brachycephalic, obese or elderly dogs, as well as dogs under 6 months of age. Although the regulation is based on heat index, regulates relative humidity rather than temperature, and a temperature of over 90 degrees F would be permitted if combined with a relative humidity that would result in a HI of no more than 90, the inclusion of the TACC Weather Safety Scale as a basis for the regulation emphasizes that the standard being set goes beyond survivability to minimize adverse heat-related consequences for dogs in commercial kennels. The survivability study and the TACC Weather Safety Scale are generally acknowledged to be the only two scholarly resources that give specific heat-related guidance applicable to canines.

The Department will purchase temperature and humidity monitoring devices to be installed in kennels as set forth at subsections 28a.4(b)(4) and (5) of the final-form. regulation. In deciding to purchase the temperature and humidity monitoring devices the Department took into account the comments of kennel owners and other related to the cost to the kennel owners of having to purchase such equipment to monitor their kennels and the issue of standardization of such equipment so that measurements are taken in the same manner and by the same type of equipment. The Department will bear the cost of buying, calibrating, replacing and installing the monitors and kennel owners will be able to continually check the monitors to assure their kennel facility is in compliance with the standards of the regulations.

The ventilation system language and requirements are based on consultations with and were reviewed by engineers – that design and build kennel housing facilities – and discussions with animal scientists. The humidity levels are based on consultations with animal scientists from the Pennsylvania State University, Canine Health Board and Department veterinarians, scientific research undertaken by Dr. Overall of the Canine Health Board, standards already contained in the Federal Animal Welfare Act and the experience and expertise of engineers that design and build kennel housing facilities.

The final-form regulation implements changes, such as establishing ventilation standards in cubic feet per minute per dog instead of air exchanges per hour. This was done in response to comments from and discussions with the architects, engineers and animal scientists consulted by the Department. This allows the Department to check the CFM or capacity rating on the ventilation and air circulation equipment employed by the kennel owner to assure it meets the required air circulation values. It also allows the kennel owner and engineer or architect to design and base the ventilation system on an objective capacity rating as opposed to a more subjective air exchange rate. A professional engineer must verify that the system utilized will meet the ventilation, auxiliary ventilation and humidity standards of the regulation.

The final-form regulation also allows up to seventy percent (70%) of the air to be re-circulated, as opposed to 100% fresh air. That change will reduce the necessity to purchase air circulation monitoring equipment and provides an objective measurement of air circulation, while at the same time, reduces the cost of operation to the kennel owner. The changes were contemplated in response to issues set forth in the comments received and were made pursuant to the Department's consultation with animal scientists and engineers – Learned Design and Paragon Engineering Services – that design and build kennel housing facilities.

The cost of the mechanical ventilation system will vary according to the sophistication and complexity of the system the kennel owner decides to install. However, the Department has consulted several engineers and engineering companies that build kennel buildings and asked them to assess the cost of designing and installing a ventilation system that would meet all the ventilation requirements – including auxiliary ventilation and humidity levels - of the final-form regulation. The costs are based on a kennel owner having to retrofit or build from the ground up and include the cost of installing all of the equipment, even though most kennel owners, especially those subject to United States Department of Agriculture regulations, should already have some form of mechanical ventilation, auxiliary ventilation and – in the case of USDA – temperature control devices already installed in the kennel.

The Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)).The Federal Animal Welfare Act Regulations further require that temperatures in enclosed or partially enclosed housing structures be maintained between 50-85 degrees Fahrenheit (9 CFR §§ 3.2(a) and 3.3(a)) and that proper ventilation and lighting be provided (9 CFR §§ 3.2(b) and (c) and 3.3(b) and (c)). Therefore, the costs estimates, which are set forth in the regulatory analysis form that accompanies the final-form regulation will necessarily be higher than those incurred by such kennel owners, because they should already have systems in place. The regulatory analysis form will set forth the greatest cost that could be incurred for a system that would meet the standards of the regulations.

Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form. The kennel owner may elect to purchase a light meter or ammonia level meter or both. The kennel owner will be able to utilize the Department's temperature and humidity monitoring devices to assure compliance with those standards. The capacity or CFM standards for air circulation can be calculated based on the cubic feet of each area of the kennel housing dogs and the total number of dogs housed in that area of the kennel and must be certified to meet the standards of the regulation by a professional engineer. The capacity or CFM rating is listed on fans and other forms of mechanical ventilation and the professional engineer, State dog warden and kennel owner can match those standards without buying any monitoring equipment. The kennel owner can adjust the level of the air circulation based on the number of dogs in the kennel at any one time, and no additional equipment or monitoring devices are necessary for such calculations. Standard carbon monoxide monitors, for those kennels that need to install them, will have to be purchased, but actual carbon monoxide level readings will not have to be taken, so no additional devices are necessary.

The Department has no baseline data with regard to a kennel's current utility costs, so it is impossible to project the amount of any increase in such costs. However, the regulatory analysis form accompanying the final-form regulation does estimate the average yearly cost of operating a system that would meet the ventilation, auxiliary ventilation and humidity standards of the regulations. These estimates do not take into account the fact that kennel owners already had previous existing utility costs. Therefore, the estimates set forth in the regulatory analysis form will include those already existing

costs. The existing costs for kennels regulated by the USDA will be much less, as those kennels already had to comply with specific heating (50 F) and cooling (85 F) regulations and therefore, should already be operating heating and cooling systems in their kennels. The Federal Animal Welfare Act regulations in fact require the kennel to reduce the temperature to 85 degrees Fahrenheit.

In addition, both the Federal Animal Welfare Act regulations and the Department's current regulations require the use of auxiliary ventilation when temperatures in kennels rise above 85 degrees Fahrenheit, so kennels should already have some form of auxiliary ventilation in place or available.

The lighting should not cost any additional amount, since kennels were already required, by the Department's current regulations and USDA regulations to provide a diurnal lighting cycle and enough light to allow for observation of the dogs and normal animal husbandry practices. The amendments made by Act 119 also require and set forth those same general standards. The new regulations quantify the intensity of the light to be provided and the type of lighting. The regulatory analysis form sets forth the cost estimates to install new full spectrum lighting, if a kennel does not already have such lighting, but there should be no additional cost of operating the lighting, since proper lighting is already required.

In short, the Department consulted with engineers who design and build kennel buildings, to determine the potential cost of the ventilation, auxiliary ventilation, humidity, ammonia and lighting standards of the final-form regulation. The new cost estimates, set forth in the accompanying regulatory analysis form, are based on their input. The final-form regulation, especially the ventilation provisions of the final-form regulation, has reduced the need for some of the measurement equipment that would have been required by the proposed regulation. Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form.

The Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

Comments: Ventilation – Section 28a.2

1. The Act provides that "housing facilities for dogs must be sufficiently heated and cooled to protect the dogs from temperature or humidity extremes and to provide for their health and well-being. If dogs are present, the ambient temperature in the facility must not fall below 50 degrees F. The ambient temperature must not rise above 85 degrees F when dog are present, unless" specified requirements are met. Such requirements relate to ventilation of facilities, and the Act provides that:

"The Canine Health Board shall determine auxiliary ventilation to be provided *if* the ambient air temperature is 85 degrees F or higher. The appropriate ventilation, humidity and ammonia *ranges* shall be determined by the Canine Health Board." (Emphasis added)

While the proposed rule, pursuant to Section 28a.2(l), provides for the temperature conditions under which mechanical ventilation should be utilized, it improperly dictates that "each area of the kennel where dogs are present must utilize a functional, mechanical ventilation system ... " Inasmuch as the underlying statute requires the availability of auxiliary ventilation only in facilities where statutory ranges of temperature are not met, the regulatory requirement for all facilities to maintain specific systems of ventilation is one which inappropriate exceeds the statutory standard. In other words, for those facilities maintaining the temperature range specified in statute, the Department is not authorized to require *any* systems of ventilation.

2. Section 221 of the Act, establishing the Board, provides its purpose as determining standards "to provide for the welfare of dogs under Section 207(h)(7) and (8)." In point of fact, Section 207(h)(7) does not even involve establishment of temperature levels. Those are set forth in Section 207(h)(6). The section applicable to the Board's authority states that the Board shall determine auxiliary ventilation "if the ambient air temperature is 85 degrees F or higher." Regulatory standards emanating from the Board should be limited to a requirement for auxiliary ventilation. It has no authority to regulate with regard to temperature at all; only as to ventilation. And with regard to ventilation, the Board is charged with establishing the level of auxiliary ventilation only where the temperature exceeds 85 degrees F. In such cases, the law does not authorize the Board to dictate how the level of ventilation is achieved.

3. Likewise, the proposed requirement under Section 28a.2(7) exceeds the statutory authority of the Board. Nowhere does the Dog Law charge the Board with measuring or regulating particulate matter. Indeed, Section 207(h) of the underlying statute already specifies standards as to kennel cleanliness without regard to specific measurement of particulate matter. Establishment of such a standard in regulation imposes a standard different from the statutory standard, thereby conflicting with and exceeding statutory requirements.

4. Specific air change requirements under 28a.2(8) are questionable in terms of sustaining a healthful environment for the animals.

RESPONSES

1. The Department disagrees with this interpretation of the Dog Law statute. The language of the statute is clear and confers absolute authority for the Department to regulate ventilation and humidity levels at all times. Section 207(h)(7) of the Dog Law, along with Section 221(f) provides the authority to regulate ventilation at all times that dogs are present in a kennel facility (3 P.S. §s 459-207(h)(7) and 459-221(f)). The Canine Health Board and hence the Department as the promulgating agency has the absolute authority, under section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) to set and establish proper ventilation, humidity and ammonia levels. The express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-221(f))

The language is very clear and precise. The Board and the Department have the authority to set "at all times" the proper ventilation, humidity and ammonia standards in commercial kennels. This authority is in addition too, not a modification of the auxiliary ventilation authority and makes it perfectly clear the Department has absolute and specific authority to address proper ventilation, at all times, in commercial kennels. Under the authority set forth at section 221(f) of the Dog Law (3 P.S. 459-221(f)) these standards have to be and are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels. As set forth in answers to previous comments, the Department researched and consulted with engineers and architects that build and design kennel buildings, animal scientists from the Pennsylvania State University and department and Canine Health Board veterinarians in establishing the proper ventilation, humidity and ammonia ranges. It was determined by the engineers (Learned Design and Paragon Engineering Services) and architects consulted, that the proper rates of ventilation could not be achieved or properly maintained without a mechanical means of air circulation. Various factors, including wind, wind direction and inverse convection to name a few, make it impossible for any kennel building to be designed in a manner that would allow it to obtain the proper ventilation levels, on a consistent and necessary basis, without mechanical means.

A holistic approach or one that incorporates kennel housing facility location and natural wind or convection will not work and will not achieve the levels of ventilation necessary to assure the welfare of the dogs housed in commercial kennel housing facilities. There is no other technology that the engineers or architects are aware of, or this Department for that matter, that will achieve the appropriate ventilation rates. If a new technology becomes available the Department can amend the regulation to add that technology. Until then, in order to properly clarify the standards established by the regulation, stating that a mechanical ventilation system must be utilized is necessary.

2. The Department disagrees with the premise that the Canine Health Board and the Department as the promulgating agency can only regulate auxiliary ventilation. Auxiliary ventilation is just that – additional ventilation techniques available if the temperature in the kennel rises above 85 degrees. Section 207(h)(6) of the Dog Law (3 P.S. § 459-207(h)(6)) is the provision of the statute that requires such regulation. Section 207(h)(7) establishes the authority and duty of the Canine Health Board to address and the Department to regulate ventilation, humidity and ammonia levels at all times when dogs are present in the kennel facility. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." Section 221(f) requires the Canine Health Board to address and set those standards and the Department to promulgate regulations based "...on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-221(f)). The final-form regulations carry out that very duty and set standards for ventilation based on cubic feet per minute per dog. The regulation then addresses how the standard will be measured, the standards to assure animal welfare, compliance and the duty of the kennel owner to meet that standards at all times. All of this is well within the authority conferred by the Act.

3. The Department has removed this provision from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation requirements of the regulations were being met, particulate matter would not pose a problem in the kennel.

4. Various commentators have questioned the air exchange rates established by the Canine Health Board. Only one, the Pennsylvania Professional Dog Breeders Association, suggested an alternative measure (3 air exchanges per hour) and no scientific or engineering data was offered to support that recommendation. The Canine Health Board, comprised of nine veterinarians with expertise in animal and specifically canine health issues, although criticized by some commentators for not providing a scientific rational or basis for their air exchange requirements, actually did do research and analysis to determine the air exchange rates. That research and analysis was discussed by the Canine Health Board at open public meetings leading to the drafting of the Canine Health Board Guidelines, which are the basis of the proposed regulation.

However, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and

consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by State dog wardens, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comments: Lighting – Section 28a.3

1. The Act, in Section 207(8) sets forth the requirement that facilities "must be lighted well enough to permit routine inspection and cleaning of the facility and observation of the dogs." It goes on to require a "regular diurnal lighting cycle" and that "lighting must be uniformly diffused throughout housing facilities." This section also states that dogs must be protected from excessive light. The sole and exclusive charge under the Act relative to lighting was that the Board shall determine "lighting ranges." The manner in which such ranges are achieved is beyond the scope of the Board's authority. Further, the Board's attempt to specify requirements for "natural light" are actually contravened by the statute. The Act explicitly states that animals must be provided "either natural or artificial light." So long as a licensee provides either natural or artificial light, within "the appropriate lighting ranges" then it is in compliance with the law.

RESPONSE

The language cited by the commentator merely reiterates the language contained in section 207(h)(8) of the Dog Law and is absolutely appropriate and it is within the authority of the Department as the promulgating agency to restate the statutory language in the regulation. The statutory language applies and is enforceable whether or not it is in the regulation. Inserting the statutory language into the regulation adds clarity and is informative to the regulated community with regard to the standards with which the must comply.

With regard to requiring natural and artificial light, the final-form regulation now allows for either type of lighting source or a combination of both to be utilized to meet the lighting requirements of the regulation. The final-form regulation no longer

contains the language of what was section 28a.3(1) of the proposed regulation (now section 28a.7 of the final-form regulation). The final-form regulation now allows for either natural or artificial light or for a combination of both. It sets general standards for all lighting and establishes specific standards that in addition to the general standards, apply to specifically to either natural or artificial lighting. What was subparagraph (1) of the proposed regulation is now contained in a provision that relates only to natural light. Natural light is no longer required. What were subparagraphs (1)(ii)-(1)(vi), have been removed from the final-form regulation. The new language, regarding general lighting standards, mirrors the language of the Act and is also consistent with existing United States Department of Agriculture, Animal Welfare Act regulation standards.

Comment: Flooring - Section 28a.4

As with the other areas of responsibility in developing substantive standards, the authorization for "additional flooring options" that may be approved by the Board was inserted in the Act in order to address insufficiency of legislative amendments in legislating that issue. Specifically, it was recognized that safe, healthy and humane flooring options are available and the intent was that the Board would devise parameters for them. It is unfortunate that proposed regulations do not address this deficiency.

RESPONSE

In response to a comment from the Independent Regulatory Review Commission, that was similar to this comment, but regarded the clarity of the language in the flooring section of the proposed regulation, the Department made substantial changes to the final-form regulatory language. The Department in response to the Independent Regulatory Review Commission's suggestion, restructured the section related to flooring, section 28a.8 of the final-form regulation. In restructuring this section the Department felt it would be even more helpful to the regulated community if all the flooring standards established by the Act, were also delineated in the regulation. Therefore, the Department established two new subsections which reiterate the language contained in sections 207(i)(3)(i)(related to general flooring standards) and (i)(3)(ii)(related to slatted flooring) of the Act (3 P.S. §§ 459-207(i)(3)(i) and (ii)). In addition, the Department had to then modify the language of the proposed regulations which sought to espouse the requirements or parameters for additional flooring options. In doing so, the Department established subsection 28a.8(c), which sets forth the language of the statute allowing the Canine Health Board to approve additional flooring options, and delineates the authority and duty of the Canine Health Board to assure the additional flooring standards adhere to the general requirements established by section 207(i)(3)(i) of the Act and that additional flooring options, based on proper animal husbandry practices, provide for the health, safety and welfare of the dogs confined to these kennels, as required by section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 459-221(f)). The Department included the standards set by the Canine Health Board in the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department veterinarians and some Canine Health Board veterinarians, the Department added language that provides for the

welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices. The final-form regulations address this comment by actually establishing parameters for additional flooring options.

Comment: Conclusion

PIJAC appreciates the efforts of the Board to provide greater detail in regulation with regard to specified substantive standards. Regrettably, we believe that in proposing these regulations the Board has gone beyond that specific grant of authority by seeking to impose substantive requirements, or means for meeting standards, that are not authorized in the Dog Law. We believe that the work of the Board should be limited to those areas delegated to it by the statute, and that these proposed regulations should be revised to eliminate excessive requirements.

RESPONSE

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

IV. SPORTSMENS' AND ANIMAL OWNERS' VOTING ALLIANCE (SAOVA)

Submitted by: Robert Youngs, President Susquehanna Brittany Club and Pennsylvania Director, Sportsmen's and Animal Owners' Voting Alliance
And
Susan Wolf, President, Sportsmen's and Animal Owners' Voting Alliance
315 Stoner Road
Mechanicsburg, PA.

Background:

The Sportsmen's and Animal Owners' Voting Alliance (SAOVA) is a nationwide, nonpartisan group of volunteers working to protect both sportsmen and animal owners in the legislative and political arenas. SAOVA's members hunt, fish, own and breed livestock, dogs, cats and other pets. On behalf of our members in Pennsylvania, we submit the following comments on the standards for commercial kennels as proposed by the Canine Health Board.

Comments: Ventilation – Section 28a.2

1. The Canine Health Board has been charged as specified in Section 207 (h)(7) with the responsibility to determine appropriate ventilation, humidity and ammonia ranges to ensure dogs' health and well-being. However, the precise, detailed regulations proposed by the Canine Health Board exceed those outlined by USDA/APHIS and appear far more exacting than even guidelines used by the Office of Laboratory Animal Welfare. Engineering standards to the detailed level currently proposed are problematic for several reasons:

a. Carbon monoxide detectors and monitoring are not included in Act 119 for regulation.

b. Proposed regulations state: When the temperature is 50-75 F, the relative humidity shall be in the range of 40-60%. The relative humidity shall be measured at standing shoulder level of 10% of the dogs in the kennel, randomly selected from all rooms. This method of measurement is both excessive and unnecessarily time consuming for kennel owners and dog wardens.

c. Complete air change of 8-20 times per hour is likely to create difficulty in

maintaining temperature without drafts or wide variances in room temperature.

2. Section 28a.2.(1) states that dogs may not remain in the facility if temperatures rise to 86 degrees or above. Removing the dogs to the outside when temperatures are 95 degrees or more does not seem a logical alternative if the ventilation system malfunction has caused a temporary rise but will be corrected within a reasonable time frame.

3. The tedious and exact regulations proposed for monitoring and recording air quality will substantially decrease the number of inspections that can be performed in a day by each dog warden. It would be reasonable to assume that additional inspectors must be hired and trained to accomplish the current workload of inspections. We believe that cost to the Department has been greatly underestimated.

4. Section 28a.2 (8)a of the proposed regulations states that dogs may not exhibit conditions or signs of illness or stress associated with poor ventilation and lists 17 symptoms of canine illness. Every veterinarian and anyone with the most basic animal husbandry knowledge is aware that each of the listed symptoms has multiple causes completely unrelated to air quality. For example:

(i) Nasal mucous can be caused by rhinitis, foreign bodies, nasal irritation, nasal mites, or even nasal tumors.

(ii) Redness, crusting of eyes can be caused by seasonal allergies, corneal scratches, entropion, or excessive tear production.

(iii) Diarrhea can be caused by something as simple as change of diet

The mere attempt to draft legislation prohibiting dogs from showing signs of illness defies reason, common sense, and practicality. To enact this into law establishes a dangerous precedent of mandating what is not achievable.

RESPONSES

1.a. The final-form regulation no longer establishes a carbon monoxide level or standard. The final-form regulation only requires that kennel housing facilities utilizing any carbon monoxide emitting device, functioning carbon monoxide detectors shall be installed and maintained in each room or area of the kennel and kennel housing facility – excluding outdoor runs - in which dogs are housed, kept or present. The carbon monoxide detectors shall meet or exceed the UL standard 2034 or the IAS 6-96 standard, or its successor standards.

1.b. First, with regard to humidity ranges, the final form regulation focuses on humidity levels in kennel housing facilities, and expands the range of the humidity level to 30%-70% when temperatures are between 50 and 85 degrees Fahrenheit. The final form regulation requires additional humidity reduction when temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, but allow the kennel owner four hours to reach the humidity level necessary to assure a 85 Heat Index value in the facility. The humidity ranges are based on expert analysis and opinion provided by the engineers consulted (Learned Design, Paragon Engineering Services), animal scientists and Canine Health Board and Department veterinarians. The Department with the

assistance of Dr. Overall from the Canine Health Board found and utilized a dog survivability study that pinpoints the upper most range of the heat index that would allow for survival of dogs. The Heat Index value is based on the results and recommendations of a survivability study conducted on beagles. The study entitled "A Temperature/Humidity Tolerance Index for Transporting Beagle Dogs in Hot Weather", was sponsored by the Federal Aviation Administration and authored by Gerald D. Hanneman and James L. Sershon. The document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.

The Heat Index Value is also based on the Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by in 1998 by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine and first published in "Recognizing and Reporting Animal Abuse: A Veterinarian's Guide." This widely-used scale, one of several canine assessment tools focused on consequences for the dog, indicates that, even with water and shade available as in a commercial kennel setting, a potentially unsafe situation develops above a 90 degree F temperature, especially for brachycephalic, obese or elderly dogs, as well as dogs under 6 months of age. Although the regulation is based on heat index, regulates relative humidity rather than temperature, and a temperature of over 90 degrees F would be permitted if combined with a relative humidity that would result in a HI of no more than 90, the inclusion of the TACC Weather Safety Scale as a basis for the regulation emphasizes that the standard being set goes beyond survivability to minimize adverse heat-related consequences for dogs in commercial kennels. The survivability study and the TACC Weather Safety Scale are generally acknowledged to be the only two scholarly resources that give specific heat-related guidance applicable to canines.

Second, with regard to required measurement standards and techniques there is no longer a requirement that 10% of the dogs be tested and there are no parameters within the regulation setting standards or protocol for the number or the place of measurements. The more objective standards established by the final-form regulation – CFM per dog – no longer requires such measurements and the installation of humidity and temperature monitoring devices by the Department does away with this requirement. Dog warden training and protocol will be undertaken by the Department, just as in any other agency that enforces regulations, but should not be set forth in a regulation.

1.c. In response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set

forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the

kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

2. The final-form regulation no longer contains any language requiring dogs to be removed from the kennel housing facility if temperatures in that facility rise above 86 degrees Fahrenheit. The final-form regulation contains humidity and auxiliary ventilation standards that must be employed and sets forth specific notification requirements if there is a mechanical malfunction.

3. The amendments made to the final-form regulation, specifically those made to the ventilation and humidity provisions will reduce the cost of inspection and compliance with the regulation in several ways.

The final form regulation focuses on humidity levels in kennel housing facilities, and establishes that the Department will purchase temperature and humidity monitoring devices to be installed in kennels as set forth at subsections 28a.4(b)(4) and (5) of the final-form regulation. In deciding to purchase the temperature and humidity monitoring devices the Department took into account the comments of kennel owners and other related to the cost to the kennel owners of having to purchase such equipment to monitor their kennels and the issue of standardization of such equipment so that measurements are taken in the same manner and by the same type of equipment. The Department will bear the cost of buying, calibrating, replacing and installing the monitors, which is included in the agency costs set forth in the regulatory analysis form, and kennel owners will be able to continually check the monitors to assure their kennel facility is in compliance with the standards of the regulations.

The ventilation system language and requirements are based on consultations with and were reviewed by engineers – that design and build kennel housing facilities – and discussions with animal scientists and implement changes, such as establishing ventilation standards in cubic feet per minute per dog instead of air exchanges per hour. This was done in response to comments and discussions with the architects, engineers and animal scientists consulted by the Department. This allows the Department to check the CFM or capacity rating on the ventilation and air circulation equipment employed by the kennel owner to assure it meets the required air circulation values and not have to utilize air exchange or circulation monitoring devices. It also allows the kennel owner and engineer or architect to design and base the ventilation system on an objective capacity rating as opposed to a more subjective air exchange rate. A professional

engineer must certify the system will meet the ventilation, auxiliary ventilation and humidity standards of the regulation.

4. The language that appeared in subsection 28a.2 (9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress, has been substantially modified in the final-form regulations and is now subsection 28a.2(h) in the final form regulation. First, based on discussions with animal scientists, at the Pennsylvania State University and Department and Canine Health Board veterinarians, the number and type of conditions in dogs that may denote poor ventilation has been reduced. Second, and significantly for purposes of authority, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that animal scientists and veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Paragraph (2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Comment: Conclusion/Summary

The regulations as proposed would create a source of constant violations for kennel operators until in frustration they decide to go out of business or leave the state. According to the 2008 Dog Law Bureau Annual Report 2,674 kennels were licensed of which only 84 (3%) were licensed to have more than 250 dogs. A total of 6,033 kennel inspections were completed and the department revoked or refused licensing to 14 kennels (0.52%). Using current standards, the inspections produced 182 kennel citations for unsanitary or inhumane conditions (6.8%). The overwhelming number of kennels appear to be operating satisfactorily and the onerous regulations proposed by the Canine Health Board are therefore not justified and should be rejected in their entirety.

RESPONSE

The Legislature of this Commonwealth determined that the provisions of the Dog Law regulating commercial kennels were inadequate to provide appropriate and sufficient protections for the health and safety of dogs housed in commercial kennels. Therefore, the Legislature passed, nearly unanimously, Act 119 of 2008, amending the Dog Law. The provisions added to the Dog Law by Act 119 that regulate commercial kennels, specifically sections 207(h) and 207(i) (3 P.S. §§ 459-207(h) and 459-207(i)) were not effective until October 9, 2009. The statistics related to compliance in 2008 do nothing to prove that additional standards are not necessary. The Canine Health Board and the

Department were charged with the duty to promulgate regulations (3 P.S. §§ 459-207(h)(6)(7)(8) and 459-221(f)) to further clarifying and setting specific standards to assure there are proper ventilation, humidity, ammonia, lighting and flooring standards to protect the health of dogs housed in commercial kennels. The Canine Health Board in setting forth Guidelines, to be published as proposed regulations by the Department, carried out its duty imposed by the Legislature and the Department in promulgating these final-form regulations is carrying out its duty under the statute.

V. PA KENNEL ASSURANCE PROGRAM (PA KAP)

Submitted by: James E. Burkholder, President
PA Kennel Assurance Program
316 Good Road
East Earl, PA 17519

The following comments are submitted on behalf of members of the PA Kennel Assurance Program (PA KAP) regarding proposed regulations developed by the Canine Health Board (CHB) to fulfill sections of Act 119 in the Dog Law.

Comment: Statutory Authority

Section 221(f) of Act 119 charges CHB with the duty of determining standards for Class C (Commercial) Kennels to provide for the health and well being of dogs in three specific areas: ventilation, lighting and flooring.

Rather than establishing standards for the health and well being of dogs relating to the three designated areas, the CHB has created guidelines that will absolutely result in animal welfare issues. CHB has grossly failed in their charge, which has caused the PA KAP to question their competency.

CHB has failed to address in its entirety the impact of the costs to the Bureau of Dog Law Enforcement (Bureau) to:

1. Purchase the necessary equipment to measure relative humidity, airborne particulate matter, air exchange, temperature and ammonia.
2. Train wardens to calibrate and accurately read measurements.
3. Provide additional man hours for the increased time required to complete lengthy inspections of Class C Kennels.

The proposed standards, if enacted, will further burden the Dog Law restricted account, creating serious concerns for future economic stability.

RESPONSE

The Department has a duty under the Act, to promulgate regulations that address ventilation, auxiliary ventilation, humidity, ammonia and lighting levels and may address parameters for additional flooring options (3 P.S. §§ 459-207(h)(6)(7)(8) and 459-221(f)). The Department is required to set standards that are based on animal husbandry practices will account for the welfare of dogs housed in kennels. While the Department is required to set forth the cost of such regulation, the cost can not be an excuse for promulgating regulations that do not adhere to the duty imposed by the statute.

The Department has fully set forth costs estimates in the regulatory analysis form that accompanies the final-from regulation. The regulatory analysis form provides cost estimates for implementation of the final-form regulation, including estimates received from engineers and architects or firms that design and/or build kennels. The cost estimates are based on the language of the final-form regulations related to ventilation, auxiliary ventilation, humidity, ammonia and carbon monoxide controls and lighting requirements. The Department points out that the Farm Bureau offered no data or other information to substantiate the costs estimates it submitted in its comments. The Department has done that research and set forth what it believes to be the appropriate costs associated with the final form regulations.

More specifically with regard to the fiscal impact of the regulations, the final-form regulations have been substantially and substantively changed. As set forth in greater detail to other similar comments, the final-form regulatory analysis form has captured the applicable and reasonable cost of the regulation. The Department has consulted with engineers that build and design kennel housing facilities and they have provided the cost estimates of implementing the regulatory provisions, either with regard to retrofitting an existing kennel or building a new kennel. In addition, the Department has researched once again, the cost of any measurement equipment to be utilized, reviewed training and paperwork costs and other costs estimates required in the regulatory analysis form.

The amendments made to the final-form regulation, besides being based on expert input from engineers and architects that design and build kennel facilities, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and the Department, also reduce the cost of compliance with the regulation in several ways.

The final-form regulation contains no requirement for temperature reduction. Air conditioning or HVAC is allowed but not required. The final form regulation focuses on humidity levels in kennel housing facilities, and expands the range of the humidity level to 30%-70% when temperatures are between 50 and 85 degrees Fahrenheit. The final form regulation requires additional humidity reduction when temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, but allow the kennel owner four hours to reach the humidity level necessary to assure a 85 Heat Index value in the facility. The humidity ranges are based on expert analysis and opinion provided by the engineers consulted (Learned Design, Paragon Engineering Services), animal scientists and Canine Health Board and Department veterinarians. The Department with the assistance of Dr. Overall from the Canine Health Board found and utilized a dog survivability study that pinpoints the upper most range of the heat index that would allow for survival of dogs. The Heat Index value is based on the results and recommendations of a survivability study conducted on beagles. The study entitled "A Temperature/Humidity Tolerance Index for Transporting Beagle Dogs in Hot Weather", was sponsored by the Federal Aviation Administration and authored by Gerald D. Hanneman and James L. Sershon. The document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.

The Heat Index Value is also based on the Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by in 1998 by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine and first published in "Recognizing and Reporting Animal Abuse: A Veterinarian's Guide." This widely-used scale, one of several canine

assessment tools focused on consequences for the dog, indicates that, even with water and shade available as in a commercial kennel setting, a potentially unsafe situation develops above a 90 degree F temperature, especially for brachycephalic, obese or elderly dogs, as well as dogs under 6 months of age. Although the regulation is based on heat index, regulates relative humidity rather than temperature, and a temperature of over 90 degrees F would be permitted if combined with a relative humidity that would result in a HI of no more than 90, the inclusion of the TACC Weather Safety Scale as a basis for the regulation emphasizes that the standard being set goes beyond survivability to minimize adverse heat-related consequences for dogs in commercial kennels. The survivability study and the TACC Weather Safety Scale are generally acknowledged to be the only two scholarly resources that give specific heat-related guidance applicable to canines.

The Department will purchase temperature and humidity monitoring devices to be installed in kennels as set forth at subsections 28a.4(b)(4) and (5) of the final-form. regulation. In deciding to purchase the temperature and humidity monitoring devices the Department took into account the comments of kennel owners and other related to the cost to the kennel owners of having to purchase such equipment to monitor their kennels and the issue of standardization of such equipment so that measurements are taken in the same manner and by the same type of equipment. The Department will bear the cost of buying, calibrating, replacing and installing the monitors and kennel owners will be able to continually check the monitors to assure their kennel facility is in compliance with the standards of the regulations.

The ventilation system language and requirements are based on consultations with and were reviewed by engineers – that design and build kennel housing facilities – and discussions with animal scientists. The humidity levels are based on consultations with animal scientists from the Pennsylvania State University, Canine Health Board and Department veterinarians, scientific research undertaken by Dr. Overall of the Canine Health Board, standards already contained in the Federal Animal Welfare Act and the experience and expertise of engineers that design and build kennel housing facilities.

The final-form regulation implements changes, such as establishing ventilation standards in cubic feet per minute per dog instead of air exchanges per hour. This was done in response to comments from and discussions with the architects, engineers and animal scientists consulted by the Department. This provides an objective and measurable standard. It also allows the kennel owner to have the system certified by an engineer as meeting the requirements of the regulation and the Department to check the CFM or capacity rating on the ventilation and air circulation equipment employed by the kennel owner to assure it meets the required air circulation values. It also allows the kennel owner and engineer or architect to design and base the ventilation system on an objective capacity rating as opposed to a more subjective air exchange rate

The final-form regulation also allows up to seventy percent (70%) of the air to be re-circulated, as opposed to 100% fresh air. That change will reduce the necessity to purchase air circulation monitoring equipment and provides an objective measurement of air circulation, while at the same time, reduces the cost of operation to the kennel owner. The changes were contemplated in response to issues set forth in the comments received and were made pursuant to the Department's consultation with animal scientists and engineers – Learned Design and Paragon Engineering Services – that design and build kennel housing facilities.

The cost of the mechanical ventilation system will vary according to the sophistication and complexity of the system the kennel owner decides to install.

However, the Department has consulted several engineers and engineering companies that build kennel buildings and asked them to assess the cost of designing and installing a ventilation system that would meet all the ventilation requirements – including auxiliary ventilation and humidity levels - of the final-form regulation. The costs are based on a kennel owner having to retrofit or build from the ground up and include the cost of installing all of the equipment, even though most kennel owners, especially those subject to United States Department of Agriculture regulations, should already have some form of mechanical ventilation, auxiliary ventilation and – in the case of USDA – temperature control devices already installed in the kennel.

The Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)).The Federal Animal Welfare Act Regulations further require that temperatures in enclosed or partially enclosed housing structures be maintained between 50-85 degrees Fahrenheit (9 CFR §§ 3.2(a) and 3.3(a)) and that proper ventilation and lighting be provided (9 CFR §§ 3.2(b) and (c) and 3.3(b) and (c)). Therefore, the costs estimates, which are set forth in the regulatory analysis form that accompanies the final-form regulation will necessarily be higher than those incurred by such kennel owners, because they should already have systems in place. The regulatory analysis form will set forth the greatest cost that could be incurred for a system that would meet the standards of the regulations.

Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form. The kennel owner may elect to purchase a light meter or ammonia level meter or both. The kennel owner will be able to utilize the Department's temperature and humidity monitoring devices to assure compliance with those standards and capacity or CFM standards for air circulation can be certified by an engineer (chosen by the kennel owner) and calculated based on the cubic feet of each area of the kennel housing dogs and the total number of dogs housed in that area of the kennel. The capacity or CFM rating is listed on fans and other forms of mechanical ventilation and the professional engineer, state dog warden and kennel owner can match those standards without buying any monitoring equipment. The kennel owner can adjust the level of the air circulation based on the number of dogs in the kennel at any one time, and no additional equipment or monitoring devices are necessary for such calculations. Standard carbon monoxide monitors, for those kennels that need to install them, will have to be purchased, but actual carbon monoxide level readings will not have to be taken, so no additional devices are necessary.

The Department has no baseline data with regard to a kennel's current utility costs, so it is impossible to project the amount of any increase in such costs. However, the regulatory analysis form accompanying the final-form regulation does estimate the average yearly cost of operating a system that would meet the ventilation, auxiliary ventilation and humidity standards of the regulations. These estimates do not take into account the fact that kennel owners already had previous existing utility costs. Therefore, the estimates set forth in the regulatory analysis form will include those already existing costs. The existing costs for kennels regulated by the USDA will be much less, as those kennels already had to comply with specific heating (50 F) and cooling (85 F) regulations and therefore, should already be operating heating and cooling systems in their kennels.

The Federal Animal Welfare Act regulations in fact require the kennel to reduce the temperature to 85 degrees Fahrenheit.

In addition, both the Federal Animal Welfare Act regulations and the Department's current regulations require the use of auxiliary ventilation when temperatures in kennels rise above 85 degrees Fahrenheit, so kennels should already have some form of auxiliary ventilation in place or available.

The lighting should not cost any additional amount, since kennels were already required, by the Department's current regulations and USDA regulations to provide a diurnal lighting cycle and enough light to allow for observation of the dogs and normal animal husbandry practices. The amendments made by Act 119 also require and set forth those same general standards. The new regulations quantify the intensity of the light to be provided and the type of lighting. The regulatory analysis form sets forth the cost estimates to install new full spectrum lighting, if a kennel does not already have such lighting, but there should be no additional cost of operating the lighting, since proper lighting is already required.

In short, the Department consulted with engineers who design and build kennel buildings, to determine the potential cost of the ventilation, auxiliary ventilation, humidity, ammonia and lighting standards of the final-form regulation. The new cost estimates, set forth in the accompanying regulatory analysis form, are based on their input. The final-form regulation, especially the ventilation provisions of the final-form regulation, has reduced the need for some of the measurement equipment that would have been required by the proposed regulation. Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form.

The Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

Comment: Temperature Cap - Puppies

Members of PA KAP have concerns regarding the health and well being of puppies housed with a temperature cap of 86 degrees F in the neonatal unit of Class C Kennels. Newborn puppies do not maintain their own body heat for the first week to ten days of life, thereby requiring an average temperature of 90 degrees F. The proposed standards would render each puppy in the neonatal unit with a pending violation of the law. The proposed requirement of eight to twenty air exchanges per hour further exhibits the

erroneous thinking and lack of knowledge and understanding by CHB, and creates additional risk to newborn puppies. Similar to hospital neonatal units, PA KAP recommends that newborn puppies require housing that is free from cold air and drafts.

RESPONSE

The final-form regulation does not set a temperature cap or require a reduction in the air temperature in the kennel housing facility, but instead sets humidity levels, based on heat index values, that must be achieved when the air temperature in a kennel housing facility rises above 85 degrees Fahrenheit.

However, based on this and other similar comments related to neonates, which suggested the temperature for neonates should never fall below 90 degrees Fahrenheit, the Department consulted with veterinarians. The consensus among veterinarians was that normal animal husbandry practices dictate that the mother provides the necessary body heat to sustain the neonates/puppies and that no exception should be made to the 85 humidity index, because such an exception would be detrimental to the adult mother dog. Therefore, no changes have been made and the kennel must maintain a heat index value of 85 or below. The Department notes, that the Federal Animal Welfare Act regulations make no such exception for neonates and the Federal Animal Welfare Act regulations, unlike these regulations, does set an upward temperature cap of 85 degrees Fahrenheit.

Comments: Ventilation – Section 28a.2(9)

The requirements of this section indicate that "Dogs may not exhibit conditions or signs of illness or stress ... " Dog wardens are not licensed veterinarians and do not qualify to assess and diagnose illness in dogs. We have grave concerns that wardens may misinterpret symptoms such as:

(i) Excessive panting. Excessive panting may be encouraged solely by a stranger entering their domain.

(ii) Elevated body temperature. Female dogs ready to whelp or one in season often exhibit natural rises and falls in body temperature.

(iv) Shivering. Shivering may be associated with excitement when a stranger Is In the kennel.

(v) Huddling of dogs 12 weeks of age or older. Uke people, dogs and puppies like to cuddle and often huddle together while sleeping.

(xi) Moist areas of hair. Act 119 requires unfettered exercise for all adult dogs in Class C Kennels. If a dog chooses to wander outdoors on a rainy day, there is a great probability that hair will be wet. Puppies playing with water nipples may acquire moisture on their coat.

(xii) Diarrhea. Diarrhea is not necessarily an indicator of illness or disease in dogs. During the worming process, the dog's stool will soften, sometimes to a diarrhea like form. Upon completion of treatment, the stool returns to normal.

(xlv) Vomiting. Occasionally a canine will engorge himself, resulting in regurgitation. A female dog cleans her puppies by licking them when they defecate and urinate. This inborn trait can enhance vomiting.

(xvi) Presence of blood. Female dogs have bloody discharge for seven to fourteen days in season, and up to six weeks after whelping.

(xvii) Death. This requirement is open to misinterpretation due to its failure to properly differentiate and clarify the type of deaths. Some puppies are born dead due to harsh labors or developmental issues. In addition, it does not address natural deaths that occur at the end life.

PA KAP members understand the intent of Section 28a.2.(9), however, CHB has gone beyond the scope of the charge they were given. The health of dogs should only be assessed and diagnosed by licensed veterinarians, who are trained professionals equipped to do so. We highly recommend Section 28a.2.(9) be deleted in full.

RESPONSE

The Department appreciates the concerns expressed and has modified the language of that section to carry out the intent. The language that appeared in subsection 28a.2(9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress, has been substantially modified in the final-form regulations and is now subsection 28a.2(h) in the final form regulation. First, based on discussions with animal scientists, at the Pennsylvania State University and Department and Canine Health Board veterinarians, the number and type of conditions in dogs that may denote poor ventilation has been reduced. Second, and significantly for purposes of authority, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that animal scientists and veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Comment: Lighting – Section 28a.3

The proposed comprehensive lighting standards are not grounded in sound science. In lighting ranges of 50 to 80 foot candles, human beings would need to wear eye

protection. How much more would it then be necessary to protect the eyes of dogs? Rather than protecting the animals, these measures create animal welfare issues, causing us to question the sensibility of this requirement. Once again, the CHB exceeded their charge to establish lighting ranges and PA KAP recommends the entire lighting section be revised. The means and method used to address lighting (artificial or natural) should be addressed by kennel owners and professionals who serve them.

RESPONSE

The assertions regarding eye protection are incorrect, as evidenced by the NIH standards and the fact that exam rooms at the Pennsylvania State University require lighting of 40-60 footcandles. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

The nighttime lighting provision has been removed from the final-form regulation. However, for clarity purposes the nighttime lighting standard was consistent with studies done that show dogs need a minimum level of nighttime lighting (1-5 footcandles) to allow a natural startle response. The nighttime lighting standard was for the welfare of the dogs. Kennel owners can turn on or add additional light at nighttime if there is a need for them to be in the kennel.

The final-form regulation allows lighting standards to be achieved through the use of either natural or artificial light or both.

Comment: Flooring – Section 28a.4

Solid flooring, the only flooring addressed by CHB, has already been determined acceptable in Act 119. The CHB again failed to meet its charge to properly address additional flooring options. Sealed concrete or tile may be poor choices for kennel flooring due to the reduction of traction, especially when wet. Such flooring can lead to

foot and leg degeneration, including arthritic and hip conditions, before dogs reach advanced age, resulting in untimely demise.

RESPONSE

In response to a comment from the Independent Regulatory Review Commission, regarding the clarity of the language in the flooring section of the proposed regulation, the Department made substantial changes to the final-form regulatory language. The Department in response to the Independent Regulatory Review Commission's suggestion, restructured the section related to flooring, section 28a.8 of the final-form regulation. In restructuring this section the Department felt it would be even more helpful to the regulated community if all the flooring standards established by the Act, were also delineated in the regulation. Therefore, the Department established two new subsections which reiterate the language contained in sections 207(i)(3)(i)(related to general flooring standards) and (i)(3)(ii)(related to slatted flooring) of the Act (3 P.S. §§ 459-207(i)(3)(i) and (ii)).

In addition, the Department had to then modify the language of the proposed regulations which sought to espouse the requirements or parameters for additional flooring options. In doing so, the Department established subsection 28a.8(c), which sets forth the language of the statute allowing the Canine Health Board to approve additional flooring options, and delineates the authority and duty of the Canine Health Board to assure the additional flooring standards adhere to the general requirements established by section 207(i)(3)(i) of the Act and that additional flooring options, based on proper animal husbandry practices, provide for the health, safety and welfare of the dogs confined to these kennels, as required by section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 459-221(f)). The Department included many of the standards set by the Canine Health Board in the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – but did remove the language regarding sealed concrete and made the language regarding non-slip services more objective. The Department also added language to these provisions to clarify the intent and provide more objective standards. Finally, based on discussions with Department veterinarians and some Canine Health Board veterinarians, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices. The final-form regulations address this comment by actually establishing parameters for additional flooring options.

Comment: CHB Deliberations

Most disappointing to PA KAP is the fact that our representatives witnessed and did nothing as the CHB drafted its proposal with the intent to create "unattainable standards" for Class C Kennels. Meeting Minutes from the CHB indicate widespread disagreement on the proposed standards and revealed the desire of some members of CHB to glean from the experience of those who excel in the dog breeding industry. Rather than consult with dog breeding experts, leaders on the CHB chose to dismiss the suggestion to do so

with the wave of a hand, while stating, "Let's forget about experience and create data." Creating data without science to address a dog's health and well being is not acceptable. Neither is it acceptable for regulating the requirements needed to promote the care and welfare of man's best friend.

PA KAP respectfully requests that the Guidelines established by the CHB be dismissed in their entirety. It is imperative that standards be established in conjunction with licensed veterinarians, who are screened by their experience and competency, with the duty of determining standards for Class C (Commercial) Kennels to provide for the health and well being of dogs in the three specific areas of ventilation, lighting and flooring. The Pennsylvania Dept. of Agriculture should be cautious about implementing and supporting unrealistic standards that could then trickle into other Industries, such as dairy, swine and poultry production.

RESPONSE

The Department has made substantive changes to the provisions of the Guidelines and the proposed regulation in the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects

who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Dog kennels are not considered normal agricultural operations. The standards established in the final-form regulations are specific to dogs and kennel operations. As pointed out in this document, dogs have different and additional physiological needs.

VI. PENNSYLVANIA STATE GRANGE

Submitted by: Betsy E. Huber, President, Pennsylvania State Grange
20 Erford Road, Suite 310
Lemoyne, PA 17043

Background:

I am writing on behalf of 13,000 members of the Pennsylvania State Grange to comment on the proposed rulemaking on standards for commercial kennels. The Pennsylvania State Grange is a family fraternal organization dedicated to the betterment of rural American through community service, education, legislation and fellowship.

Comment: Cost and Economic Impact

The Grange is concerned that the proposed health standards will force most small dog breeders in the state out of business because of cost of compliance. Small breeders may show more care, personal attention, and socialization to their dogs than large kennels who can afford to make all the environmental alterations to meet the standards. Sixty dogs sold in a year is not many considering that some breeds normally have litters of ten puppies. Breeders who do not expect to sell 60 dogs may find themselves in violation if one dog has a larger than expected litter.

RESPONSE

The Act itself, not the regulations, determine the definition and parameters that result in a kennel being considered a commercial kennel and subject to the provisions of the Act and the regulations. The Department is under an obligation to promulgate regulations that address ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels.

The Pennsylvania General Assembly, by nearly unanimously passing the amendments to the Dog Law established in Act 119 of 2008, established the duty and necessity to regulate ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels. The Legislature, in sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, imposed the authority and the absolute duty on the Canine Health Board to develop and the Department to promulgate such regulations.

The Department has set forth and considered the costs to the regulated community and the private sector to the best of its ability. However, the mere existence of a cost to the regulated community or private sector does not mean the regulations themselves can

not or should not be promulgated. The Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

The statute does not provide any special exception and the Department believes that when promulgating regulations that are to set health and welfare standards for dogs housed in commercial kennels there is no rational basis for promulgating disparate or separate regulatory standards for small commercial kennels and large commercial kennels. The standards set forth in the final-form regulation establish basic and minimum standards for ventilation, auxiliary ventilation, humidity, ammonia, lighting and additional flooring options that account for the welfare of dogs housed in commercial kennels. There are no lower standards that would be acceptable based on the size or make-up of the business entity and the Department does not think it prudent to set higher standards for kennels that do not fall within a small business definition. In addition, there is no provision in the Dog Law that would allow the Department to assist commercial kennels that fall within a small business definition by providing grants or loans. Dog kennels are not considered normal agricultural operation and therefore do not fall within the category of a farm.

Comment: Cost to small businesses

Today's economic climate makes it difficult for most small businesses to survive. Mandating these excessive regulations will force many kennels out of business, losing their livelihood, rather than expend thousands of dollars to comply with these requirements which are not based on science.

RESPONSE

The comment asserts the same issue raised in the first comment above and the Department's response is the same.

Comment: Supplemental business

Kennels are often a supplemental business on a family farm. Pennsylvania's farm families are struggling to maintain their farms in the economic downturn. Forcing them to give up this source of supplemental income will make it even more difficult for our farmers to remain economically viable.

RESPONSE

The Act itself, not the regulations, determine the definition and parameters that result in a kennel being considered a commercial kennel and subject to the provisions of the Act and the regulations. The Department is under an obligation to promulgate regulations that address ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels.

The Pennsylvania General Assembly, by nearly unanimously passing the amendments to the Dog Law established in Act 119 of 2008, established the duty and necessity to regulate ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels. The Legislature, in sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, imposed the authority and the absolute duty on the Canine Health Board to develop and the Department to promulgate such regulations.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Sales and income tax

Loss of these small businesses will cause loss of income to the Commonwealth in sales and income taxes as well as all income from associated businesses and sales.

RESPONSE

The Pennsylvania General Assembly, by nearly unanimously passing the amendments to the Dog Law established in Act 119 of 2008, established the duty and necessity to regulate ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels. The Legislature, in sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, imposed the authority and the absolute duty on the Canine Health Board to develop and the Department to promulgate such regulations.

The question of tax losses is based on an assumption and can not be quantified or supported. This is a question that would require the Department to have authority to access the tax returns of all individual kennels and the ability to pre-determine which and how many kennels may decide to close solely as a result of the regulations. The Department has neither. Once again, much of the cost and much of the upgrades are required by the Act itself. Some of the comments fail to appreciate that fact, or seem determined to mix the costs and make them all inclusive. The regulations will impose only a portion of the total costs of all upgrades and changes necessary to commercial kennels. Much of the additional cost comes from the Act itself. In addition, the Department is required, by the Act, to promulgate the regulations. All regulations impose additional costs. The question is not the total cost, but whether the Department has consulted with appropriate experts and done research and taken steps to try to allow choices – where able – and minimize costs. The Department has done extensive research through its consultations with architects, engineers, animal scientists and veterinarians – including the expert veterinarians appointed by the General Assembly and the Governor. The Department has redrafted the final-form regulation to impose standards that, based on the information received, present the minimum level of regulation necessary to carry out its duty to set levels for ventilation, auxiliary ventilation, humidity, ammonia and lighting that will account for the welfare of dogs housed in commercial kennels. It has done so in a manner that it believes lowers the cost of compliance and gives kennel owners various choices in meeting those standards. Once again, many of the standards and "upgrades" – especially those associated with heating and proper temperature levels are standards already required for kennels that fall under the Federal Animal Welfare Act and the its associated regulations and those kennels should already be in compliance.

Comment: Agency cost

More staff and equipment will be required in the Department of Agriculture to monitor and enforce the regulations. With fewer licensed kennels and more work for enforcement, the Office of Dog Law will no longer be self-supporting from license fees.

RESPONSE

The commentator offers no information or proof to support the assertion set forth in this comment. The Department has analyzed the cost of the regulation to the agency and has set forth that cost in the final-form regulatory analysis form. The cost has been reduced because of the changes made to the final-form regulation, especially those made to the ventilation or air exchange provisions of the final-form regulation. As stated previously, the Department can not forgo its duty to regulate or establish regulations that do not meet the regulatory duties imposed by the Act, simply because of a projected cost to the agency.

The Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

Comment: One size fits all

"One size fits all" regulations will not work for all the various breeds of dogs. Some breeds cannot thrive in heated environments; some develop problems living on concrete; some need more space to exercise than others. Different types of dogs should be considered when formulating regulations.

RESPONSE

Formulating a regulation that set standards for every breed of dog would be impossible, onerous on the regulated community, nearly impossible for some kennels with many breeds to comply with and costly to the regulated community and the agency. The regulations as written set forth standards that are based on consultations with and research by experts, such as engineers (Learned Design and Paragon Engineering Services) and architects that design and build kennel housing facilities, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and Department. The experts consulted utilized their background, knowledge and experience to help the Department craft ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, and flooring parameters, that if implemented properly, will account for the welfare of all breeds of dogs housed in kennel housing facilities.

Comment: Lighting – Section 28a.3
The excessive lighting requirements will be detrimental to the animal's health rather than beneficial. If lighting must be required, it should be based on sound scientific evidence.

RESPONSE

The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

The nighttime lighting provision has been removed from the final-form regulation. However, for clarity purposes the nighttime lighting standard was consistent with studies done that show dogs need a minimum level of nighttime lighting (1-5 footcandles) to allow a natural startle response. The nighttime lighting standard was for the welfare of the dogs. Kennel owners can turn on or add additional light at nighttime if there is a need for them to be in the kennel.

The final-form regulation allows lighting standards to be achieved through the use of either natural or artificial light or both.

Comment:
We hope that you will oppose the proposed rulemaking as excessive and unnecessary.

RESPONSE

The Department disagrees with this comment. The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations

were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

KENNEL OWNERS COMMENTS

I. COMMON THEME COMMENTS – The listed commentators made some or all of the following comments

Commentators:

Submitted by: See Addendum D – Kennel Owner Commentators – attached hereto and made a part hereof

(a)

Comment: General Opposition

I am opposed to the approval of the Section 28a Canine Health Board Standards for Commercial Kennels. Please consider the following points and consider voting against these proposals which are, at times, detrimental to the health of the animals in these facilities. I hope you will vote against these proposals based on the points set forth below. Please reevaluate the proposals because I believe many of them to at the least unnecessary and at the greatest, detrimental to animals.

Dog breeders and kennel owners may be forced to give up their well maintained kennels due to the excessive requirements of these proposals. In today's economy it is difficult to keep businesses viable and only necessary and beneficial proposals should be considered.

When laws and regulations are not clear, it is possible that misinterpretation of the laws can be detrimental. Some of the proposed changes for Section 28a of the Canine Health Board Standards for Commercial Kennels are vague and perhaps impossible to achieve. For this reason, we encourage you to oppose the Section 28a proposed changes to the Canine Health Board Standards for Commercial Kennels. I believe they are vague at times and not always designed for the best environment of the housed animals. I believe that many of the suggested changes, although well intended, are extremely difficult, if not impossible, to achieve. These unnecessary requirements would cause expenditures that in some cases may close viable and well-maintained facilities.

RESPONSE

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also

consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comments: Ventilation – Section 28a.2

1. Section 28a.2 air changes - This section requires facilities to have between 8 - 20 air changes of 100% fresh air per hour in each room. This would require a facility of 40' x 100' to push 5,300 cubic feet per minute through the facility. After investigating needs and costs, I believe this would cost a kennel owner to spend approximately $118,000 to bring their facility to code and then spend approximately $34,000-$35,000 in additional costs to operate the equipment. The reality of this proposed regulation is that it violates the Federal Law covering Animal Welfare mandating that dogs must be protected from drafts in their primary enclosure. Please consider this negative factor and consider voting against this proposal.

2. Section 28a.2 particulate matter - I also believe that in Section 28a.2 the requirement to ensure that particulate matter form such as dander, hair and food is below 10 milligrams per meter cubed is unrealistic. All dog breeders know that puppies love to play in their bedding which is typically wood shavings or shredded paper. It would be impossible to meet the strict requirements of less than 10 milligrams per meter cubed. Again, this is unnecessary stress on owners.

3. Section 28a.2 temperature for puppies - Young puppies are unable to maintain their own body heat and therefore require supplemental heat sources to achieve air temperatures between 91 and 96 degrees. And yet, the new proposal requires kennel owners to keep a kennel at less than 86 degrees. I believe that the Department exceeds their authority to create a law which would make it illegal to keep puppies at a safe temperature.

RESPONSE

1. First, engineers consulted (Learned Design and Paragon Engineering Services) on this comment have indicated the cubic foot calculation and the assertion that the air exchange rates originally required by the proposed regulation (8-20 per hour) would create an unreasonable "draft" through the kennel are not correct.

Second, it would not violate the Federal Act or the current Department regulations because it does not prevent primary enclosure from being placed or constructed in such a

manner that the dog has a draft free area.

Third, the final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

Fourth, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

The provisions of section 28.2(8)(i)(A)(I-V) of the proposed regulations have been either eliminated or extensively modified in the final-form regulation. The provisions were modified to account for the information needed to verify and calculate the cubic feet per minute (CFM) per dog standard of the final-form regulation, which replaced the air exchanges per hour standard. The information requested is based on

consultations with and approved by the kennel housing facility engineers consulted by the Department.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

2. The Department has removed this provision from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation

requirements of the regulations were being met, particulate matter would not pose a problem in the kennel

3. The final-form regulation does not set a temperature cap or require a reduction in the air temperature in the kennel housing facility, but instead sets humidity levels, based on heat index values, that must be achieved when the air temperature in a kennel housing facility rises above 85 degrees Fahrenheit.

However, based on this and other similar comments related to neonates, which suggested the temperature for neonates should never fall below 90 degrees Fahrenheit, the Department consulted with veterinarians. The consensus among veterinarians was that normal animal husbandry practices dictate that the mother provides the necessary body heat to sustain the neonates/puppies and that no exception should be made to the 85 humidity index, because such an exception would be detrimental to the adult mother dog. Therefore, no changes have been made and the kennel must maintain a heat index value of 85 or below. The Department notes, that the Federal Animal Welfare Act regulations make no such exception for neonates and the Federal Animal Welfare Act regulations, unlike these regulations, does set an upward temperature cap of 85 degrees Fahrenheit.

Comment: Lighting – Section 28a.3

1. Section 28a.3 foot candles - Under Section 28a.3, requiring lighting in a kennel to be between 50 - 80 foot candles would be harmful to animals exposed to this high intensity. A typical home is between 12 - 20 foot candles and commercial properties are between 15 to 30 foot candles. Forcing dogs to endure this intensity of lighting would be inhumane.

2. Section 28a.3 cost - The proposal also calls for lighting to be 50 to 80 foot candles during the day and 1 - 5 foot candles on a night cycle. After researching the cost to achieve this level of lighting with a diurnal light cycle, I believe the costs could be over $18,500. Besides the inhumanity to animals, the exorbitant cost may cause good kennels and breeders to give up their businesses.

3. Section 28a.3 natural lighting - The proposed standards require Natural Lighting. The proposed requirements could cause an expenditure of over $32,000 for a facility of 40' x 100' for architectural design, zoning permitting and inspections window and installation costs, and glazing of windows for diffraction of direct sunlight. This requirement far exceeds the necessary lighting for healthy animals!

RESPONSE

1. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to

biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D. The lighting levels are not inhumane and are supported by research and animal husbandry practices.

The nighttime lighting provision has been removed from the final-form regulation. However, for clarity purposes the nighttime lighting standard was consistent with studies done that show dogs need a minimum level of nighttime lighting (1-5 footcandles) to allow a natural startle response. The nighttime lighting standard was for the welfare of the dogs. Kennel owners can turn on or add additional light at nighttime if there is a need for them to be in the kennel.

The final-form regulation allows lighting standards to be achieved through the use of either natural or artificial light or both.

2. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

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The Department has set forth the cost of lighting in the regulatory analysis form and the cost is based on information received from engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. In addition, the kennel owners should have already been incurring lighting expenses that were similar to those that will be incurred under the final-form regulation. The Department's current regulations, as well as, the Federal Animal Welfare Act regulations require lighting standards that allow for routine inspection and cleaning of the facility, and observation of the dogs. The lighting must be uniformly diffused throughout the animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animal and for the well-being of the animals (9 CFR §§ 3.2(c) and 3.3(c) and 7 Pa.Code §21.27).

3. The section of the proposed regulation containing the language commented on has been amended in the final-form regulation to read the same as the statutory language. The final-form regulation deletes the requirement for kennels to provide both artificial and natural light. The language now mirrors the language of the statute with regard to providing light through natural or artificial light. The final-form regulation sets general standards that apply to lighting whether provided by artificial or natural light and also sets forth standards that apply specifically to either natural or artificially provided light. The final-form regulation does require some natural lighting source in kennels that were provided an exemption from outdoor exercise. It requires the light to reach each dog, but does not require the window or skylight to be directly over or in front of the primary enclosure. The Department agrees, from its research into the heat index that such exposure may not only violate the provisions of the lighting section related to "excessive light", but would run the risk of increasing temperatures – on a hot day – within the primary enclosure to levels that would be detrimental to the dogs' health. However, research done by the Canine Health Board indicates the exposure to natural light is vital to the health and welfare of dogs. The need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight.

In addition, this requirement is congruent with the requirement that kennels buildings have operational windows, doors and other openings that can be opened in the event of a mechanical malfunction of the ventilation equipment.

Finally, the requirement that 8% of the floor space be utilized to provide natural light has been removed from the final-form regulation.

Comments: Flooring – Section 28a.4

1. Section 28a.4 - In Section 28a.4, solid flooring is approved for use. I feel that this does not provide the most sanitary flooring environment for dogs. I would like to see this change eliminated from the proposal.

2. Section 28a.4(6) and (8) - I also believe that in the same part, numbers 6 and 8 may be in conflict with each other since it is possible that sealed concrete, painted concrete,

epoxy flooring, sealed wood, textured and sealed tile (which are coated materials) could potentially be toxic to some dogs.

3. **Section 28a.4(7)** - I would also like to point out that under Section 28a.4. 7, it is stated that a floor may be subject to microbial assessment. However, it is possible that even after it is sanitized, if a dog urinates or defecates on the flooring it will show positive for microbial assessment from the digestive tract of the dog. Therefore it might be impossible for the kennel owner to pass this assessment when in reality the kennel is sanitary.

4. **Section 28a.4 drainage** - In Section 28a.4 it is stated that "Solid flooring must be sloped to a drain that is free of debris." Again this is an unrealistic requirement.

5. **Section 28a.4 debris free floors** - It is impossible to maintain a totally debris free floor, as required by Section 28a.4, since dogs may track bedding particles, hair follicles, food particles, defecation, nose or mouth residue and naturally falling dander into the kennel and each would independently constitute as debris on the floor. Therefore this is an unrealistic requirement.

6. **Section 28a.4 thermal conductance** - Section 28a.4, the requirement states that flooring may not be metal or any other material with high thermal conductance. I believe the Department is exceeding its authority.

7. **Section 28a.4 Research and Bio-Security Laboratory standards** - Pennsylvania's Bio Security Labs and USDA's licensed inspected research labs would all fail these exorbitant and unreasonable standards set by these proposals. I do not believe these requirements are scientifically based and the Department has exceeded its authority.

RESPONSES

1. The Department first points out that solid flooring is not required, but is only an option available to the kennel owner.

Second, the Department disagrees that solid flooring is inherently unsanitary. There is no evidence to suggest that such a contention has any merit. Boarding kennels, humane society and other non-profit rescue kennels, as well as, standard breeding kennels currently house dogs on solid flooring with no ill effects. The commentator expresses a concern for sanitation. Solid flooring can be kept clean and sanitary as witnessed by a large number of kennels across the Commonwealth that currently utilize solid flooring in their kennels. The veterinarians consulted do not agree that sanitary flooring is inherently unsanitary or can not be kept clean and sanitary with normal maintenance and care.

Third, the statute does not ban solid flooring and the Department will not ban it in the regulation.

2. In the final-form regulation, the Department amended both subsection 28a.4(6) and subsection 28a.4(8) of the proposed regulations. With regard to subsection (6), the Department added language to define and clarify what was referred to in the proposed regulation as "good footing." That subsection now makes it clear that the flooring surface must not allow the dog to slip or loose traction, which could then result in injury to the dog and removes the examples of sealed concrete and tile. What was subsection (8) has been rewritten to set forth more objective criteria and does include examples of flooring. The two subsections are not in conflict as terrazzo flooring, porcelain tile or hard-troweled sealed concrete can all have their surfaces coated or textured in a manner to assure they are not slippery or slick. The veterinarians and engineers consulted did not believe the flooring would present a problem with toxicity.

3. The language related to "microbial assessment" has been deleted from the final-form regulation. In the final-form regulation, the Department has modified the language of what is now subsection 28a.8(c)(7), which was 28a.4(7) of the proposed regulations, by specifically removing the language "and may be subject to microbial assessment" and replacing that language with clear and distinct language regarding the ability of the flooring to be cleaned and sanitized in concurrence with the Act and current Department regulations.

4. The Canine Health Board and the Department in promulgating the regulation, is under a duty to assure any alternative flooring established for alternative flooring would be based on animal husbandry practices that account for the welfare of dogs housed in commercial kennels (3 P.S. § 459-221(f)). The standards established in the proposed regulations and again set forth in the final-form regulations effectuate and carry out that duty and authority. Requiring that drains be provided to eliminate waste and wash water to name a few and that those drains be properly functioning is certainly within that very duty. To state keeping the drain free of debris is unachievable is to state that no one can maintain a functioning drain. A large number of kennels employ drains in the kennel housing facility. They are able to keep those drains free of debris and functioning. The language of the final-form regulation has been modified for clarity purposes. It is also fully consistent with the standards established by section 3.1(f) of the Animal Welfare Act (9 CFR § 3.1(f)).

5. The proposed regulation did not require that flooring be free of debris and the final-form regulation does not require floors to be free of debris.

6. With regard to metal flooring and thermal conductivity comments, the Department, in response to these comments modified the language of that provision to establish a more objective standard in the final-form regulation. For instance, subsection 28a.8(c)(3) of the final-form regulation makes it clear the Department does not allow a flooring type that could be heated through mere exposure to direct sunlight or lighting source to a temperature that would be harmful to the dogs confined to that surface, but it does not ban any particular flooring type.

7. The commentator gives no basis for the contention in the comment and no citation to the provisions to which the commentator is referring. However, the standards established in the final-form regulation are based on and verified by consultations with engineers that design and build kennel housing facilities, animal scientists, veterinarians from the Canine Health Board and the Department and literature such as the documents attached to this comment and response document.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form

regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

INDIVIDUALIZED KENNEL COMMENTATORS

II. JUDITH COMSTOCK - Comments-General and Specific

Commentator:
Submitted by: Judith Comstock
Comstock's Country Kennel
Ulster, PA

Background:

I have read some of the public comments submitted by people and the fact that they want these proposed regulations to pass, so that dogs don't freeze, live in dark rooms or in poorly ventilated buildings that are commercial kennels in Pennsylvania. These statements are not even issues under the new dog law that was effective October 9th, 2009.

Let's take a look at some FACTS under the new dog law's provision for heating, ventilation, and lighting that was effective October 9, 2009 in commercial kennels in Pennsylvania.

Comment: Heating

207(h)(6) Housing facilities for dogs must be sufficiently heated and cooled to protect the dogs from temperature or humidity extremes and to provide for their health and well-being. If dogs are present, the ambient temperature in the facility must not fall below 50 degrees F. The ambient temperature must not rise above 85 degrees F when dogs are present, unless the requirements of paragraph (7) are met.

It must be at least 50 degrees.

RESPONSE

This is a general restatement of the Dog Law and the commentator is correct that the Dog Law requires the temperature in kennels to be maintained at 50 degrees Fahrenheit or higher.

Comment: Ventilation

207(h)(7) Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation. The Canine Health Board shall determine auxiliary ventilation to be provided if the ambient air temperature is 85 degrees F or higher. The relative humidity must be maintained at a level that ensures the health and well-being of the dogs housed therein. The appropriate ventilation, humidity and ammonia ranges shall be determined by the Canine Health Board. It is already in law that states "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being…"

RESPONSE

The Department agrees and the Canine Health Board and the Department are required by the statute to promulgated regulations that set forth the standards and ranges of sufficient ventilation, humidity and ammonia ranges that account for the dogs' health and well-being.

Comment: Lighting

207(h)(8) Housing facilities for dogs must be lighted well enough to permit routine inspection and cleaning of the facility and observation of the dogs. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs from excessive light. The appropriate lighting ranges shall be determined by the Canine Health Board. Dogs under the current law must have a regular diurnal lighting of either natural or artificial light.

RESPONSE

This is a general restatement of the Dog Law and the commentator is correct that the Dog Law requires that commercial kennels provide a diurnal lighting cycle by natural or artificial light and be sufficiently illuminated to maintain good housekeeping practices, adequate cleaning and observation of the animals at any time and for the well-being of animals. The final-form regulation promulgated by the Department sets forth the requirements of the Act and establishes general and specific standards for artificial and natural light, such as the level of the lighting required to meet the edict of the Act which requires appropriate lighting ranges to sufficiently illuminate the kennel housing facility and allow for good housekeeping practices, adequate cleaning and observation of the animals and to protect the dogs' health and well-being.

Comment:
So what then is the real concern with these proposed regulations? It is how the Canine Health Board (CHB) has not done the job that they were charged with: to implement reasonable standards as set forth within the law. Here is one example with regards to lighting were the CHB has gone outside the law.

This is what the law states:
207(h)(8) Housing facilities for dogs must be lighted well enough to permit routine inspection and cleaning of the facility and observation of the dogs. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs from excessive light. The appropriate lighting ranges shall be determined by the Canine Health Board.

This is what the CHB has proposed:
Lighting. 28a.3. §
Natural lighting is important to the development of dogs. Each kennel shall have a mix of natural and artificial light, provided in the following manners…
As you can see the CHB has taken "natural OR artificial light" and replaced it with "natural AND artificial light". I could see if one of the CHB members made this mistake and was then corrected by the remaining eight members, however when I see nine out of nine members changing something to that degree I do not see it as a mistake at all. I clearly see it as intent to change the law.

RESPONSE

The final-form regulation promulgated by the Department changes the language to mirror the language of the Act. The final-form regulation requires sufficient lighting be provided by natural or artificial means and sets general and specific standards for both types of lighting. There is one exception where some amount of natural light is still required. Kennels that have received a waiver under section 207(i)(6)(x)(B) of the Dog Law, allowing for indoor exercise are required to provide some natural light to the dogs

housed in the kennel building. The Department still requires those kennels to have some external openings and doors that provide sunlight and that can be opened in the case of a mechanical ventilation malfunction. In addition, the need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight.

Comment:
The PVMA (Pennsylvania Veterinary Medical Association) does not support these proposed regulations, however all nine members of the CHB, are members of the PVMA. That is a red flag to me and it says that these members have not done their job and are not even supported by their own colleagues.

RESPONSE

The Department believes this broad and general statement is incorrect. The PVMA may not agree with some aspects of the Guidelines established by the Canine Health Board and the proposed regulations promulgated by the Department, but they are not opposed to all of the standards established in the proposed regulation. The Canine Health Board did an extraordinary amount of research and work to put together the Guidelines that formed the basis of the Department's proposed regulation and the majority of the ideals and basic standards established form the underlying requirements of the final-form regulation.

However, based on comments received, including those of the PVMA and research and consultations undertaken by the Department in promulgating the final-form regulation, many changes have been made to the final-form regulation. The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

I also see somewhat of a hidden agenda in proposed regulations such as this one: Lighting sources may not have a visible flicker. (iv) I know of only one light source that continually flickers and that, to me, seems to be aimed at a certain people.

RESPONSE

The Department has modified the language of what was subsection 28a.3 (2)(iv) of the proposed regulation, in a manner to better clarify its intent. The word "flicker" is no longer set forth in the final-form regulation. The modified language appears in subsection 28a.7 (b)(2)(ii) of the final-form regulation. The focus is on the lighting being kept in good repair. The language will actually effectuate the intent of the Canine Health Board. In speaking to members of the Canine Health Board, it became clear the intent of the Canine Health Board was to assure the lighting fixtures were kept in good repair and were functioning properly. The reference to a "visible flicker" was important to the veterinarians on the Canine Health Board, because they assert that flickering lights – such as the flickering caused by defective ballast – can result in seizures in some dogs. Therefore, in order to assure the health, safety and welfare of the dogs through proper animal husbandry related to lighting, it is important that artificial lighting sources within the kennel building be kept in good repair and not result in problems such as a "flickering" light source. The revised language of the final-form regulation requires lighting to be kept in good repair and sets forth – among other examples - such as emitting irregular bursts of light, as when a ballast is in disrepair.

Comment:
I am not against regulations or laws that reasonably promote the health and well being of our canine companions, but I am totally against what I see happening here with these proposed regulations. I strongly recommend that these proposed regulations are not approved.

RESPONSE

The Department believes the final-form regulation with its modifications and deletions meets the duties imposed by the Act and the regulatory criteria and standards necessary for passage and that the final-form regulations should be approved and made law. The final-form regulations provide standards that are based on research and consultations with experts undertaken by the Department and address the basic standards necessary to assure the health and well-being of dogs housed in commercial kennels.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

III. TOTALLY PETS INCORPORATED - Comments-General and Specific

Commentator:

Submitted by: Thomas Oprendek
President, Totally Pets Inc.
7618 city Ave.
Philadelphia, PA 19151

Comment: Oppose regulation

I am opposed to the approval of the Section 28a Canine Health board Standards for Commercial Kennels. Please consider the following points and consider voting against these proposals which are, at times, detrimental to the health of the animals in these facilities.

RESPONSE

The Department believes the final-form regulation with its modifications and deletions meets the duties imposed by the Act and the regulatory criteria and standards necessary for passage and that the final-form regulations should be approved and made law. The final-form regulations provide standards that are based on research and consultations with experts undertaken by the Department and address the basic standards necessary to assure the health and well-being of dogs housed in commercial kennels.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

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The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Lighting

Requiring lighting in an animal facility to be 50 to 80 foot candles is ridiculous when lighting in the average home is only 12 to 20 foot candles and even commercial properties are 15-30 foot candles. Actually requiring that high intensity lighting in a dog facility is inhumane.

RESPONSE

The Dog Law, at section 207(h)(8) requires that kennel housing facilities be "...lighted well enough to permit routine inspections and cleaning of the facility and observation of the dogs...and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals..." The final-form regulation provides the range of lighting that is proper to carry out that duty.

With regard to the exact footcandle requirements of the final-form regulation, the Department did additional research and modified the standard in the final-form regulation. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers who design kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires

average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

Comment: Ventilation – Air Exchange

The requirement for what is referred to as proper ventilation would require breeders and owners to have 8-20 air changes of 100% fresh air per hour in each room of a facility that houses dogs. In order to achieve this level of ventilation, an owner would have to spend approximately $118,000 to install the needed equipment. Then approximately an additional $35,000 would be needed to fuel and maintain this additional equipment. These expenditures are outrageous and would in some cases put kennel owners out of business.

In addition to the expense of these changes, it is true that requiring 8-20 air changes would be excessive. This would actually be in violation to the Federal Law that mandates that dogs must be protected from drafts in the primary enclosure. In a 40" x 100" building the proposal would require that 5300 cubic feet of air per minute be pushed through a facility – certainly causing excessive drafting. And so, this is a cost item as well as an item for the best environment for the dogs.

RESPONSE

First, engineers consulted (Learned Design and Paragon Engineering Services) on this comment have indicated the cubic foot calculation and the assertion that the air exchange rates originally required by the proposed regulation (8-20 per hour) would create an unreasonable "draft" through the kennel are not correct.

Second, it would not violate the Federal Act or the current Department regulations because it does not prevent primary enclosure from being placed or constructed in such a manner that the dog has a draft free area.

Third, the final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

Fourth, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians.

As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

The provisions of section 28.2(8)(i)(A)(I-V) of the proposed regulations have been either eliminated or extensively modified in the final-form regulation. The provisions were modified to account for the information needed to verify and calculate the cubic feet per minute (CFM) per dog standard of the final-form regulation, which replaced the air exchanges per hour standard. The information requested is based on consultations with and approved by the kennel housing facility engineers consulted by the Department.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity

control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment: General

I strongly believe these proposals, although designed to improve conditions, have the potential to create unsafe and unhealthy environments for our animals. Please vote "no" to these proposals.

RESPONSE

The Department believes the final-form regulation with its modifications and deletions meets the duties imposed by the Act and the regulatory criteria and standards necessary for passage and that the final-form regulations should be approved and made law. The final-form regulations provide standards that are based on research and consultations with experts undertaken by the Department and address the basic standards necessary to assure the health and well-being of dogs housed in commercial kennels.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

IV. MARYANN RIESS

Commentator:
Submitted by: MaryAnn Riess
Vision Kennel

Comment:
I own and operate a kennel in PA. I do both boarding and breeding . I believe that my kennel is ok the way it is and resist the need to upgrade once again. I have put over $300,000 into it in the last 5 years. I understand that there are "puppy mills" in Pa but also know that 90% of us are doing it right and being punished with the few that are doing it wrong. Pa is basically putting us out of business as a group. Law makers in PA as a group need to get realistic, when our dogs have it better then our kids in PA something needs to change. I would like you to make sure that the Kids in PA have heat and air equal to what you are going to make a requirement in dog kennels in PA. (my kennel is up to code in heating and air and has been since we opened) . I want kids in PA to have the quality of care, food, housing and heat and air that our dogs in PA will now have! Aren't we going about this a little wrong! I think if a realistic law was made we all would be happy. I wouldn't be breeding dogs if I didn't love them. I want them to be loved and care for but this is not the way.

RESPONSE

The Department agrees there are many good kennel owners in the Commonwealth of Pennsylvania. The standards imposed by the Pennsylvania General Assembly in Act 119 of 2008 were and are supported by the Department. The Department believes the standards of the Act do establish basic health and welfare requirements for dogs. In addition to the standards imposed by the statute, the Canine Health Board was given the task to produce Guidelines that set forth standards and requirements and the Department was given the authority and duty to promulgate standards and requirements regarding ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, as well as, standards for alternative flooring options.

The Department believes the final-form regulation with its modifications and deletions meets the duties imposed by the Act and the regulatory criteria and standards necessary for passage and that the final-form regulations should be approved and made law. The final-form regulations provide standards that are based on research and consultations with experts undertaken by the Department and address the basic standards necessary to assure the health and well-being of dogs housed in commercial kennels.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional

research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

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The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

Why not cover the things that really need to be changed. Why are we still allowing stacking at all in this new law? Why does anyone have to have a dog on wire for any reason? Why does anyone have to have 200 adult dogs? That's what a puppy mill is.

RESPONSE

The comment raises pertinent issues, but the standards and issues discussed in the comment can not be addressed in the regulation.

Comment:

Why isn't a good breeder on the board to help make realistic rules for us all to follow. I am willing to be on it **for free.**

RESPONSE

The Canine Health Board is comprised of licensed veterinarians. The General Assembly appointed such animal health experts to be able to assess the necessary animal husbandry and welfare standards that were proper to address ventilation, auxiliary

ventilation, humidity, ammonia and lighting levels and standards for alternative flooring options. The Board members are not paid for their services.

Comment:
Do you know that all the loser kennels are moving their dogs to Ohio right now! They aren't closing but just moving ! **That's sad..... That's not change.**

RESPONSE

The Pennsylvania General Assembly and the Department can only enact and effect legislation and regulation that addresses kennel conditions in the Commonwealth of Pennsylvania. However, in many cases legislative action in one state can alert another state as to problems and solutions it may want to address and effectuate.

V. SANDY REYNOLDS

Commentator:
Submitted by: Sandy Reynolds
Plantation Delight

Background:
My name is Sandy Reynolds, I have been a licensed breeder in Pa for many years. I sell over 60 dogs a year which makes me a commercial kennel. 60 dogs will be 6 litters in a given year since I breed large breed dogs that produce between 8-12 pups in a litter. Most of the new regulations are terrific and really don't effect me since I already had many of them in place. My kennels are old but they are large and well kept. I sell directly to the public and take back any dog that I sell no matter what in order to ensure that they have a good home.

Comment:
Since my dogs are large breed they enjoy the great outdoors and according to my vet if I close up my kennel I will have problems with upper respiratory problems. In 20 yrs of breeding I have never had kennel cough or any other upper respiratory problems with my dogs. We need some sanity with this. There are many children and elderly in this country that don't live in that perfect environment that you want to create.

RESPONSE

The final-form regulations do not require a kennel to be "closed up", and in fact require that a kennel be sufficiently ventilated and that humidity and ammonia levels within the kennel housing facility must be controlled and held at levels that will create an environment ensures the health and well-being of the dogs.

The commentator should know that the Department has reviewed every comment and has done research and made changes based on that research that make the standards more objective, flexible, measurable and enforceable and less costly. The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was

unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

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The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

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Comment:

My Bernese Mt. dogs will not be happy if they are penned up in a kennel and that is the only way for me to be able to meet these proposed regulations. They currently have a 1/4 acre of grass trees with an enclosure to get out of the weather (which they never use).

RESPONSE

The statute, not the regulations, sets the requirements for the size of the primary enclosure and outdoor exercise area. The statutory standards are the minimum standards and kennel owner, such as the commentator, is welcome to give their dogs unfettered

access to an exercise area that is larger than the required area established by the statute. The primary enclosure size may also be greater than the requirements of the statute. The statute sets minimum requirements.

Comment:
I have many repeat customers that tell me that my dogs are the best they have ever owned. Where are they to get puppies that are held and loved from the moment they are born? The only way that I can comply with these proposed regulations would be to mass produce puppies to cover the costs of the upgrades and then I would not have time to give each pup the love that they deserve.

RESPONSE

The commentator had expressed that she already complies with a majority of the standards that would have been imposed had the proposed regulation been promulgated as a final regulation. The Department appreciates that she has taken steps to provide such a good kennel environment for her dogs. The Department, as set forth in response to other comments, has made substantial and substantive changes to the final-form regulations that make the standards more objective, flexible, measurable and enforceable and less costly.

There is also the option of producing and selling less than 60 puppies in one year. In that case you may apply for a K-Class license. A K-Class license does not require you to make the changes necessary to comply with the Commercial Kennel provisions of the Dog Law and the regulations.

VETERINARIANS' COMMENTS

I. Dr. KATE HURLEY

Commentator:
Submitted by: Kate Hurley, DVM, MPVM
U.C. Davis, California

Comment: General
I am a veterinarian with over 20 years of experience working with animal shelters and advanced training in shelter medicine. I have consulted extensively with animal shelters and boarding facilities and have personally visited over 300 shelters. These regulations seem consistent with expectations and norms for animal shelters, in my experience. These guidelines also seem in line with generally recommended standards for animal housing. Smooth, sealed, cleanable surface such as sealed concrete are recommended both for ease of disifnection and to reduce the risk of injury to animals. Feces should be physically removed several times daily as needed to keep runs sanitary and runs should be thoroughly cleaned of urine at least daily. Waste should not be allowed to pile up beneath open flooring as these create pest and infectious disease hazards.

RESPONSE

The Department very much appreciates that the commentator has reviewed the proposed regulations and approves the general standards established in those regulation. The final-form regulation has made substantive and substantial changes to the proposed regulation, but all such changes have been based on research and consultation with experts, such as engineers that design and build kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department. The final-form regulation has retained the underlying health and welfare standards espoused in the proposed regulation but has made changes to comport with statutory authority, clarify and objectify the regulation and assure the levels are measurable, attainable, enforceable and necessary to assure the basic health and welfare needs of the dogs.

II. PENNSYLVANIA VETERINARY MEDICAL ASSOCIATION (PVMA)

Commentator:

Submitted by: Lisa A. Murphy, VMD, DABT, and President
Pennsylvania Veterinary Medical Association
12 Briar Crest Square
Hershey, PA 17033

Background:

On behalf of the Pennsylvania Veterinary Medical Association (PVMA). I thank you for the opportunity to provide our comments on the Canine Health Board's standards for commercial breeding kennels. As the state organization representing over 1,900 veterinarians, including the members of the Board, we extend our appreciation to the Board for the expertise they provided and the commitment they have shown to the arduous process of developing these regulations. We also thank the Department for their concern regarding the health and welfare of the dogs housed in commercial breeding facilities. As you know, the health and the welfare of the dogs impacted by these regulations are of utmost concern and are the sole reasons for our comments today.

Previously, we submitted comments during the temporary guidelines comment period earlier this year. However, because our concerns with the temporary guidelines remain unaddressed, the comments below echo earlier concerns now that the proposed rulemaking has been promulgated.

Comment: Development of the Regulations

As you are aware, Section 221 of Act 119 of 2008 which establishes the Canine Health Board states that the Board's purpose is to determine the standards based on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7) and (8) and (i)(3) of the Act. In addition, the Board was charged with the development of temporary guidelines and regulations under this section. The temporary guidelines issued were created within 45 days of the Board's first meeting which, in accordance with the provisions of Act 119, had to take place within 30 days of the effective date of the Act.

The 45-day timeframe allotted for the development of temporary guidelines was unreasonable. A 45-day turnaround time would be a major accomplishment for individuals who are knowledgeable about the subject matter and about how to develop regulatory language. Veterinarians, including the nine individuals on the Board, are highly-qualified and skilled people. However, their knowledge and expertise is in animal health and well-being, not in establishing engineering standards for ventilation, relative humidity, ammonia ranges, and lighting ranges or in writing regulatory language.

RESPONSE

The Department agrees that the Canine Health Board is comprised of very knowledgeable and skilled individuals and that they did in extraordinary job in researching and completing very technical Guidelines within a 45 day time period.

The standards of the regulations do require the consultation and expertise of engineers and architects, as well as, veterinarians. The Department, in responding to comments and drafting the final-form regulations did consult with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities, as well as, architects, animal scientists and the veterinarians from the Canine Health Board and the Department. The Department had meetings with members of the Pennsylvania Professional Dog Breeders Association and the American Kennel Club and did additional research, which it had reviewed by the engineers and veterinarians.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also

consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Scope of Guidelines

The temporary guidelines to be established by the Canine Health Board were to: 1) determine auxiliary ventilation to be provided if the ambient air temperature is 85 degrees Fahrenheit or higher, 2) determine appropriate ventilation, relative humidity and ammonia ranges, and 3) appropriate lighting ranges.

However, in the currently regulatory proposal, the Canine Health Board makes the following recommendations as standards:

- 8-20 air changes per hour
- Ambient air temperature in excess of 86 Fahrenheit will exclude dogs from that portion of the facility
- Relative humidity shall be 1-50% when the temperature is above 75 Fahrenheit
- Carbon monoxide levels below detectable levels
- Particulate matter below 10 mg/meter cubed
- Glazed window area may not be less than 8% of the floor space
- Night time lighting 1-5 foot candles
- Daytime lighting 50-80 foot candles
- Specified canine behavior which kenneled dogs may not exhibit as these behaviors are presumed to be caused by unhealthy environmental conditions.

RESPONSE

Ventilation: The language of the statute is clear and confers absolute authority for the Department to regulate ventilation and humidity levels at all times. Section 207(h)(7) of the Dog Law, along with Section 221(f) provides the authority to regulate ventilation at all times that dogs are present in a kennel facility (3 P.S. §s 459-207(h)(7) and 459-221(f)). The Canine Health Board and hence the Department as the promulgating agency has the absolute authority, under section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) to set and establish proper ventilation, humidity and ammonia levels. The express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, "Housing

facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-221(f))

The language is very clear and precise. The Board and the Department have the authority to set "at all times" the proper ventilation, humidity and ammonia standards in commercial kennels. This authority is in addition too, not a modification of the auxiliary ventilation authority and makes it perfectly clear the Department has absolute and specific authority to address proper ventilation, at all times, in commercial kennels. Under the authority set forth at section 221(f) of the Dog Law (3 P.S. 459-221(f)) these standards have to be and are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels. As set forth in answers to previous comments, the Department researched and consulted with engineers and architects that build and design kennel buildings, animal scientists from the Pennsylvania State University and department and Canine Health Board veterinarians in establishing the proper ventilation, humidity and ammonia ranges

With regard to the specific ventilation standards established, the final-form regulation no longer measures air exchanges per hour or requires that measurements be taken at the height of 10% of the dogs. The ventilation standard is now set in cubic feet per minute per dog.

The final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

In response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates

and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

The provisions of section 28.2(8)(i)(A)(I-V) of the proposed regulations have been either eliminated or extensively modified in the final-form regulation. The provisions were modified to account for the information needed to verify and calculate the cubic feet per minute (CFM) per dog standard of the final-form regulation, which replaced the air exchanges per hour standard. The information requested is based on consultations with and approved by the kennel housing facility engineers consulted by the Department.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Ambient Air Temperature: With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement in the final-form regulations. Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

Humidity: However, since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. Instead, the final-form regulation utilizes the absolute authority conferred by section 207(h)(7) to establish proper humidity ranges at all times that dogs are present. The final-form regulation requires the kennel owner to utilize auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit

C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

With regard to the humidity levels when temperatures are greater than 85 degrees Fahrenheit, the Department, with the assistance of consultations with the engineers listed above, Department and Canine Health Board veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, swine or cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure

survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

With regard to ventilation standards, not only does the final-form regulation do away with air exchanges per hour and change to a more objective and defined standard of cubic feet per minute per dog, but the final-form regulation no longer requires 100% fresh air exchange. It now provides that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing facility. These standards will make the system easier to design and install, easier to assure compliance and less expensive to operate because a majority of the air can be re-circulated and the amount of air circulation is based on kennel volume and number of dogs.

In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

Carbon Monoxide: The final-form regulation no longer establishes a carbon monoxide level or standard. The final-form regulation only requires that kennel housing facilities utilizing any carbon monoxide emitting device, functioning carbon monoxide detectors shall be installed and maintained in each room or area of the kennel and kennel housing facility – excluding outdoor runs - in which dogs are housed, kept or present. The carbon monoxide detectors shall meet or exceed the UL standard 2034 or the IAS 6-96 standard, or its successor standards. This was done in consultation with animal scientists from the Pennsylvania State University and the Canine Health and Department veterinarians. The engineers consulted agreed that expulsion of carbon monoxide was part of ventilation and felt that carbon monoxide would not be a problem so long as the ventilation provisions of the final-form regulations were adhered to, but agreed having detectors was prudent in case of a system malfunction.

Particulate Matter; Glazed Lighting and Nighttime Lighting: The Department has deleted from the final-form regulation all provisions and language related to particulate matter, glazed lighting and nighttime lighting.

Daytime Lighting Ranges: The Dog Law, at section 207(h)(8) requires that kennel housing facilities be "...lighted well enough to permit routine inspections and cleaning of the facility and observation of the dogs...and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of

animals at any time and for the well-being of the animals..." The final-form regulation provides the range of lighting that is proper to carry out that duty.

With regard to the exact footcandle requirements of the final-form regulation, the Department did additional research and modified the standard in the final-form regulation. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers who design kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

Illness and Stress: The Department considered the concerns expressed by this and other commentators and has modified the language of that section to carry out the intent. The language that appeared in subsection 28a.2 (9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress, has been substantially modified in the final-form regulations and is now subsection 28a.2(h) in the final form regulation. First, based on discussions with animal scientists, at the Pennsylvania State University and Department and Canine Health Board veterinarians, the number and type of conditions in dogs that may denote poor ventilation has been reduced. Second, and significantly for purposes of authority, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that animal scientists and veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Paragraph (2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part

of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Comment: Scientific Basis and Data

There is little relevant scientific basis for the measurements and parameters discussed in the regulations. It appears that most of the scientific data which was used came from resources for research facilities and shelters and was subjectively applied to "fit" a commercial breeding environment. Research facilities are incredibly controlled environments out of necessity for disease management, purity of the dog colony, etc. Commercial breeding facilities cannot be fairly regulated using the same standards because the dogs have access to outdoors at all times and the environment does not need to be as controlled for raising companion animals.

RESPONSE

First the Department disagrees with the general assertion that disease management should not be a concern in commercial kennels. In addition, the Department disagrees that successful animal husbandry standards established by the National Institute of Health (NIH) or utilized by animal research facilities or kennels other than commercial kennels should not be considered and utilized in forming standards for canine health and well-fare in commercial kennels.

However, the final-form regulation does not establish standards that are as strict as those followed in animal research kennels. According to the engineers consulted the standards are not as strict as those utilized in designing other kennel types, such as boarding kennels or animal shelters. As set forth in the responses to other comments, although there are not many studies on dogs or dog housing environments outside institutional standards, the standards established in the final-form regulation are based on scientific studies done conducted on dogs and animal husbandry practices related to dogs or research, data and studies related to other animals, such as swine, cattle, poultry and humans. In addition, the final-form regulations are based on consultations with and verifications from experts such as engineers and architects that build and design kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

The PVMA is in a unique position to provide any additional studies or data the Department or the Canine Health Board may have failed to find or consult. The PVMA was welcome to send such supporting documentation with its comments.

Comment: Justification of Standards

The proposed standards need to be justified in order to make it clear how these standards were arrived at and what authoritative source was used to reach these values. Otherwise, the standards seem arbitrary and designed to make it difficult to conduct business as a Class C kennel and not in the best interest of the dogs in the kennel. The methods of measuring these standards also need to be defined. There should be standardization of the methods and tools used by both kennel operators and dog wardens so the assessments are accurate and everyone is using the same tools and units of measurement. This will allow for less subjectivity, easier compliance, and more accurate enforcement.

RESPONSE

The Department has engaged experts in the field of kennel housing facility engineering and design, animal scientists, veterinarians from the Department and the Canine Health Board, met with members of the Pennsylvania Professional Dog Breeders Association and an AKC Senior Field Representative, reviewed research and minutes of the Canine Health Board, done additional research and consulted engineers and veterinarians with regard to that research and met with representatives of the General Assembly and IRRC in responding to the comments and making substantial and substantive changes to the final-form regulation. Any person that requested a meeting was engaged by the Department. In short, the Department has not been silent, nor has it stood pat on the information and research that led to the promulgation of the Guidelines and the proposed regulations. The PVMA did not request a meeting with Department and did not provide any literature with their comments, however, the Department has done research and elicited expert opinion and advice with regard to their comments. The Department has met all of the requirements of the Regulatory Review Process in its deliberations and promulgation of this regulation.

The assertions made in the comment are very general nature and point to no specific provisions within the proposed regulations. However, in drafting and reformulating the final-form regulations, the Department did go back to sources utilized by the Canine Health Board and to literature utilized by the Canine Health Board for the purpose of asking questions and verifying information. Some of the information and research was utilized and some of the information and research was set aside. In addition, the Department consulted engineers, architects and a regulated group to request input. The Department consulted with engineers from the private sector (Learned Design and Paragon Engineering Services) and an engineer from the Pennsylvania State University, as well as animal scientists from the Pennsylvania State University and Department veterinarians and also did additional research of it own so that it had a better understanding of ventilation standards and measurement criteria, humidity, ammonia and lighting levels and requirements, as well as, the interrelationship and interaction between these ventilation, humidity, temperature and auxiliary ventilation and there relationship to animal health and welfare. The majority of the questions asked and issues raised and reviewed were based on the comments received from the general public, the General Assembly and the Independent Regulatory Review Commission.

In addition, the Department reviewed the statutory authority behind the criteria established in the proposed regulation.

As a result of the information gained, the Department has made substantial and substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act, are attainable, comport with science, animal husbandry practices and expertise and experience of people in the field of kennel design and dog health issues and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels.

The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable. In addition, the Department had the engineers consulted review the final-form regulatory standards to assure those standards were objective enough to allow them to design a kennel, could be designed and implemented in new kennel construction or a retrofit of an existing kennel and would not be overly expensive to design, install and operate. The engineers provided the verifications and set forth cost estimates of between $10 per square foot and $25 per square foot.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

Comment: Lack of Data Related to Dogs In Commercial Breeding Kennels

Because there is little to no scientifically-based data available for dogs in commercial breeding kennels, it is suggested that this data be collected prior to imposing ventilation, relative humidity, ammonia and lighting range standards on the regulated community. We are aware that the Canine Health Board did have individuals with agricultural engineering expertise address the group about standards. However, as stated by these agricultural experts, there is no scientifically-based data available for dogs in this environment. Therefore, it would

make sense to survey commercial kennels rated as excellent, compliant, well-run operations with a track record of housing and breeding healthy dogs and assess their ventilation, relative humidity, ammonia and lighting ranges, and population and kennel sizes. This would provide baseline information to be used by the Board. With the assistance of kennel inspectors, breeders, and agricultural engineering, animal facility engineering, and ventilation experts familiar with animal husbandry practices and measurements used in large groups of animals (such as the standards established for swine, cattle, and other agricultural animals), the Board could develop accurate measurements and acceptable ranges.

RESPONSE

First, in drafting the final-form regulations the Department did consult kennel inspectors, such as the AKC Senior Field representative and utilized the expertise and experience of the Bureau of Dog Law Enforcement, the Department met with members of a breeding organization and consulted an agricultural engineer and animal scientists from the Pennsylvania State University whose background and expertise is in practices utilized in large animal groups, swine, cattle and other agricultural animals. In addition, the Department consulted and received ideas and verification from private engineers that build and design kennel housing facilities and consulted a private architect that design kennel buildings. The Department also continued to use the experience, knowledge and skill of the members of the Canine Health Board and the Department veterinarians in crafting the language of the final-form regulation. The measurements and ranges in the final-form regulation have been verified by the engineers as being accurate, measureable and attainable through design and both the engineers that design kennel buildings and the veterinarians, as well as, the animal scientists consulted believe the ranges established are acceptable.

With regard to doing studies in commercial kennels, the Department is required by the statute to establish regulation based on animal husbandry practices that account for the welfare of the dogs. While it would be nice to have the time, resources and funding necessary to carry on large scale studies of commercial kennel environments to determine what levels of ventilation, humidity, ammonia and lighting are optimal (or perhaps minimal) to protect dog health, it is simply not practical. This is especially true when the regulated industry itself is waiting to find out what the standards will be and is perhaps even wasteful when one considers the knowledge already available, such as the knowledge gleaned from the engineers and architects that design and build kennel housing facilities. They have the data and knowledge to know what works and how to utilize the minimum design to assure animal health and welfare. The animal scientists and veterinarians that work with dogs or other large group or confined animals have a wealth of knowledge that was also utilized to formulate the final-form regulatory standards.

Comments: Authority of Board

In addition, most of these standards were not placed within the authority of the Canine Health Board by the Dog Law and represent an attempt to rewrite the law without authority. Examples are listed below:

1. Section 28a.2. Ventilation - General
In paragraph (1), the proposed regulation requires a mechanical ventilation system be used when the ambient temperature is 85 degrees Fahrenheit to reduce the temperature. This goes beyond the authority in the law. The only type of ventilation that should be addressed by the Canine Health Board is "auxiliary ventilation" and only "If the ambient air temperature is 85 degrees or higher." The responsibility of the Canine Health Board is to determine an acceptable ventilation range. These requirements mandate mechanical ventilation even though kennels may function successfully with passive ventilation. The Dog Law, as passed by the Pennsylvania House and Senate, did not mandate mechanical ventilation and this was inserted by the Canine Health Board as an attempt to rewrite the law, exceeding their charter which was to set standards for the amount of ventilation, not how it was accomplished.

2. Section 28a.2 , Paragraph (1)
This language limits the temperature in a commercial kennel to a maximum of 86 degrees Fahrenheit and appears to go beyond the authority of the Canine Health Board. In Section 207(h) (6) of the law, a temperature range for commercial kennels of 50 to 85 degrees Fahrenheit is established, unless auxiliary ventilation is provided when the air temperature rises above 85 degrees Fahrenheit. The proposed standard suggests that dogs cannot be inside when the temperature is 86 Fahrenheit or higher, even though the next sentence says that this restriction does not apply to outside areas. If a dog could be in air that is 86 Fahrenheit outside, the restriction for inside air seems arbitrary, especially in light of the ventilation requirement of 8-20 air changes per hour. The ambient air in Pennsylvania in the summer can exceed 86 Fahrenheit and is not considered unhealthy for animals or people as long as shade, ventilation, and access to water are provided.

3. Section 28a.2, Paragraph (3)
This provisions states, "when the temperature is above 75 Fahrenheit the relative humidity shall be 1%-50%". This is not possible in Pennsylvania except in a hermetically sealed kennel. It is unreasonable to expect the humidity to be this low in any home or kennel without air conditioning. Also, it is well-recognized that humidity 30% or below dries out a dog's coat and skin and is not healthy.

4. Section 28a.2, Paragraphs (5) and (7)
This paragraph requires a commercial kennel to install and maintain carbon monoxide detectors. The Canine Health Board has no authority to address carbon monoxide levels. Similarly, paragraph (7) establishes a limit for particulate matter. The limited scope of authority of the Canine Health Board does not cover particulate matter.

5. Section 28a.2, Paragraph (9)
This paragraph identifies signs of illness associated with poor ventilation. This list of adverse clinical signs is not necessarily associated with poor ventilation and needs to be interpreted in light of breed, age, reproductive status, chronic disease, etc. It is unreasonable to state that dogs may not exhibit these signs in a kennel. There are many reasons why a dog may vomit. pant. or have nasal discharge that

have nothing to do with ventilation.

6. Section 28a.2, Paragraphs (10) and (11)
The standards are subjective and vague as written. In addition, paragraph (11) requires air filters. The limited authority of the Canine Health Board to establish appropriate ventilation ranges does not include the authority to require air filters.

7. Section 28a.2, Paragraph (12)
This paragraph states that all ventilation systems must comply with the latest edition of applicable codes. The Canine Health Board does not have the authority to establish the provision related to ventilation systems being compliant with the latest applicable codes. Their authority is to establish ventilation ranges.

8. Section 28a.3. Lighting - General
Section 207(h) (8) of the Act establishes lighting requirements for commercial kennels, which authorizes either natural or artificial light. The only responsibility of the Canine Health Board is to establish appropriate lighting ranges for housing facilities of dogs. The provisions in this section appear to go beyond the authority of the Canine Health Board.

9. Section 28a.1
The definition of "Excessive Light" is vague, suggesting that direct light shining, either from the sun or a light fixture, is prohibited. In contrast, in Section 28a.3, (1) "Natural Light," each dog is required to have exposure to natural light. Does this mean that the sun cannot shine on an indoor dog but can only reach an indoor dog by reflecting off of some surface? This seems arbitrary and designed to confuse kennel owners and kennel inspectors.

10. Section 28a.3, Paragraph (1)(ii).
"The minimum combined total of net glazed area of external windows, external sky light or area of other external openings through which natural light passes within each room where dogs are housed may not be less than 8% of the floor space". This seems excessive. The number seems arbitrary and does not seem to hinge on the health of the dog.

11. Section 28a.3, Paragraphs (1)(i)(ii).
The requirement of 50-80 foot candles of light during the day seems arbitrary, especially when these proposed regulations prohibit direct sunlight or direct artificial light on the dog. In addition, the requirement of 1-5 foot candles of light at night time means that the dogs cannot sleep in the dark. This is unreasonable. Dogs should be allowed to have complete darkness for good rest, just like people.

RESPONSE

1. The Department disagrees with the premise that the Canine Health Board and the Department as the promulgating agency can only regulate auxiliary ventilation. Auxiliary ventilation is just that – additional ventilation techniques available if the temperature in the kennel rises above 85 degrees. Section 207(h)(6) of the Dog Law

(3 P.S. § 459-207(h)(6)) is the provision of the statute that requires the regulation of auxiliary ventilation. Section 207(h)(7) establishes the authority and duty of the Canine Health Board to address and the Department to regulate ventilation, humidity and ammonia levels **at all times** when dogs are present in the kennel facility. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." Section 221(f) requires the Canine Health Board to address and set those standards and the Department to promulgate regulations based "...on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-221(f)). The final-form regulations carry out that very duty and set standards for ventilation based on cubic feet per minute per dog. The regulation then addresses how the standard will be measured, the standards to assure animal welfare, compliance and the duty of the kennel owner to meet that standards at all times. All of this is well within the authority conferred by the Act.

The language is very clear and precise. The Board and the Department have the authority to set "at all times" the proper ventilation, humidity and ammonia standards in commercial kennels. This authority is in addition too, not a modification of the auxiliary ventilation authority and makes it perfectly clear the Department has absolute and specific authority to address proper ventilation, at all times, in commercial kennels. Under the authority set forth at section 221(f) of the Dog Law (3 P.S. 459-221(f)) these standards have to be and are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels. As set forth in answers to previous comments, the Department researched and consulted with engineers and architects that build and design kennel buildings, animal scientists from the Pennsylvania State University and department and Canine Health Board veterinarians in establishing the proper ventilation, humidity and ammonia ranges. It was determined by the engineers (Learned Design and Paragon Engineering Services) and architects consulted, that the proper rates of ventilation could not be achieved or properly maintained without a mechanical means of air circulation. Various factors, including wind, wind direction and inverse convection to name a few, make it impossible for any kennel building to be designed in a manner that would allow it to obtain the proper ventilation levels, on a consistent and necessary basis, without mechanical means.

A holistic approach or one that incorporates kennel housing facility location and natural wind or convection will not work and will not achieve the levels of ventilation necessary to assure the welfare of the dogs housed in commercial kennel housing facilities. There is no other technology that the engineers or architects are aware of, or this Department for that matter, that will achieve the appropriate ventilation rates. If a new technology becomes available the Department can amend the regulation to add that technology. Until then, in order to properly clarify the standards established by the regulation, stating that a mechanical ventilation system must be utilized is necessary.

2. The final-form regulation deletes the language that is the concern of this comment. The final-form regulation does not regulated ambient air temperature in a kennel housing facility. With regard to standards once ambient air temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement in the final-form regulations. Although not enforced by

the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

However, since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. Instead, the final-form regulation utilizes the absolute authority conferred by section 207(h)(7) to establish proper humidity ranges at all times that dogs are present. The final-form regulation requires the kennel owner to utilize auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

With regard to the humidity levels when temperatures are greater than 85 degrees Fahrenheit, the Department, with the assistance of consultations with the engineers listed above, Department and Canine Health Board veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on

their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, swine or cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

With regard to ventilation standards, not only does the final-form regulation do away with air exchanges per hour and change to a more objective and defined standard of cubic feet per minute per dog, but the final-form regulation no longer requires 100% fresh air exchange. It now provides that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing facility. These standards will make the system easier to design and install, easier to assure compliance and less expensive to operate because a majority of the air can be re-ciruculated and the amount of air circulation is based on kennel volume and number of dogs.

In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool

themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

3. As set forth in the response to comment 2 above. The Department has modified the humidity requirements in the final-form regulation. With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

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The Department has confirmed with the engineers consulted (Learned Design and Paragon Engineering Services) that the humidity and heat index values established can be achieved in commercial kennels – even with the unfettered access to outdoor exercise - and can be achieved through dehumidification, without temperature reducing air conditioning. The statement may be true of tunnel ventilation, which no matter how employed or utilized can not control air temperature or humidity, but is not true of a system that allows for air re-circulation as is allowed by the final-form regulation.

4. The final-form regulation no longer establishes a carbon monoxide level or standard. The final-form regulation only requires that kennel housing facilities utilizing any carbon monoxide emitting device, functioning carbon monoxide detectors shall be installed and maintained in each room or area of the kennel and kennel housing facility – excluding outdoor runs - in which dogs are housed, kept or present. The carbon monoxide detectors shall meet or exceed the UL standard 2034 or the IAS 6-96 standard, or its successor standards. This was done in consultation with animal scientists from the Pennsylvania State University and the Canine Health and Department veterinarians. The engineers consulted agreed that expulsion of carbon monoxide was part of ventilation and felt that carbon monoxide would not be a problem so long as the ventilation provisions of the final-form regulations were adhered to, but agreed having detectors was prudent in case of a system malfunction.

With regard to particulate matter, the Department has removed this provision from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation requirements of the regulations were being met, particulate matter would not pose a problem in the kennel.

5. The Department considered the concerns expressed by this and other commentators and has modified the language of that section to carry out the intent. The language that appeared in subsection 28a.2 (9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress, has been substantially modified in the final-form regulations and is now subsection 28a.2(h) in the final form regulation. First, based on discussions with animal scientists, at the Pennsylvania State University and Department and Canine Health Board veterinarians, the number and type of conditions in dogs that may denote poor ventilation has been reduced. Second, and significantly for purposes of authority, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper

enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that animal scientists and veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that or too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

6. Subsections (10) through (12) of section 28a.2 of the proposed regulations have been deleted from the final-form regulation. The final-form regulation does require air filtration of re-ciruculated air. The Canine Health Board and the Department have the authority under section 207(h)(7) and 221(f) to assure sufficient ventilation that accounts for the welfare of the dogs. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-221(f))

7. All language in the proposed regulation regarding "applicable codes" has been removed from the final-form regulation.

8. The Department has modified the language of the lighting provisions in the final-form regulation. Much of the language in the lighting section now reiterates the lighting standards set forth at section 207(h)(8) of the Dog Law (3 P.S. § 459-207(h)(8)). Such reiteration of the standards of the Act is absolutely appropriate and it is within the authority of the Department as the promulgating agency to restate the statutory language in the regulation. The statutory language applies and is enforceable whether or not it is in the regulation. Inserting the statutory language into the regulation adds clarity and is informative to the regulated community with regard to the standards with which the must comply.

With regard to requiring natural and artificial light, the final-form regulation now allows for either type of lighting source or a combination of both to be utilized to meet the lighting requirements of the regulation. The final-form regulation no longer contains the language of what was section 28a.3(1) of the proposed regulation (now section 28a.7 of the final-form regulation). The final-form regulation now allows for either natural or artificial light or for a combination of both. It sets general standards for all lighting and establishes specific standards that in addition to the general standards,

apply to specifically to either natural or artificial lighting. What was subparagraph (1) of the proposed regulation is now contained in a provision that relates only to natural light. Natural light is no longer required. What were subparagraphs (1)(ii)-(1)(vi), have been removed from the final-form regulation. The new language, regarding general lighting standards, mirrors the language of the Act and is also consistent with existing United States Department of Agriculture, Animal Welfare Act regulation standards.

9. The term and the requirement that dogs in commercial kennels not be exposed "excessive light" comes from section 207(h)(8) of the Dog Law (3 P.S. S 459-207(h)(8) and is also set forth in the Federal Animal Welfare Act regulations (9 CFR §§ 3.2(c) and 3.3(c)) and is applicable to kennels whether or not the Department sets it forth in these regulations. The Department however, has provided a more objective definition of "excessive light" in the final-form regulation. The definition is based on research done by Dr. Overall of the Canine Health Board.

With regard to direct exposure to natural light, as stated, previously the lighting provisions of the final-form regulation allow for natural or artificial light and does not require that each dog have exposure to direct natural light. The animal scientists and kennel engineers the Department consulted either expressed concerns or had actually witnessed instances where dogs primary enclosures were exposed to direct sunlight and the dog could not escape the light or the heat generated, thereby putting the dogs health in jeopardy. The dogs in the majority of these kennels have either unfettered access to outdoor exercise or the kennel owner must adhere to an adjudication issued by the Canine Health Board setting forth the amount of time the dogs must be placed in an outdoor exercise area, thus providing access to natural sunlight. Therefore, the Department felt it was prudent to remove this provision.

10. The language related to total net glazed area, that was in section 28a.3(i)(ii) of the proposed regulation, has been removed from the final-form regulation.

11. As set forth previously, the level of light provided has been modified in the final-form regulation. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. Theveterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and

administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

With regard to the nighttime lighting standard, although removed from the final-form regulation, it was not an arbitrary standard. The standard was based on research that showed dogs need 1-5 footcandles of light in order to allow for their normal startle response. Complete darkness is not optimal for dogs.

Comments: Fiscal Impact

1. Cost to Department:

Financial feasibility is not our main concern but is interrelated to our overriding concern for the welfare of the dogs. As written, these regulations would result in the Department having to purchase the equipment used in the measurement of temperature, humidity levels, ammonia levels, carbon monoxide levels, particulate matter, air velocity and lighting. In addition, there would be costs associated with training dog wardens to properly use the equipment and regularly maintain and certify it for accurate measurements. Because of the additional time involved in each kennel inspection, more dog wardens may also be needed.

2. Cost to Regulated Community:

The regulated community will also need to purchase this equipment and be trained on proper use and maintenance. There will be significant costs associated with installation of mechanical ventilation systems, additional windows, and utility costs. These costs are in addition to the significant financial investments that kennel operators need to make to comply with the new provisions of the Dog Law such as creating unfettered access to outdoor exercise areas and larger primary enclosure spaces.

3. Cost of Compliance:

Another concern is whether or not compliance could even be possible and, if so, how costly compliance would be to have a ventilation system that works according to the guidelines when a facility has multiple, uncovered openings to outside exercise areas. Fairness should be used in the expectations of kennel operators if they are adhering to standards that ensure the health and welfare of the dogs and are acting responsibly.

If a person looks at the "big picture", fiscal feasibility, ability to comply with regulations, and proper enforcement are all crucial elements to the welfare of the dogs we are all seeking to protect. If responsible commercial kennel operators find it impossible to comply with these regulations and the other requirements of the law, it could result in commercial kennel operations ceasing altogether in the Commonwealth. In fact, this is already occurring. While some may argue that this would be a good result, the kennels will simply take residence in states with far fewer regulatory standards than Pennsylvania, a scenario that is likely to seriously impede and endanger the health and welfare of the dogs that Act 119 of 2008 and these regulations seek to protect.

RESPONSE

1. 2. and 3. The regulations, which have not yet been promulgated, have not been the driving force with regard to kennels that have either gone out of business either on their own or because of enforcement action by the Department. The driving force to date has been the cost of compliance with the standards imposed by Act 119 of 2008 and kennel owners failure to take action to comply with those standards.

With regard to the fiscal impact of the regulations, the final-form regulations have been substantially and substantively changed. As set forth in greater detail to other similar comments, the final-form regulatory analysis form has captured the applicable and reasonable cost of the regulation. The Department has consulted with engineers that build and design kennel housing facilities and they have provided the cost estimates of implementing the regulatory provisions, either with regard to retrofitting an existing kennel or building a new kennel. In addition, the Department has researched once again, the cost of any measurement equipment to be utilized, reviewed training and paperwork costs and other costs estimates required in the regulatory analysis form.

The amendments made to the final-form regulation, besides being based on expert input from engineers and architects that design and build kennel facilities, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and the Department, also reduce the cost of compliance with the regulation in several ways.

The final-form regulation contains no requirement for temperature reduction. Air conditioning or HVAC is allowed but not required. The final form regulation focuses on humidity levels in kennel housing facilities, and expands the range of the humidity level to 30%-70% when temperatures are between 50 and 85 degrees Fahrenheit. The final form regulation requires additional humidity reduction when temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, but allow the kennel owner four hours to reach the humidity level necessary to assure a 85 Heat Index value in the facility. The humidity ranges are based on expert analysis and opinion provided by the engineers consulted (Learned Design, Paragon Engineering Services), animal scientists and Canine Health Board and Department veterinarians. The Department with the assistance of Dr. Overall from the Canine Health Board found and utilized a dog survivability study that pinpoints the upper most range of the heat index that would allow for survival of dogs. The Heat Index value is based on the results and recommendations of a survivability study conducted on beagles. The study entitled "A Temperature/Humidity Tolerance Index for Transporting Beagle dogs in Hot Weather", was sponsored by the Federal Aviation Administration and authored by Gerald D. Hanneman and James L. Sershon. The document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.

The Heat Index Value is also based on the Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by in 1998 by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine and first published in "Recognizing and Reporting Animal Abuse: A Veterinarian's Guide." This widely-used scale, one of several canine assessment tools focused on consequences for the dog, indicates that, even with water and shade available as in a commercial kennel setting, a potentially unsafe situation develops above a 90 degree F temperature, especially for brachycephalic, obese

or elderly dogs, as well as dogs under 6 months of age. Although the regulation is based on heat index, regulates relative humidity rather than temperature, and a temperature of over 90 degrees F would be permitted if combined with a relative humidity that would result in a HI of no more than 90, the inclusion of the TACC Weather Safety Scale as a basis for the regulation emphasizes that the standard being set goes beyond survivability to minimize adverse heat-related consequences for dogs in commercial kennels. The survivability study and the TACC Weather Safety Scale are generally acknowledged to be the only two scholarly resources that give specific heat-related guidance applicable to canines.

The Department will purchase temperature and humidity monitoring devices to be installed in kennels as set forth at subsections 28a.4(b)(4) and (5) of the final-form. regulation. In deciding to purchase the temperature and humidity monitoring devices the Department took into account the comments of kennel owners and other related to the cost to the kennel owners of having to purchase such equipment to monitor their kennels and the issue of standardization of such equipment so that measurements are taken in the same manner and by the same type of equipment. The Department will bear the cost of buying, calibrating, replacing and installing the monitors and kennel owners will be able to continually check the monitors to assure their kennel facility is in compliance with the standards of the regulations.

The ventilation system language and requirements are based on consultations with and were reviewed by engineers – that design and build kennel housing facilities – and discussions with animal scientists. The humidity levels are based on consultations with animal scientists from the Pennsylvania State University, Canine Health Board and Department veterinarians, scientific research undertaken by Dr. Overall of the Canine Health Board, standards already contained in the Federal Animal Welfare Act and the experience and expertise of engineers that design and build kennel housing facilities.

The final-form regulation implements changes, such as establishing ventilation standards in cubic feet per minute per dog instead of air exchanges per hour. This was done in response to comments from and discussions with the architects, engineers and animal scientists consulted by the Department. This allows the kennel owner to have the ventilation system certified as meeting all the standards of the regulations by an engineer (chosen by the kennel owner) and the Department to check the CFM or capacity rating on the ventilation and air circulation equipment employed by the kennel owner to assure it meets the required air circulation values. It also allows the kennel owner and engineer or architect to design and base the ventilation system on an objective capacity rating as opposed to a more subjective air exchange rate

The final-form regulation also allows up to seventy percent (70%) of the air to be re-circulated, as opposed to 100% fresh air. That change will reduce the necessity to purchase air circulation monitoring equipment and provides an objective measurement of air circulation, while at the same time, reduces the cost of operation to the kennel owner. The changes were contemplated in response to issues set forth in the comments received and were made pursuant to the Department's consultation with animal scientists and engineers – Learned Design and Paragon Engineering Services – that design and build kennel housing facilities.

The cost of the mechanical ventilation system will vary according to the sophistication and complexity of the system the kennel owner decides to install. However, the Department has consulted several engineers and engineering companies that build kennel buildings and asked them to assess the cost of designing and installing a

ventilation system that would meet all the ventilation requirements – including auxiliary ventilation and humidity levels - of the final-form regulation. The costs are based on a kennel owner having to retrofit or build from the ground up and include the cost of installing all of the equipment, even though most kennel owners, especially those subject to United States Department of Agriculture regulations, should already have some form of mechanical ventilation, auxiliary ventilation and – in the case of USDA – temperature control devices already installed in the kennel.

The Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)).The Federal Animal Welfare Act Regulations further require that temperatures in enclosed or partially enclosed housing structures be maintained between 50-85 degrees Fahrenheit (9 CFR §§ 3.2(a) and 3.3(a)) and that proper ventilation and lighting be provided (9 CFR §§ 3.2(b) and (c) and 3.3(b) and (c)). Therefore, the costs estimates, which are set forth in the regulatory analysis form that accompanies the final-form regulation will necessarily be higher than those incurred by such kennel owners, because they should already have systems in place. The regulatory analysis form will set forth the greatest cost that could be incurred for a system that would meet the standards of the regulations.

Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form. The kennel owner may elect to purchase a light meter or ammonia level meter or both. The kennel owner will be able to utilize the Department's temperature and humidity monitoring devices to assure compliance with those standards and capacity or CFM standards for air circulation will be certified by a professional engineer – of the kennel owners choosing – as meeting the standards of the regulation and can be calculated based on the cubic feet of each area of the kennel housing dogs and the total number of dogs housed in that area of the kennel. The capacity or CFM rating is listed on fans and other forms of mechanical ventilation and the professional engineer, State dog warden and kennel owner can calculate and match those standards without buying any monitoring equipment. The kennel owner can adjust the level of the air circulation based on the number of dogs in the kennel at any one time, and no additional equipment or monitoring devices are necessary for such calculations. Standard carbon monoxide monitors, for those kennels that need to install them, will have to be purchased, but actual carbon monoxide level readings will not have to be taken, so no additional devices are necessary.

The Department has no baseline data with regard to a kennel's current utility costs, so it is impossible to project the amount of any increase in such costs. However, the regulatory analysis form accompanying the final-form regulation does estimate the average yearly cost of operating a system that would meet the ventilation, auxiliary ventilation and humidity standards of the regulations. These estimates do not take into account the fact that kennel owners already had previous existing utility costs. Therefore, the estimates set forth in the regulatory analysis form will include those already existing costs. The existing costs for kennels regulated by the USDA will be much less, as those kennels already had to comply with specific heating (50 F) and cooling (85 F) regulations and therefore, should already be operating heating and cooling systems in their kennels.

The Federal Animal Welfare Act regulations in fact require the kennel to reduce the temperature to 85 degrees Fahrenheit.

In addition, both the Federal Animal Welfare Act regulations and the Department's current regulations require the use of auxiliary ventilation when temperatures in kennels rise above 85 degrees Fahrenheit, so kennels should already have some form of auxiliary ventilation in place or available.

The lighting should not cost any additional amount, since kennels were already required, by the Department's current regulations and USDA regulations to provide a diurnal lighting cycle and enough light to allow for observation of the dogs and normal animal husbandry practices. The amendments made by Act 119 also require and set forth those same general standards. The new regulations quantify the intensity of the light to be provided and the type of lighting. The regulatory analysis form sets forth the cost estimates to install new full spectrum lighting, if a kennel does not already have such lighting, but there should be no additional cost of operating the lighting, since proper lighting is already required.

In short, the Department consulted with engineers who design and build kennel buildings, to determine the potential cost of the ventilation, auxiliary ventilation, humidity, ammonia and lighting standards of the final-form regulation. The new cost estimates, set forth in the accompanying regulatory analysis form, are based on their input. The final-form regulation, especially the ventilation provisions of the final-form regulation, has reduced the need for some of the measurement equipment that would have been required by the proposed regulation. Although the need for specific measurement tools has been significantly reduced by the changes made to the final-form regulation, the cost of any measurement tools has been assessed by the Department and added to the regulatory analysis form.

The Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

Comment: Canine Health Board Member Concerns

Finally, a majority of the members of the Canine Health Board have expressed sincere concerns with the final work product that was developed and serious flaws with the process used to develop the current proposed rulemaking. Their concerns are based on the final regulatory proposal exceeding their scope of authority and the lack of relevant scientific basis for the facilities in question. The regulations as proposed may result in major difficulties in complying with the regulations and in

enforcing them. These concerns and other administrative process concerns have been shared with the Department in writing as you are aware.
Those concerned members of the Canine Health Board, and we as an association, are very apprehensive that if the proposed rulemaking moves forward, it may not be in the best interest of the dogs it aims to protect, may result in kennels being unable to comply, wardens unable to enforce the regulations, the closing of legitimate kennels, and dogs being moved and bred in states that have far worse conditions and substandard laws (or no laws at all) to ensure the welfare of the dogs. It would be much better for the dogs, for which we all share concern, if Pennsylvania kennels can comply with reasonable requirements that still provide a suitable, healthy environment for the dogs housed in commercial kennels. The Canine Health Board members who have expressed concerns have recommended that the current regulatory process be halted and that the Board be reconvened. The Board members also expressed a desire to develop a new regulatory proposal in concert with experts in the areas of agricultural engineering and ventilation. kennel inspectors and in consultation with owners of model kennels. We support their recommendations.

RESPONSE

The Department is now the promulgating agency and has moved forward through the regulatory process. The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted with the Canine Health Board members, as well as, with Department veterinarians, architects, engineers, a regulated community group and animal scientists, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations.

The Department followed all of the mandates of the Act and the regulatory process in promulgating the regulation The Department, during the actual regulatory review process and in the promulgation of the final-form regulations, has made a legitimate effort to address the concerns of all commentators, including the persons to be regulated and has made substantive changes to the proposed regulations, so that the final-form regulation provides standards that are not unduly vague and provide a genuine opportunity for the regulated community to comply.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received

during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

In closing we sincerely appreciate the time, effort and expertise given by each member of the Canine Health Board especially in light of their own personal and professional commitments outside of their voluntary service on this Board. However. as an organization we are concerned that the final decisions made were: 1) largely outside the scope of authority of the Board and 2) subjective and not based on animal husbandry practices nor relevant scientifically-based data or measurements. Because of this we ask that serious consideration to be given to delaying promulgation of the regulations until more scientifically-based information can be established for dogs housed in commercial breeding kennels.

We would be willing to assist the Board in development of scientifically-supportable kennel standards that are responsive to the welfare needs of dogs in kennels.

RESPONSE

The Department in response to the other general and specific comments set forth by this commentator has delineated the extensive consultation and research undertaken in drafting the final-form regulation. The Department consulted experts in the field of kennel engineering, design and construction, animal scientists, persons in the field that inspect kennels, Department and Canine Health Board veterinarians and found and utilized animal husbandry practices suggested by such experts and scientific data related specifically to dogs. Although the standards may not be exactly the standards that would have been established by PVMA, they are based on solid expert advice, opinion and experience, as well as, animal husbandry practices and scientific research that has been supported and verified by the experts consulted.

As evidenced by the responses to comments received and the substantial and substantive changes to the final-form regulation, the Department did not blindly, arbitrarily or capriciously adopt any standard set forth in the Canine Health Board Guidelines or the proposed regulations. The Department consulted engineers (Learned Design, Paragon Engineering Services, Pennsylvania State University), animal scientists from the Pennsylvania State University, had meetings with members of the Canine Health Board and conferred with Department veterinarians to address ventilation, auxiliary ventilation, humidity and ammonia level and lighting standards. The Department did its own research and eventually had the engineers verify that the standards established were congruent, attainable, minimal, objective, measurable and comported with animal husbandry practices and science and design incorporated in the kennel buildings they design, build and retrofit.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

III. NADIRA WILLIAMS, VMD

Commentator:

Submitted by: Nadira Williams, VMD

Background:

As part of this comment the Commentator set forth selected regulations pertaining to dogs and cats from the 9 CFR Part 3 – Standards from the Animal Welfare Act. Those regulatory provisions are set forth in italics below.

Comment: General Reasons Supporting the CHB Regulations

We remind our licencees that these AWA regulations are the minimum standards that are required by the USDA's Animal Care agency. However, we encourage them to go above and beyond these minimum standards to ensure the health and well-being of the animals and to prevent or decrease the likelihood of non-compliances.

The proposed regulation from the PA Canine Health Board is definitely in line with our AWA regulations. I also feel that they put into practice the higher standards that we promote among our licensees. In my experience with numerous research facilities, I have noted that solid and slat-flooring is the standard for all dog enclosures. They provide a safe and comfortable surface that can be easily cleaned. I would also like to stress the importance of enrichment for these dogs. Increasing the enclosure size, does not necessarily mean that the animals will receive sufficient exercise. Nor does it guarantee that they are adequately utilizing the extra space. Implementing an enrichment plan, that includes things such as appropriate enrichment toys/ items and/ or compatible pair-housing or group exercise, will help ensure that the dogs are healthier and well-

socialized. The descriptions and parameters set forth in the proposed regulation will assist in setting a better standard of care for the dogs and ensure that their health and well-being becomes more of a priority, as opposed to simply making a profit.

Animal Welfare Act – Selected Standards

Sec. 3.1 Housing facilities, general.

Facilities and Operating Standards

(c) Surfaces--

(1) General requirements. The surfaces of housing facilities--including houses, dens, and other furniture-type fixtures and objects within the facility--must be constructed in a manner and made of materials that allow them to be readily cleaned and sanitized, or removed or replaced when worn or soiled. Interior surfaces and any surfaces that come in contact with dogs or cats must:

(i) Be free of excessive rust that prevents the required cleaning and sanitization, or that affects the structural strength of the surface; and

(ii) Be free of jagged edges or sharp points that might injure the animals.

(2) Maintenance and replacement of surfaces. All surfaces must be maintained on a regular basis. Surfaces of housing facilities--including houses, dens, and other furniture-type fixtures and objects within the facility--that cannot be readily cleaned and sanitized, must be replaced when worn or soiled.

(3) Cleaning. Hard surfaces with which the dogs or cats come in contact must be spot-cleaned daily and sanitized in accordance with Sec. 3.11(b) of this subpart to prevent accumulation of excreta and reduce disease hazards. Floors made of dirt, absorbent bedding, sand, gravel, grass, or other similar material must be raked or spot-cleaned with sufficient frequency to ensure all animals the freedom to avoid contact with excreta. Contaminated material must be replaced whenever this raking and spot-cleaning is not sufficient to prevent or eliminate odors, insects, pests, or vermin infestation. All other surfaces of housing facilities must be cleaned and sanitized when necessary to satisfy generally accepted husbandry standards and practices. Sanitization may be done using any of the methods provided in Sec. 3.11(b)(3) for primary enclosures.

.....

(f) Drainage and waste disposal. Housing facility operators must provide for regular and frequent collection, removal, and disposal of animal and food wastes, bedding, debris, garbage, water, other fluids and wastes, and dead animals, in a manner that minimizes contamination and disease risks. Housing facilities must be equipped with disposal facilities and drainage systems that are constructed and operated so that animal waste and water are rapidly eliminated and animals stay dry. Disposal and drainage systems must minimize vermin and pest infestation, insects, odors, and disease hazards. All drains must be properly constructed, installed, and maintained. If closed drainage systems are used, they must be equipped with traps and prevent the backflow of gases and the backup of sewage onto the floor. If the facility uses sump or settlement ponds, or other similar systems for drainage and animal waste disposal, the system must be located far enough away from the animal area of the housing facility to prevent odors, diseases, pests, and vermin infestation. Standing puddles of water in animal enclosures must be drained or mopped up so that the animals stay dry.

Sec. 3.2 Indoor housing facilities.

(a) Heating, cooling, and temperature. Indoor housing facilities for dogs and cats must be sufficiently heated and cooled when necessary to protect the dogs and cats from temperature or humidity extremes and to provide for their health and well-being. When dogs or cats are present, the ambient temperature in the facility must not fall below 50 deg. F (10 deg. C) for dogs and cats not acclimated to lower temperatures, for those breeds that cannot tolerate lower temperatures without stress or discomfort (such as short-haired breeds), and for sick, aged, young, or infirm dogs and cats, except as approved by the attending veterinarian. Dry bedding, solid resting boards, or other methods of conserving body heat must be provided when temperatures are below 50 deg. F (10 deg. C). The ambient temperature must not fall below 45 deg. F (7.2 deg. C) for more than 4 consecutive hours when dogs or cats are present, and must not rise above 85 deg. F (29.5 deg. C) for more than 4 consecutive hours when dogs or cats are present. The preceding requirements are in addition to, not in place of, all other requirements pertaining to climatic conditions in parts 2 and 3 of this chapter.

(b) Ventilation. Indoor housing facilities for dogs and cats must be sufficiently ventilated at all times when dogs or cats are present to provide for their health and well-being, and to minimize odors, drafts, ammonia levels, and moisture condensation. Ventilation must be provided by windows, vents, fans, or air conditioning. Auxiliary ventilation, such as fans, blowers, or air conditioning must be provided when the ambient temperature is 85 deg. F (29.5 deg. C) or higher. The relative humidity must be maintained at a level that ensures the health and well-being of the dogs or cats housed therein, in accordance with the directions of the attending veterinarian and generally accepted professional and husbandry practices.

(c) Lighting. Indoor housing facilities for dogs and cats must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs and cats. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animals, and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs and cats from excessive light.

(d) Interior surfaces. The floors and walls of indoor housing facilities, and any other surfaces in contact with the animals, must be impervious to moisture. The ceilings of indoor housing facilities must be impervious to moisture or be replaceable (e.g., a suspended ceiling with replaceable panels).

Sec. 3.3 Sheltered housing facilities.

(a) Heating, cooling, and temperature. The sheltered part of sheltered housing facilities for dogs and cats must be sufficiently heated and cooled when necessary to protect the dogs and cats from temperature or humidity extremes and to provide for their health and well-being. The ambient temperature in the sheltered part of the facility must not fall below 50 deg. F (10 deg. C) for dogs and cats not acclimated to lower temperatures, for those breeds that cannot tolerate lower temperatures without stress and discomfort (such as short-haired breeds), and for sick, aged, young, or infirm dogs or cats, except as approved by the attending veterinarian. Dry bedding, solid resting boards, or other methods of conserving body heat must be provided when temperatures are below 50 deg. F (10 deg. C). The ambient temperature must not fall below 45 deg. F (7.2 deg. C) for

more than 4 consecutive hours when dogs or cats are present, and must not rise above 85 deg. F (29.5 deg. C) for more than 4 consecutive hours when dogs or cats are present. The preceding requirements are in addition to, not in place of, all other requirements pertaining to climatic conditions in parts 2 and 3 of this chapter.

(b) Ventilation. The enclosed or sheltered part of sheltered housing facilities for dogs and cats must be sufficiently ventilated when dogs or cats are present to provide for their health and well-being, and to minimize odors, drafts, ammonia levels, and moisture condensation. Ventilation must be provided by windows, doors, vents, fans, or air conditioning. Auxiliary ventilation, such as fans, blowers, or air-conditioning, must be provided when the ambient temperature is 85 deg. F (29.5 deg. C) or higher.

(c) Lighting. Sheltered housing facilities for dogs and cats must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs and cats. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animals, and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs and cats from excessive light.

(d) Shelter from the elements. Dogs and cats must be provided with adequate shelter from the elements at all times to protect their health and well-being. The shelter structures must be large enough to allow each animal to sit, stand, and lie in a normal manner and to turn about freely.

(e) Surfaces.

(1) The following areas in sheltered housing facilities must be impervious to moisture:

(i) Indoor floor areas in contact with the animals;

(ii) Outdoor floor areas in contact with the animals, when the floor areas are not exposed to the direct sun, or are made of a hard material such as wire, wood, metal, or concrete; and

(iii) All walls, boxes, houses, dens, and other surfaces in contact with the animals.

(2) Outside floor areas in contact with the animals and exposed to the direct sun may consist of compacted earth, absorbent bedding, sand, gravel, or grass.

RESPONSE

The Department appreciates the support of this commentator and agrees that the final-form regulation is consistent with and utilizes the minimum standards established by the Federal Welfare Act as a basis for the standards. The final-form regulation drafted by the Department, as required by the Dog Law, sets very specific ventilation, auxiliary ventilation, humidity, ammonia, lighting and flooring standards for dogs housed in commercial kennels. The Department appreciates that the commentator took the time to set forth the provisions of the Federal Animal Welfare Act that are congruent to and supportive of the standards established in the Department's regulation.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the

comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

IV. HUMANE SOCIETY VETERINARY MEDICAL ASSOCIATION (HSVMA)

Commentator:

Submitted by: Barbara Hodges, DVM, MBA, HSVMA Veterinary Consultant
Humane Society Veterinary Medical Association
2100 L Street, NW
Washington, DC 20037

Background:

On behalf of The Humane Society Veterinary Medical Association (HSVMA), I am writing to offer comments on the proposed Canine Health Board Standards for Commercial Kennel Regulations in Pennsylvania (IRRC Number 2785). HSVMA is a professional organization, representing more than 1,300 veterinary professionals

nationwide, with a focus on the welfare of all animals, including canine companions. We wish to acknowledge the expertise of and express our appreciation for the diligent efforts of our nine veterinarian colleagues on the Canine Health Board.

Comment: Commercial Kennel Health Issues

Any environment, such as a commercial dog kennel, in which large numbers of animals are housed in close proximity, presents significant herd health challenges. Infectious viral and bacterial agents such as canine distemper virus, canine parvovirus, bordatella bronchiseptica and canine parainfluenza virus (both common agents of kennel cough), as well as protozoal parasitic agents such as giardia and coccidia, are all relatively easily transmitted under such conditions. In addition to physical concerns such as housing materials, ventilation, and routine cleaning and disinfection programs, efforts to minimize animals' stress levels are important factors in protecting animal health and comfort. We believe the proposed regulations take these factors into consideration and are based on sound animal health data and research. In particular, we want to emphasize our strong support of the standards proposed for kennel temperature, ventilation and flooring.

RESPONSE

The Department appreciates the support expressed by this commentator and the specific rationale for that support. The Department agrees that proper ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, as well as, proper flooring standards are essential to dog health and welfare in commercial kennels. The Department has endeavored, within the bounds of its statutory authority and utilizing the research, knowledge, experience and expertise of engineers, architects, animal scientists and veterinarians to draft a final-form regulation that does utilize animal husbandry practices and scientific evidence and practices that will account for and assure the health and welfare of dogs in commercial kennels.

The language of the final-form regulation, although based on and still retaining many of the overall ideas and standards of the proposed regulation, has been significantly modified to provide additional clarity, more objective standards and provisions which allow for more effective and uniform enforcement. The final-form regulation contains additional sections that break the regulation down into the basic elements set forth in the statute (ventilation, humidity, auxiliary ventilation, ammonia levels, carbon monoxide, lighting and flooring. In addition, the ventilation provisions measure air circulation in cubic feet per minute per dog (CFM) not in exchanges per hour. This measurement is much easier to check, assess and enforce and allows kennel owners to adjust air circulation levels dependent on the number of dogs housed in the kennel housing facility. The ventilation section also sets forth clear standards and guidance for what constitutes a violation and clear standards and guidance with regard to a kennel owner's duty if a mechanical failure should occur. The humidity section sets forth clear humidity standards that are based on scientific research, data and practices. The auxiliary ventilation provisions make it clear that air conditioning to reduce temperatures may be utilized when temperatures rise above 85 degrees Fahrenheit, but is not required. It also sets forth examples of other techniques that are currently being utilized in kennels. The ammonia provisions set forth clear levels and measurement standards, all of which are based on consultation with and research by experts (engineers, animal scientist and veterinarians). The lighting provisions now establish clear levels and standards for either natural or

artificial lighting or both. Finally, the flooring section is broken down into three subsections. The first two subsections set forth the flooring standards contained in section 207(i)(3)(i) and section 207(i)(3)(ii) of the Dog Law (3 P.S. §§ 459-207(i)(3)(i) and (i)(3)(ii)). The third section delineates the legal authority and the standards for alternative flooring. These changes all incorporate language that is clear and establishes more objective standards.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Temperature

The Board's recommendation regarding a maximum ambient temperature of 85 degrees Fahrenheit is sufficient to generally guard against discomfort and potential hyperthermia in most healthy adult doqs. The commentator cited the Animal Welfare Act (AWA) as support for the 85 degree cap on temperature in commercial kennels. Title 9 Animals and Animal Products: Chapter 1-Animal and Plant Health Inspection Service, Department of Agriculture; Subchapter A-Animal Welfare; Part 3 Standards; Subpart A- Specifications for the Humane Handling, Care, Treatment and Transportation of Dogs and Cats. Section 3.2, Indoor Housing Facilities, p. 54.

RESPONSE

The Department agrees that the Animal Welfare Act sets a temperature cap of 85 degree Fahrenheit and kennels that fall under the jurisdiction of the United States Department of Agriculture should already have ventilation and temperature equipment in place to comply with that standard.

Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

That said, the final-form regulations no longer sets a temperature cap of 86 degrees Fahrenheit, nor does it require a reduction in the ambient air temperature in the kennel housing facility. Since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from numerous commentators, including the Independent Regulatory Review, the Honorable Senator Brubaker and the Honorable Members of the Pennsylvania House of Representatives.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six

hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

With regard to the humidity levels when temperatures are greater than 85 degrees Fahrenheit, the Department, with the assistance of consultations with the engineers listed above, Department and Canine Health Board veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, swine or cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure

survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

With regard to ventilation standards, not only does the final-form regulation do away with air exchanges per hour and change to a more objective and defined standard of cubic feet per minute per dog, but the final-form regulation no longer requires 100% fresh air exchange. It now provides that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing facility. These standards will make the system easier to design and install, easier to assure compliance and less expensive to operate because a majority of the air can be re-circulated and the amount of air circulation is based on kennel volume and number of dogs.

In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

Comment: Ventilation

The Board's recommendation regarding ventilation, stipulating an air exchange rate range of 8-20 exchanges per hour is adequate to reasonably minimize the presence of air-borne pathogens." We understand others have noted that a minimum air exchange rate of 10-15 exchanges per hour would provide even greater protection for the animals' health, and we would support this narrower range as an improvement. The commentator cited the following as support for the ventilation requirements - Environmental Enrichment Information Resources for Laboratory Animals (1995). *Dog and Dog Housing* chapter, by Robert Hubrecht, Universities Federation for Animal Welfare, p. 43.

RESPONSE

The Department did change the measurement standards for the ventilation requirements in the final-form regulation. In response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form

regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

The final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

In addition, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been

deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment: Flooring

The Board's recommendation requiring solid flooring is the best flooring option to insure the health, safety and comfort of kenneled dogs. Indeed, solid flooring is the industry standard among shelter medicine practitioners and in animal shelters nationwide, where flooring must be safe and easily cleaned and disinfected." The commentator provided the following citation supporting the comment - University of California at Davis, School of Veterinary Medicine, Koret Shelter Medicine Program website FAQs. htlp:II'NWIN.sheltermedicine.com/portal/fag.php?zoomget-774. Accessed Oct. 27, 2009.

RESPONSE

The Department agrees with the comment and appreciates the supporting documentation. The Department also supports solid flooring. The final-form regulation however, at the suggestion of the Independent Regulatory Review Commission sets forth the standards of the Act and then establishes the additional animal husbandry and welfare factors the Board must consider when approving optional flooring requirements.

Comment: General Support

The HSVMA is dedicated to promoting the humane treatment of all animals, both for the sake of the animals themselves and for the benefit of the public, including the future owner-guardians of dogs confined at commercial kennels. We support the application of veterinary medicine for the betterment of animal welfare and we are pleased the Board utilized its considerable expertise to recommend standards that will enhance animal well-being in Pennsylvania kennels. For these reasons, the HSVMA supports implementation of the proposed regulations.

RESPONSE

First, the Department very much appreciates the support offered by this commentator. The Department agrees that the Canine Health Board is comprised of very knowledgeable and skilled individuals and that they did in extraordinary job in researching and completing very technical Guidelines within a 45 day time period.

In addressing comments made with regard to the Guidelines published by the Board and the proposed regulation promulgated by the Department, the Department did consult the Canine Health Board, as well as, the numerous other experts, including engineers with expertise in kennel design and construction, architects, animal scientists and Department veterinarians. The final-form regulation has been scrutinized by those experts and the engineers believe the standards are attainable and consistent with standards and criteria followed and utilized in other kennel facilities they design and construct. The standards are also based on the input of animal scientists and veterinarians.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation

is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

V. Dr. ROBERT A. WHITNEY, DVM, DACLAM

Commentator:

Submitted by: Robert A. Whitney, DVM, DACLAM
RADM (08), USPHS (ret.)
314 2nd Street
Steilacoom, WA 98388

Background:

My veterinary medical credentials include over 20 years with the U.S. Army working in research with dogs and other animals, and with the National Institutes of Health, U.S. Public Health Service (PHS). At NIH, I directed programs at Branch and Division level in which dogs and other species were bred and used. We also set standards for those dogs obtained from breeders. I attained the rank of Rear Admiral (08) in the PHS, highest of any veterinarian in history, and the only veterinarian as the Surgeon General of the United States. I am currently a member of a National Research Council committee preparing a report on dogs. The National Academy Press will release a report from this committee, and another ILAR committee currently revising the *Guide for the Care and Use of Laboratory Animals*, within a few weeks. Both documents address many of the issues contained in the Proposed Regulations.

Comment:
This letter is in support of the Proposed Regulations: Canine Health Board Standards for Commercial Kennels. The science of animal care, like that of human medicine, is not absolute. It evolves with time as new discoveries are made and new equipment provides a measure of heretofore-immeasurable parameters. Nevertheless, animal care is not in the dark ages. For decades studies have been published and reports of the NRC and other reputable agencies and scientists have served to provide solid groundwork for the development of standards by which dogs are bred, reared, and cared for. The report of the Canine Health Board continues along these lines, reflecting the fine work and recommendations made by former individuals and committees who have struggled with these same issues. Their recommendations may conflict with the desires of some professional associations and breeders (such as those characterized as "puppy mills"), whose financial interests obscure their better judgment, but the Canine Health Board's research and recommendation cannot be disparaged.

RESPONSE

The Department agrees with this comment and very much appreciates the support for the parameters developed by the Canine Health Board and published as Guidelines and the standards that were delineated in the proposed regulation promulgated by the Department. The Department agrees that the Canine Health Board is comprised of very knowledgeable and skilled individuals and that they did in extraordinary job in researching and completing very technical Guidelines within a 45 day time period.

In addressing comments made with regard to the Guidelines published by the Board and the proposed regulation promulgated by the Department, the Department did consult the Canine Health Board, as well as, the numerous other experts, including engineers with expertise in kennel design and construction, architects, animal scientists and Department veterinarians. The final-form regulation has been scrutinized by those experts and the engineers believe the standards are attainable and consistent with standards and criteria followed and utilized in other kennel facilities they design and construct. The standards are also based on the input of animal scientists and veterinarians.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the

specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

The Canine Health Board sought guidance from informed individuals and from a wealth of published literature by the US Department of Agriculture, NIH, PHS, NRC, animal welfare organizations, scientific journals, state and local government and institute standards, the UK's Universities Federation for Animal Welfare, and many others. They clearly did their homework as demonstrated by their recommendations for the physical and environmental (heat, humidity, lighting, temperature, sanitation, air flow and quality, types of flooring) conditions. I sincerely urge that these regulations be accepted and become the law of Pennsylvania.

RESPONSE

The Department agrees that the Canine Health Board did a wonderful job of consulting experts and gathering published literature and then condensing that into Guidelines. The Department has pointed that out to commentators who have sought to assert that the Board did not do its duty in collecting information and that the standards established in the Guidelines and those set forth in the proposed regulations were arbitrary in nature. As set forth in the answer to many comments, however, the Department, with the assistance of Canine Health Board members did additional research, consulted additional experts and found additional studies upon which the final-form regulations are based. There should no longer be any question of underlying engineering, animal husbandry and scientific support for the standards established in the final-form regulation.

VI. Dr. WILLARD STOLTZFUS, VMD

Commentator:

Submitted by: Willard Stoltzfus, VMD
Black Horse Animal Hospital
5081 Lincoln Highway
Kinzers, PA 17535

Background:

This letter is to offer public comments to the proposed regulations of the Canine Health Board. Let me start by letting you know who I am and why I am qualified to comment on this matter. I am a licensed veterinarian from Lancaster County, PA. and my name is Willard L. Stoltzfus, VMD. I am a 1993 graduate of the University of Pennsylvania and I have been in private practice since then. For almost that entire time I have been involved with dog breeders and the industry in general. This includes not just medical care, but housing and other canine husbandry issues as well. There are only a handful of veterinarians who have this level of experience in this field in Pennsylvania, so I believe I am uniquely qualified to address the proposed regulations.

Comment:

For the past 16 years I have observed what works and what does not in the best interest of the health of these animals, and I have consistently pushed for and recommended the husbandry practices which are best. I can tell you without a shadow of a doubt that promulgating the current guidelines into law would be a huge step backwards for the overall health of the dog.

1. Flooring: The first issue is that of flooring. When I first entered the profession, many dogs in kennels were at ground level on solid flooring. It quickly became obvious that this was a disaster medically. Dogs routinely were lying in their urine and feces and cleanliness was difficult to achieve and maintain. Even more importantly parasites were much more difficult to control as the dogs immediately re-infected themselves. Diarrhea and weight loss were commonplace. In every case without exception the health of the dogs improved dramatically after being moved off the floor and away from their own feces. Current guidelines call for solid or slatted flooring which puts the dogs right back where they were when I first found them 16 years ago.

2. Outdoor Exercise: The second issue is that of "outdoor exercise areas." Again, when I first started many dogs were outside on the ground, and flea and tick infestations were common, as well as skin infections from mud and dirt. Moving the dogs indoors is what I recommended, and it improved the health of the dogs. Now once again government interference and senseless regulations are dictating that these dogs must be sent back outside where they will again be at risk for ectoparasite infestations. And I may also add that forcing dogs to move outside also significantly increases their chance of exposure to rabies through contact with wild animals, primarily skunks and raccoons.

3. Heating and Ventilation: The third area of major concern is with the proposed heating and ventilation requirements. Not only do these requirements lack any scientific or real evidence basis they are also practically impossible to achieve, both from a practical application and financial standpoint. Even more important than that is the

complete lack of real benefit to the dogs medically. There is no evidence whatsoever that this kind of micro-management of the environment provides any health benefits to the dogs. Medical logic would even suggest that air flows of the proposed magnitude (20 air exchanges per hour) could actually be detrimental to the animals allegedly being helped. It is clear to this experienced veterinarian that this regulation provides no benefits and is in reality detrimental.

RESPONSES

1. The Department first points out that solid flooring is not required, but is only an option available to the kennel owner. So long as the solid flooring meets the criteria of section 207(i)(3)(i) of the Act and the additional flooring requirements of the regulations, as well as, the approval of the Canine Health Board, it may be utilized.

Second, the Department disagrees that solid flooring is inherently unsanitary. There is no evidence to suggest that such a contention has any merit. Boarding kennels, humane society and other non-profit rescue kennels, as well as, standard breeding kennels currently house dogs on solid flooring with no ill effects. The commentator expresses a concern for sanitation. Solid flooring can be kept clean and sanitary as witnessed by a large number of kennels across the Commonwealth that currently utilize solid flooring in their kennels. As asserted by veterinarians from the Canine Health Board and the Department, a flat, solid surface causes fewer medical problems, such as splaying of the feet or ulceration of the pads of the dog, and is a much more natural surface for dogs to walk on or be housed on than is a metal strand, wire or even slatted flooring.

Finally, the Canine Health Board, a Board comprised of nine veterinarians believes that solid flooring is a proper flooring material upon which to house dogs.

2. Outdoor exercise is a requirement imposed by the Act itself. The regulations do not address, nor does the Canine Health Board or the Department have the authority to address the outdoor exercise provisions of the Act in this regulation.

3. The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

The final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

In addition, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and

consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with

engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment: Summary Objection

In summary, the regulations proposed by the Canine Health Board are impractical, extremely difficult to achieve, and medically detrimental to the animals. It should be thrown out completely and re-evaluated from a scientific point of view instead of political and emotional avenues.

RESPONSE

The Department disagrees with this comment in full. In drafting the final-form regulations the Department consulted kennel inspectors, such as the AKC Senior Field representative and utilized the expertise and experience of the Bureau of Dog Law Enforcement, the Department met with members of a breeding organization and consulted an agricultural engineer and animal scientists from the Pennsylvania State University whose background and expertise is in practices utilized in large animal groups, swine, cattle and other agricultural animals. In addition, the Department consulted and received ideas and verification from private engineers that build and design kennel housing facilities and consulted a private architect that design kennel buildings. The Department also continued to use the experience, knowledge and skill of the members of the Canine Health Board and the Department veterinarians in crafting the language of the final-form regulation. The measurements and ranges in the final-form regulation have been verified by the

engineers as being accurate, measureable and attainable through design and both the engineers that design kennel buildings and the veterinarians, as well as, the animal scientists consulted believe the ranges established are acceptable and will provide for the health and welfare of dogs housed in commercial kennels.

VII. Dr. THOMAS L. WOLFLE, MS, DVM, PhD

Commentator:

Submitted by: Thomas L. Wolfle, MS, DVM, PhD
Public Health Service (ret) Captain (06)
Diplomat American College of Laboratory Animal Medicine
Founding Diplomat, American College of Veterinary Behavior.

As a clinical and research veterinarian, retired from service in the Air Force and NASA; National Institutes of Health; and the National Academy of Sciences, National Research Council (NRC) I have over forty years experience dealing with suppliers of dogs and others animals. At NIH, I ran a colony of American Fox Hounds in which we had an average annual inventory of about 1,000 dogs. These dogs were for research, not as family pets, but the National Heart, Lung, and Blood Institute, the major user of these dogs, was adamant that their temperament be no different from those bred for life in homes with children and household activities. I would think that Pennsylvania would do no less for its citizens. I helped initiate and directed the NIH Animal Care and Use Committee and the Interagency Research Animal Committee. Both committees established standards for all animals used in any federal government program—and for all institutions that receive federal funding of any type. These federal agencies include the NIH, U.S. Dept. of Agriculture, National Science Foundation, NASA, and all other agencies in which animals are used. I have published broadly in the scientific literature and spoken to local, national and international scientific audiences on this subject. I come to this issue with some degree of experience.

Comment: General Support

I am writing in support of the Proposed Regulations: Canine Health Board Standards for Commercial Kennels (Board).

RESPONSE

The Department appreciates the support of this commentator.

Comment: Support and Documentation

The Regulations, as drafted by Governor Rendell's Canine Health Board (Board), are absolutely on the mark; no changes must be allowed. As Director of the NRC's Institute of Laboratory Animal Medicine (ILAR), I worked with numerous committees composed of subject matter experts from around the world, similar to the Board. We developed the 1996 Guide for the Care and Use of Laboratory Animals, Laboratory Animal Management: Dogs, and reports on their housing, husbandry, pain, and nutrition. The Guide and a new document on dogs are currently being written by ILAR with new data, ferreted from the scientific literature. On that account, make no mistake of the scientific backing of these reports! Such environmental issues as temperature, sanitation, air flow and quality, lighting, types of flooring and rest areas, social interactions and exposure,

housing density, nutrition, and many other details are well researched and the data—buttressed by decades of professional judgment—supporting these areas emphasize the importance of each. The Board is aware of these data and accurately reflected it in their report.

RESPONSE

The Department very much appreciates the support for the parameters developed by the Canine Health Board and published as Guidelines and the standards that were delineated in the proposed regulation promulgated by the Department. The Department agrees that the Canine Health Board is comprised of very knowledgeable and skilled individuals and that they did in extraordinary job in researching and completing very technical Guidelines within a 45 day time period.

In addressing comments made with regard to the Guidelines published by the Board and the proposed regulation promulgated by the Department, the Department did consult the Canine Health Board, as well as, the numerous other experts, including engineers with expertise in kennel design and construction, architects, animal scientists and Department veterinarians. The final-form regulation has been scrutinized by those experts and the engineers believe the standards are attainable and consistent with standards and criteria followed and utilized in other kennel facilities they design and construct. The standards are also based on the input of animal scientists and veterinarians.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the

final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

The perceived images of "puppy mills" rampant in Pennsylvania is of no credit to your fine state. Dogs of high quality, recognized by their state of health and behavior—clear bright eyes; healthy hair coats; and species-typical behaviors, physiology and nutrition—results *only* from high quality care such as these regulations propose. Pennsylvania must take the high ground on this issue and resist the pleas of those conflicted by financial or facility issues.

RESPONSE

The Department appreciates the comment and under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

VIII. Dr. M. ROSSET

Commentator:
Submitted by: Dr. M. Rosset

Comment:
These ordinances are overly restrictive and exceedingly expensive.

RESPONSE

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to

assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:
The regulations include temperature ranges that do not include breed variety or what a particular breed of dog was intended to do with regard to the work it was bred to do.

RESPONSE

Formulating a regulation that set standards for every breed of dog would be impossible, onerous on the regulated community, nearly impossible for some kennels with many breeds to comply with and costly to the regulated community and the agency. The regulations as written set forth standards that are based on consultations with and research by experts, such as engineers (Learned Design and Paragon Engineering Services) and architects that design and build kennel housing facilities, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and Department. The experts consulted utilized their background, knowledge and experience to help the Department craft ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, and flooring parameters, that if implemented properly, will account for the welfare of all breeds of dogs housed in kennel housing facilities.

Comment:
It is clear the board has exceeded what the law requires or demands.

RESPONSE

The comment is quite broad in its allegation and sets forth no specific provision that exceeds the Board's authority. However, the Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:
It is clear that whoever compiled these restrictions are intending to do away with all breeding of dogs by making it too expensive and too costly to raise, buy or sell a dog.

RESPONSE

The Department disagrees with this unsupported comment. This comment does not address any substantive provision of the current regulations and is merely the commentators own opinion. Nothing in the proposed or final-form regulation is intended to close or shut down a commercial kennel. The standards are based on research, science and expert advice from engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians. The final-form regulation is within the scope of the authority established by the Dog Law and effectuates standards that will carry out the duty imposed on the Department to account for the welfare of the dogs.

Comment:
Sensible restrictions are warranted but one size does not fit all and the air exchanges rules are greater than what is required for any animal husbandry facility including medical labs, hospitals and other animal care facilities.

RESPONSE

The Department disagrees with this comment and in contrast to the unsupported opinion sets forth the following response. The final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

First, engineers consulted (Learned Design and Paragon Engineering Services) on this comment have indicated the cubic foot calculation and the assertion that the air exchange rates originally required by the proposed regulation (8-20 per hour) would create an unreasonable "draft" through the kennel are not correct.

Second, it would not violate the Federal Act or the current Department regulations because it does not prevent primary enclosure from being placed or constructed in such a manner that the dog has a draft free area.

Third, the final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

Fourth, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a

professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

The provisions of section 28.2(8)(i)(A)(I-V) of the proposed regulations have been either eliminated or extensively modified in the final-form regulation. The provisions were modified to account for the information needed to verify and calculate the cubic feet per minute (CFM) per dog standard of the final-form regulation, which replaced the air exchanges per hour standard. The information requested is based on consultations with and approved by the kennel housing facility engineers consulted by the Department.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and

decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment:
Extreme limits and use of materials down to the details can only be intended to force people out of breeding dogs. Even the most responsible breeder cannot operate under these draconian restrictions. And the cost for implementing then will be expensive to the state and the people who raise dogs.

RESPONSE

As set forth above, nothing in the proposed or final-form regulation is intended to close or shut down a commercial kennel. The standards are based on research, science and expert advice from engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians. The final-form regulation is within the scope of the authority established by the Dog Law and effectuates standards that will carry out the duty imposed on the Department to account for the welfare of the dogs.

In drafting the final-form regulations the Department consulted kennel inspectors, such as the AKC Senior Field representative and utilized the expertise and experience of the Bureau of Dog Law Enforcement, the Department met with members of a breeding organization and consulted an agricultural engineer and animal scientists from the Pennsylvania State University whose background and expertise is in practices utilized in large animal groups, swine, cattle and other agricultural animals. In addition, the Department consulted and received ideas and verification from private engineers that build and design kennel housing facilities and consulted a private architect that design kennel buildings. The Department also continued to use the experience, knowledge and skill of the members of the Canine Health Board and the Department veterinarians in crafting the language of the final-form regulation. The measurements and ranges in the final-form regulation have been verified by the engineers as being accurate, measureable and attainable through design and both the engineers that design kennel buildings and the veterinarians, as well as, the animal scientists consulted believe the ranges established are acceptable and will provide for the health and welfare of dogs housed in commercial kennels.

Comment:
HSUS and PETA at work again, not good common sense rules, but excessive rules that are only intended to force people to quit raising dogs altogether. You could take the best kennel and under these rules shut them down. No one can operate under these rules.

RESPONSE

Neither HSUS or PETA were involved in the drafting or consulted with regard to the Guidelines established by the Canine Health Board or the proposed regulations drafted by the Department. In addition, neither HSUS nor PETA had any input with regard to the final-form regulation.

Comment:
Dogs are dogs and the rules you are putting in place are greater than the rules for daycare for our own children.

RESPONSE

The Act requires the Canine Health Board and the Department to address and establish standards for ventilation, auxiliary ventilation, humidity, ammonia and lighting levels and allows the regulations to address flooring options. The Department in promulgating the final-form regulation consulted experts in such as engineers and architects that design and build kennel housing facilities, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and the Department. The measurements and ranges contained in the final-form regulation have been verified by the engineers as being accurate, measureable and attainable through design and both the engineers that design kennel buildings and the veterinarians, as well as, the animal scientists consulted believe the ranges established are acceptable and will provide for the health and welfare of dogs housed in commercial kennels.

FORM LETTER COMMENTS AND COMMENTATORS

I. AMERICAN SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS (ASPCA)

Commentators: See attached spreadsheet of all commentators attached hereto as Addendum A and made a part hereof

Background:
The Bureau of Dog Law Enforcement within the Department of Agriculture is charged with implementing and enforcing the Dog Law, which was passed to ensure the humane care and treatment of dogs in the Commonwealth. In 2008, the Pennsylvania General Assembly passed significant amendments to the Dog Law and created the Canine Health Board to establish appropriate ventilation, humidity, ammonia, and lighting ranges for commercial kennels, as well as consider alternative flooring options to those set forth in the law. The proposed regulations are the result of the Canine Health Board's recommendations for those standards.

Comments:

1. General Support:
As a concerned Pennsylvania citizen, I respectfully submit the following comments in support of the Department of Agriculture's proposed rulemaking regarding standards for commercial kennels. Based on the following comments, I fully support the proposed regulatory package presented by the Department of Agriculture and the Canine Health Board with the recommended changes, and encourage promulgation of the new regulations as expeditiously as possible. Thank you for your time and consideration.

2. Ventilation: Section 28a.2

a. The proposed regulations require that "ventilation be achieved through a mechanical system that will allow for 8 to 20 air changes per hour, keep consistent moderate humidity, keep the kennel from becoming too hot, keep ammonia levels and particulate matter low, and to keep odor minimized...". While generally I support these standards, it is well established that a minimum of 10 air changes per hour should be required in all animal spaces. As a result, I recommend that the required air changes per hour be changed to reflect this standard.

b. I commend the Department of Agriculture and the Canine Health Board for proposing a requirement that kennels use a mechanical ventilation system that provides ventilation, heating, and cooling. Such a system is imperative to ensure the health and comfort of dogs housed in kennel facilities.

3. Lighting: Section 28a.3

I commend the Department of Agriculture and the Canine Health Board for acknowledging the importance of exposure to natural light and a diurnal cycle for dogs housed in a kennel environment. I fully support the lighting requirements proposed in these regulations.

Flooring:

4. Flooring: Section 28a.4

I fully support the flooring requirements proposed in these regulations.

RESPONSES

1. The Department appreciates the support of this commentator. The final-form regulation drafted by the Department, as required by the Dog Law, sets very specific ventilation, auxiliary ventilation, humidity, ammonia, lighting and flooring standards for dogs housed in commercial kennels.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the

specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

2.a. and b. The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

First, engineers consulted (Learned Design and Paragon Engineering Services) on this comment have indicated the cubic foot calculation and the assertion that the air exchange rates originally required by the proposed regulation (8-20 per hour) would create an unreasonable "draft" through the kennel are not correct.

Second, it would not violate the Federal Act or the current Department regulations because it does not prevent primary enclosure from being placed or constructed in such a manner that the dog has a draft free area.

Third, the final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

Fourth, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations

with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with

engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

With regard to cooling or temperature reduction, the Department agrees that the Animal Welfare Act sets a temperature cap of 85 degree Fahrenheit and kennels that fall under the jurisdiction of the United States Department of Agriculture should already have ventilation and temperature equipment in place to comply with that standard.

Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

That said, the final-form regulations no longer sets a temperature cap of 86 degrees Fahrenheit, nor does it require a reduction in the ambient air temperature in the kennel housing facility. Since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from numerous commentators, including the

Independent Regulatory Review, the Honorable Senator Brubaker and the Honorable Members of the Pennsylvania House of Representatives.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

Concerning the humidity levels when temperatures are greater than 85 degrees Fahrenheit, the Department, with the assistance of consultations with the engineers listed above, Department and Canine Health Board veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, swine or cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs

confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

- In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

3. The Department appreciates the support expressed by the commentator, but notes that changes, including mimicking the language of the statute which allows either natural or artificial light.

In addition, as set forth previously, the level of light provided has been modified in the final-form regulation. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and

guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. Theveterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

With regard to the nighttime lighting standard, although removed from the final-form regulation, it was not an arbitrary standard. The standard was based on research that showed dogs need 1-5 footcandles of light in order to allow for their normal startle response. Complete darkness is not optimal for dogs.

4. The Department appreciates the support expressed by the commentator. At the recommendation of the Independent Regulatory Review Commission, the Department has added language to the final-form regulation that sets forth the general flooring parameters of the statute. In addition, the Department, following many of the standards established by the Canine Health Board in the Guidelines, has established provisions that must be met in order for optional flooring to be approved.

II. DOGPAC

Commentators: See attached spreadsheet of all commentators attached hereto as Addendum B and made a part hereof

Patricia Faller, 1115 Fleetwood Drive, Carlisle, PA 17013; Nancy Tarlini,4615 Millett street, Philadelphia, PA 19136; Erin Tharp, 1351 Perry Valley Road, Liverpool, PA 17045; Lawrence A Huff, 1608 Walnut Street, Suite 501, Philadelphia, PA 19103

Comment: General Support

I am writing to voice my support for the new commercial kennel regulations that have been proposed by the Canine Health Board. I hope they will be approved and implemented as soon as possible in order to protect dogs.

RESPONSE

The Department appreciates the support of this commentator. The final-form regulation drafted by the Department, as required by the Dog Law, sets very specific ventilation, auxiliary ventilation, humidity, ammonia, lighting and flooring standards for dogs housed in commercial kennels.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the

comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comments: Specific

I support the proposed regulations because they will:

1. Implement new standards to provide auxillary ventilation so that the temperature does not exceed 85 degrees. Currently under state law there is no requirement and this leads to dogs suffering in intolerable heat during the summer months. There will be a minimum temperature of 50 degrees.

2. Require that solid floors are used in all commercial kennels, replacing the cruel wire floors that can be used today and constantly cause debilitating injuries to dogs.

3. Implement ventilation requirements that will ensure that fresh air is continually passed throughout the kennels to reduce disease.

RESPONSES

1. The Department no longer sets a temperature cap in the final-form regulation. While the Department believes that such a cap would be consistent with the Animal Welfare Act regulations, which set a temperature cap of 85 degree Fahrenheit, the language of the statute and comments from the Office of Attorney General and members of the Senate and House Agricultural and Rural Affairs Committees have led the Department to utilize humidity levels, which it has absolute authority to establish, to control the kennel environment.

Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

That said, the final-form regulations no longer sets a temperature cap of 86 degrees Fahrenheit, nor does it require a reduction in the ambient air temperature in the kennel housing facility. Since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from numerous commentators, including the Independent Regulatory Review, the Honorable Senator Brubaker and the Honorable Members of the Pennsylvania House of Representatives.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an

indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

With regard to the humidity levels when temperatures are greater than 85 degrees Fahrenheit, the Department, with the assistance of consultations with the engineers listed above, Department and Canine Health Board veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, swine or cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 (HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value – with the recommended 20% reduction in humidity levels - under which dogs confined in the kennels can survive.

With regard to ventilation standards, not only does the final-form regulation do away with air exchanges per hour and change to a more objective and defined standard of cubic feet per minute per dog, but the final-form regulation no longer requires 100% fresh air exchange. It now provides that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing

facility. These standards will make the system easier to design and install, easier to assure compliance and less expensive to operate because a majority of the air can be re-circulated and the amount of air circulation is based on kennel volume and number of dogs.

In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

2. The Department appreciates the support expressed by the commentator. At the recommendation of the Independent Regulatory Review Commission, the Department has added language to the final-form regulation that sets forth the general flooring parameters of the statute. In addition, the Department, following many of the standards established by the Canine Health Board in the Guidelines, has established provisions that must be met in order for optional flooring to be approved.

3. The Department appreciates the support of the commentator. Mechanical ventilation is required and must be operated at all times. The final-form regulation requires 100 cubic feet per minute per dog of air circulation. The engineers consulted where of the opinion that air exchanges per hour were not able to be properly calculated or measured, but cubic feet per minute per dog could be certified, verified and enforced. The circulation must be at the height of the dogs. The air may be re-circulated, which allows for better control of humidity, temperature, ammonia levels and pathogens. The ventilated air must be filtered.

The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

In addition, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities,

Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper

humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

III. UNITED AGAINST PUPPY MILLS (UAPM)

Commentators: See attached spreadsheet of all commentators attached hereto as Addendum C and made a part hereof

Comment:

In the spirit of Act 119 and the power it grants to the Canine Health Board, I wish to voice my support of the CHB's recommended regulations pertaining to lighting, temperature control, ventilation, control of humidity and ammonia levels and exercise. The regulation of each of these environmental factors will significantly impact the health and welfare of the breeder dogs kept in Pennsylvania's large scale commercial breeding facilities in a positive way and serves to finalize the Act and the work of the General Assembly. Please do not further delay the relief the dogs have waited so long to receive, and expedite the passage of these regulations as soon as possible.

RESPONSE

The Department appreciates the support expressed by this commentator and has worked diligently to draft a final-form regulation in a timely manner. The final-form regulation drafted by the Department, as required by the Dog Law, sets very specific

ventilation, auxiliary ventilation, humidity, ammonia, lighting and flooring standards for dogs housed in commercial kennels.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

IV. ADDITIONAL INDIVIDUAL COMMENTS SUBMITTED BY DOGPAC COMMENTATORS

Commentators:
Robert Batley, 20 County Lane, Glen Mills, PA 19342
Kris Batley, 975 Westtown Road, West Chester, PA 19382-5700
Amanda Eick-Miller, RVT, Certified Professional Dog Trainer Pawsitively Pets, LLC 2544 Earl St., Wooster, Ohio 44691
Jane Leslie Dalton, Partner, Duane Morris, 30 South 17th Street, Philadelphia, PA 19103
Carol G. Huff, President, Real Estate Investment Strategies, Inc., 1608 Walnut Street, Suite 501Philadelphia, PA 19103
Lawrence A. Huff, 1608 Walnut Street, Suite 501, Philadelphia, PA 19103
Christine Chavlick, 1028 Saxonburg Blvd, Glenshaw, PA 15116
Jack L. Mollin, 330 Blanketflower Lane, Princeton Junction, N.J. 08550

Comments:

1. I strongly endorse and support the regulations created and proposed by the Canine Health Board and the Department. I hope they will be approved and implemented as soon as possible in order to protect dogs.

2. People shouldn't be allowed to profit from the suffering of helpless animals . I am a firm believer that we should treat every living being the way we would want to be treated. Please base your decision on morals, not profits.

3. Pennsylvania's reputation has been tarnished by being branded a "puppy mill" capital which allows dogs to be raised in inhumane conditions.

4. Pennsylvania Commercial Kennel bred and raised dogs and puppies often are sold to neighboring states where medical professionals and trainers see the results of poor kennel conditions on the mental and physical well being of the animals.

5. These regulations are based in scientific research and on advice provided by scientific experts.

6. These regulations will ensure that any dog who is commercially bred will be given adequate light, heat, ventilation, air quality, flooring, and social exposure and interaction - all essential factors that were OMITTED from the recently enacted dog law. For the first time, commercially bred puppies and dogs will have a guarantee of an environment that will promote - not hinder - behavioral and physical health.

7. It is time that Pennsylvania was a leader in humane care of animals, rather than always appearing in the news for the numerous abuses that occur here. This regulation will ensure humane care.

8. As a taxpayer in the Commonwealth of Pennsylvania I am sickened when I see that we are known as the "puppy mill state." We can and should do better!!

9. As a concerned American, I cannot sit silently while lobbyists for those who have selfish financial interests lobby to oppose the reasonable regulations. It is too bad that

responsible breeders, who respect the lives that they bring into the world are tainted by those who are too greedy to understand that they could provide quality care and still make a profit for themselves. Think of your actions in approving the regulation as tantamount to passing a child labor law. These are intelligent creatures who, when grown are equivalent to a child of 2 to 3 years old.

RESPONSES

1.-9. The Department appreciates the support expressed by this commentator and has worked diligently to draft a final-form regulation in a timely manner. The final-form regulation drafted by the Department, as required by the Dog Law, sets very specific ventilation, auxiliary ventilation, humidity, ammonia, lighting and flooring standards for dogs housed in commercial kennels.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

EXHIBIT
A

gaseous filtration (such as with activated-charcoal filters) can be used but only in limited applications, provided that

- Room air is mixed with at least 50% fresh air (that is, the supply air does not exceed 50% recycled air).
- Husbandry practices, such as bedding-change and cage-washing frequency, and the preparation of recycled air used are sufficient to minimize toxic gases and odors.
- Recycled air is returned only to the room or area from which it was generated, except if it comes from other than animal-housing areas.
- Recycled air is appropriately conditioned and mixed with sufficient fresh air to address the thermal and humidity requirements of animals in that space.

Frequent bedding changes and cage-cleaning coupled with husbandry practices, such as low animal density within the room and lower environmental temperature and humidity, can also reduce the concentration of toxic or odor-causing gases in animal-room air. Treatment of recycled air for either particulate or gaseous contaminants is expensive and can be rendered ineffective by improper or insufficient maintenance of filtration systems. These systems should be properly maintained and monitored appropriately to maximize their effectiveness.

The successful operation of any HVAC system requires regular maintenance and evaluation, including measurement of its function at the level of the secondary enclosure. Such measurements should include supply- and exhaust-air volumes, as well as static-pressure differentials, where applicable.

Illumination

Light can affect the physiology, morphology, and behavior of various animals (Brainard and others 1986; Erkert and Grober 1986; Newbold and others 1991; Tucker and others 1984). Potential photostressors include inappropriate photoperiod, photointensity, and spectral quality of the light (Stoskopf 1983). Numerous factors can affect animals' needs for light and should be considered when an appropriate illumination level is being established for an animal holding room. These include light intensity, duration of exposure, wavelength of light, light history of the animal, pigmentation of the animal, time of light exposure during the circadian cycle, body temperature, hormonal status, age, species, sex, and stock or strain of animal (Brainard 1989; Duncan and O'Steen 1985; O'Steen 1980; Salturelli and Coppola 1979; Semple-Rowland and Dawson 1987; Wax 1977).

In general, lighting should be diffused throughout an animal holding area and provide sufficient illumination for the well-being of the animals and to allow good housekeeping practices, adequate inspection of animals—including the bottom-most cages in racks—and safe working conditions for personnel. Light in

animal holding rooms should provide for adequate vision and for neuroendocrine regulation of diurnal and circadian cycles (Brainard 1989).

Photoperiod is a critical regulator of reproductive behavior in many species of animals (Brainard and others 1986; Cherry 1987) and can also alter body-weight gain and feed intake (Tucker and others 1984). Inadvertent light exposure during the dark cycle should be minimized or avoided. Because some species will not eat in low light or darkness, such illumination schedules should be limited to a duration that will not compromise the well-being of the animals. A time-controlled lighting system should be used to ensure a regular diurnal cycle, and timer performance should be checked periodically to ensure proper cycling.

The most commonly used laboratory animals are nocturnal. Because the albino rat is more susceptible to phototoxic retinopathy than other species, it has been used as a basis for establishing room illumination levels (Lanum 1979). Data for room light intensities for other animals, based on scientific studies, are not available. Light levels of about 325 lux (30 ft-candles) about 1.0 m (3.3 ft) above the floor appear to be sufficient for animal care and do not cause clinical signs of phototoxic retinopathy in albino rats (Bellhorn 1980), and levels up to 400 lux (37 ft-candles) as measured in an empty room 1 m from the floor have been found to be satisfactory for rodents if management practices are used to prevent retinal damage in albinos (Clough 1982). However, the light experience of an individual animal can affect its sensitivity to phototoxicity; light of 130-270 lux above the light intensity under which it was raised has been reported to be near the threshold of retinal damage in some individual albino rats according to histologic, morphometric, and electrophysiologic evidence (Semple-Rowland and Dawson 1987). Some guidelines recommend a light intensity as low as 40 lux at the position of the animal in midcage (NASA 1988). Young albino and pigmented mice prefer much-lower illumination than adults (Wax 1977), although potential retinal damage associated with housing these rodents at higher light levels is mostly reversible. Thus, for animals that have been shown to be susceptible to phototoxic retinopathy, light at the cage level should be between 130 and 325 lux.

Management practices, such as rotating cage position relative to the light source (Greenman and others 1982) or providing animals with ways to modify their own light exposure by behavioral means (e.g., via tunneling or hiding in a structure), can be used to reduce inappropriate light stimulation of animals. Provision of variable-intensity light controls might be considered as a means of ensuring that light intensities are consistent with the needs of animals and personnel working in animal rooms and with energy conservation. Such controls should have some form of vernier scale and a lockable setting and should not be used merely to turn room lighting on and off. The Illuminating Engineering Society of North America (IESNA) handbook (Kaufman 1984, 1987) can assist in decisions concerning lighting uniformity, color-rendering index, shielding, glare control, reflection, lifetime, heat generation, and ballast selection.

EXHIBIT
B

Heat Stress Index Chart for Swine Producers

By Iowa State University - Due to the fact that the US National Weather Service (NWS) has cut back on information that they provide to radio stations on livestock heat stress, ISU has developed a heat stress index chart to aid swine producers in making management decisions based on the current weather situation.

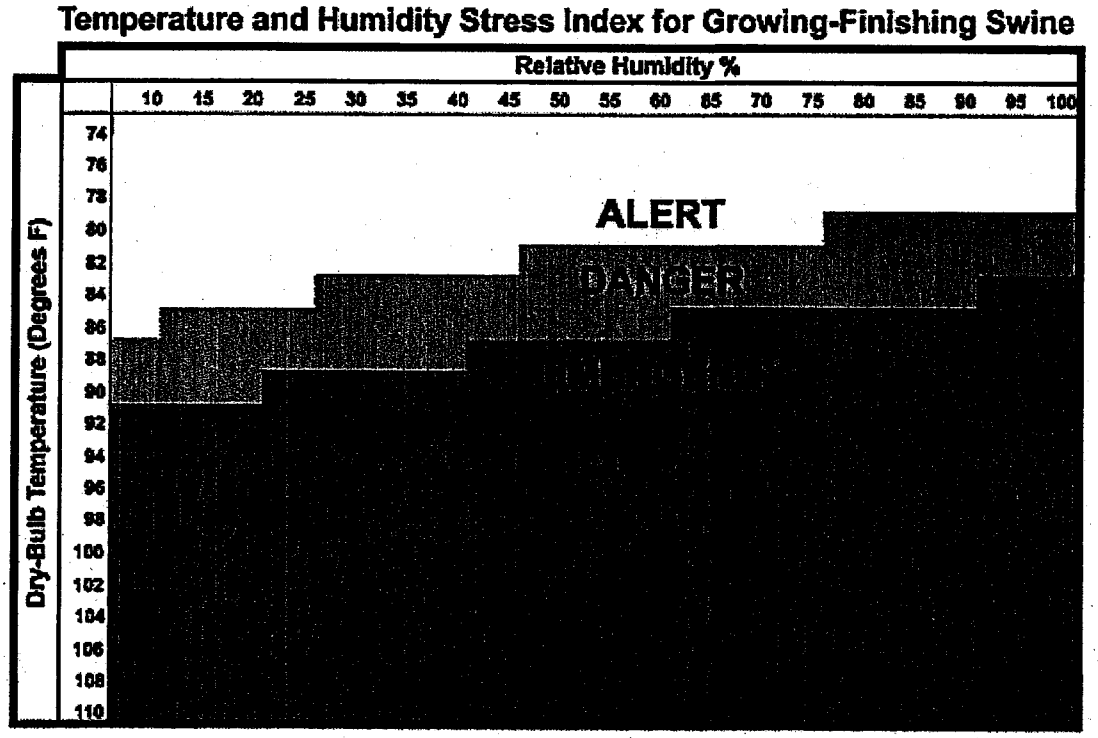
The heat stress indices (HSI) combine the effects of both temperature and relative humidity, and classified as alert, danger, and emergency zones.

Because different animal species and humans have different sensitivities to temperature and relative humidity, the heat stress charts are thus unique of that particular species.

For example, compared to swine, cattle can tolerate much higher temperature at lower relative humidity. This difference arises from the fact that cattle exposed to hot temperature can dissipate their body heat more effectively by sweating, whereas swine or poultry do not have sweat glands. As temperature increases, thereby temperature difference between the environment and the animal narrows, more body heat has to be dissipated via the so-called evaporative heat loss mode.

The natural capability of sweating by cattle gives them an edge over swine and poultry to rid of their body heat in the hot and dry conditions. By the same token, increase in relative humidity during hot weather will put cattle under stress much faster than for pigs or chickens.

The following figure is the one relevant to swine.



Heat Index Zone Classifications

The following lists the recommended management actions for the three HSI categories.

Alert
Prepare to take necessary cooling measures; increase ventilation rate; turn on cooling fans where applicable; monitor animal behavior for signs of heat stress such as panting or open mouth; make plenty of drinking water available.

EXHIBIT
Tabbies
B

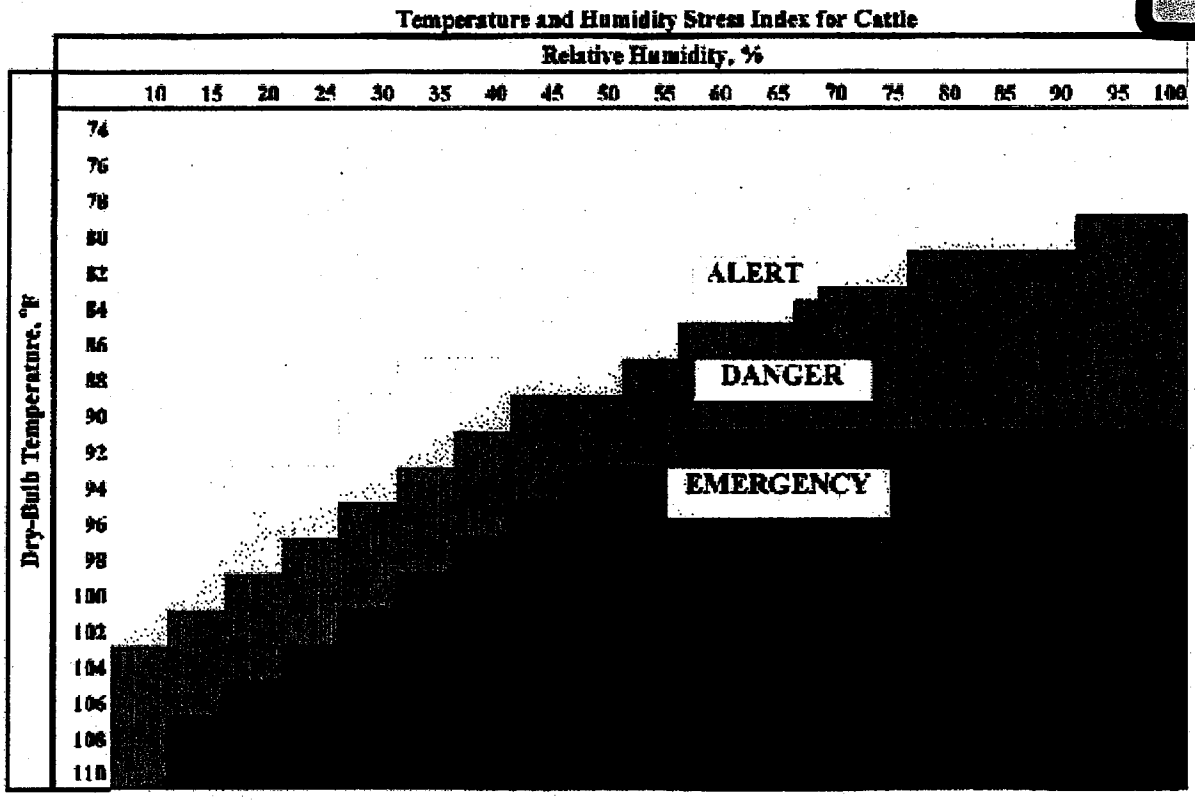


EXHIBIT B

Temperature and Humidity Stress Index for Laying Hens

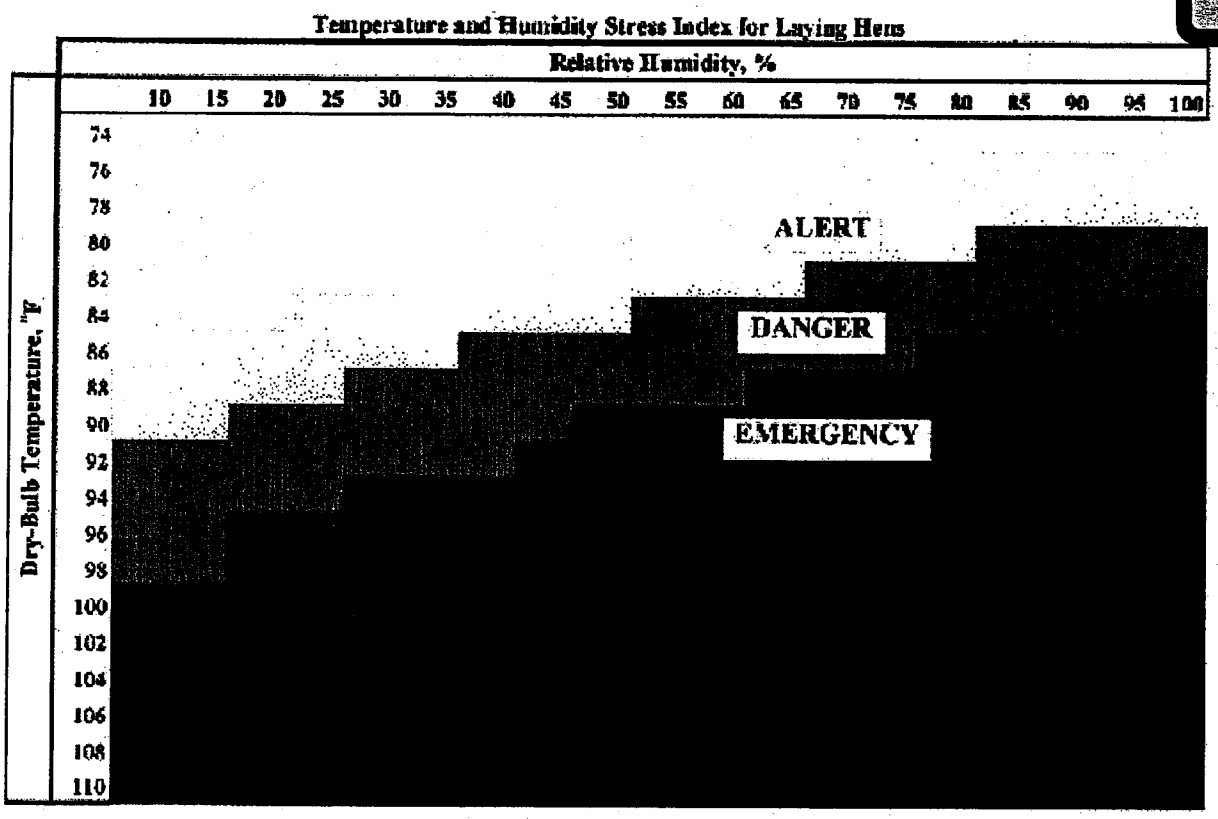


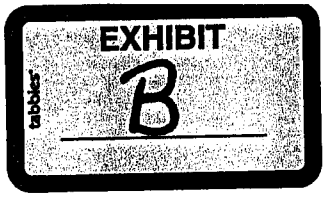
EXHIBIT
tabbies
B

HEAT INDEX °F (°C)

Temp.	RELATIVE HUMIDITY (%)												
	40	45	50	55	60	65	70	75	80	85	90	95	100
110 (47)	136 (58)												
108 (43)	130 (54)	137 (58)											
106 (41)	124 (51)	130 (54)	137 (58)										
104 (40)	119 (48)	124 (51)	131 (55)	137 (58)									
102 (39)	114 (46)	119 (48)	124 (51)	130 (54)	137 (58)								
100 (38)	109 (43)	114 (46)	118 (48)	124 (51)	129 (54)	136 (58)							
98 (37)	105 (41)	109 (43)	113 (45)	117 (47)	123 (51)	128 (53)	134 (57)						
96 (36)	101 (38)	104 (40)	108 (42)	112 (44)	116 (47)	121 (49)	126 (52)	132 (56)					
94 (34)	97 (36)	100 (38)	103 (39)	106 (41)	110 (43)	114 (46)	119 (48)	124 (51)	129 (54)	135 (57)			
92 (33)	94 (34)	96 (36)	99 (37)	101 (38)	105 (41)	108 (42)	112 (44)	116 (47)	121 (49)	126 (52)	131 (55)		
90 (32)	91 (33)	93 (34)	95 (35)	97 (36)	100 (38)	103 (39)	106 (41)	109 (43)	113 (45)	117 (47)	122 (50)	127 (53)	132 (56)
88 (31)	88 (31)	89 (32)	91 (33)	93 (34)	95 (35)	98 (37)	100 (38)	103 (39)	106 (41)	110 (43)	113 (45)	117 (47)	121 (49)
86 (30)	85 (29)	87 (31)	88 (31)	89 (32)	91 (33)	93 (34)	95 (35)	97 (36)	100 (38)	102 (39)	105 (41)	108 (42)	112 (44)
84 (29)	83 (28)	84 (29)	85 (29)	86 (30)	88 (31)	89 (32)	90 (32)	92 (33)	94 (34)	96 (36)	98 (37)	100 (38)	103 (39)
82 (28)	81 (27)	82 (28)	83 (28)	84 (29)	84 (29)	85 (29)	86 (30)	88 (31)	89 (32)	90 (32)	91 (33)	93 (34)	95 (35)
80 (27)	80 (27)	80 (27)	81 (27)	81 (27)	82 (28)	82 (28)	83 (28)	84 (29)	84 (29)	85 (29)	86 (30)	86 (30)	87 (31)

Category	Heat Index	Possible heat disorders for people in high risk groups
Extreme Danger	130°F or higher (54°C or higher)	Heat stroke or sunstroke likely.
Danger	105 - 129°F (41 - 54°C)	Sunstroke, muscle cramps, and/or heat exhaustion likely. Heatstroke possible with prolonged exposure and/or physical activity.

Extreme Caution	90 - 105°F (32 - 41°C)	Sunstroke, muscle cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.
Caution	80 - 90°F (27 - 32°C)	Fatigue possible with prolonged exposure and/or physical activity.



Heat Index Chart - National Weather Service

Temperature, °F	Relative Humidity, %																			
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
70	64	64	65	65	66	66	67	67	68	68	69	69	70	70	70	70	71	71	71	71	72
75	69	69	70	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80
80	73	74	75	76	77	77	78	79	79	80	81	81	82	83	85	86	86	87	88	89	91
85	78	79	80	81	82	83	84	85	86	87	88	89	90	91	93	95	97	99	100	105	108
90	83	84	85	86	87	88	90	91	93	95	96	98	100	102	105	109	113	117	120		
95	87	88	90	91	93	94	96	98	101	104	107	110	114	119	124	130	136				
100	91	93	95	97	99	101	104	107	110	115	120	126	132	138	144						
105	95	97	100	102	105	109	113	118	124	129	135	142	149								
110	99	102	105	106	112	117	123	130	136	143	150										
115	103	107	110	115	120	127	135	143	151												
120	107	111	116	123	130	139	148														
125	111	116	122	131	140																
130	116	122	129																		
135	120	128																			
140	125																				

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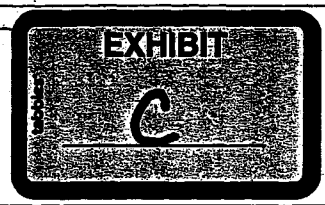

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TEMPERATURE/HUMIDITY TOLERANCE INDEX FOR TRANSPORTING BEAGLE DOGS IN HOT WEATHER,

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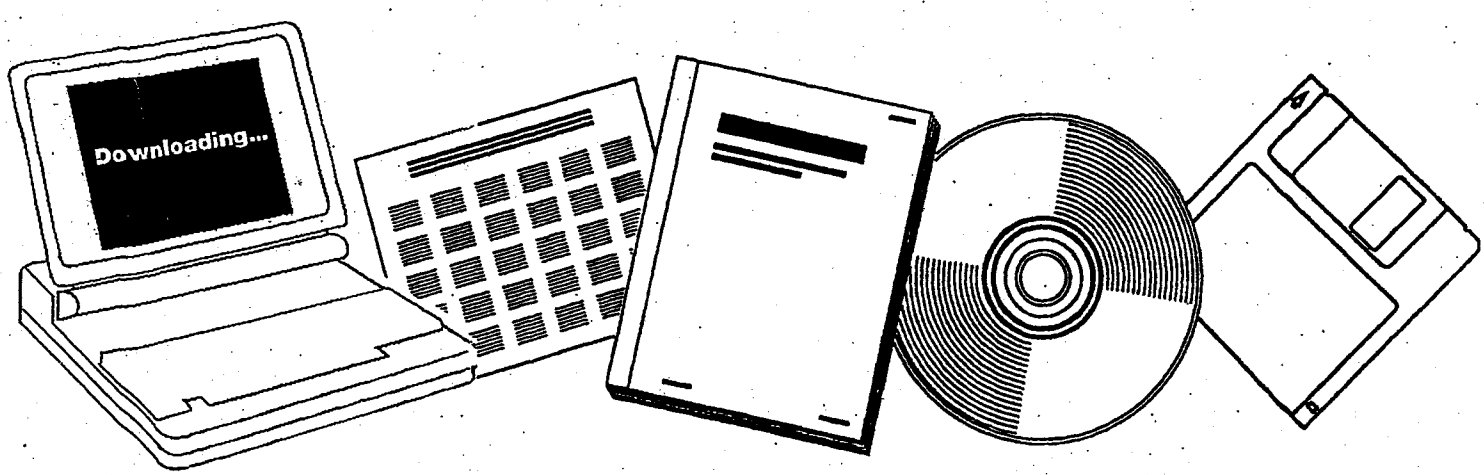

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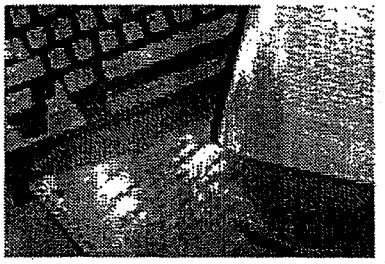

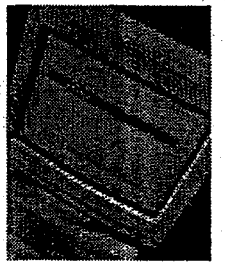

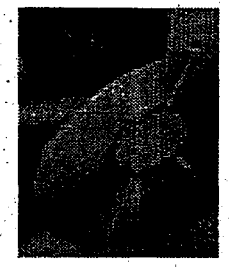

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16. Abstract

Male beagle dogs were subjected to various hot air temperature/humidity combinations in an attempt to develop a safe temperature/humidity index for dogs being transported by aircraft. Only those environments in which all exposed dogs could maintain a rectal temperature less than 108 °F during 6 hours of continuous exposure were considered safe.

Results from the experiments provided data to formulate an equation used in defining the tolerance index. Increasing the environment's humidity serves as a catalyst in decreasing a dog's tolerance to heat. In order to offset the effects of an increase in air temperature (starting at 85 °F with a 90 percent relative humidity), relative humidity would need to be decreased by 4 percent for every 1 °F rise in temperature. Changes in rectal temperature and behavior (barking and excessive movement) in relation to the exposure environment are presented and discussed.

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A TEMPERATURE/HUMIDITY TOLERANCE INDEX FOR TRANSPORTING BEAGLE DOGS IN HOT WEATHER

Introduction

Pet owners, humane organizations, shippers, and others have long been justifiably concerned about the health and safety of dogs when transported by commercial aircraft during hot weather. Because animal deaths have occurred in air transportation during hot weather seasons, the United States Department of Agriculture (USDA) incorporated air temperature limits in the Animal Welfare Act, which applies to dogs shipped by commercial conveyances.

Present transportation regulations stipulate that dogs shall not be transported when the ambient air temperature surrounding a live dog exceeds 85 °F or if the animal will be subjected to an air temperature in excess of 75 °F for more than 4 hours at any time (2). While this regulation affords some assurance for safe and humane treatment during transport, it also presents the problem for the shipper and the airline that since temperatures above 85 °F are not uncommon in the summer, the consignee of a dog cannot be certain whether their animal will be accepted for shipment by the airlines because of different interpretations of the regulations.

Dogs can often withstand extremely warm air temperatures, if airflow is adequate and not restricted; water is available for drinking; and the humidity of the environment remains low. A dog's primary and most efficient mechanism for dissipating excess body heat is by evaporative heat loss through open-mouth panting. High humidity restricts evaporative heat loss and inhibits effective cooling in the dog. Present standards do not address humidity in determining warm air temperature limits.

The purpose of this study was to determine which warm air temperature/humidity combinations would be safely tolerated by short-haired dogs confined in a shipping crate of 14 percent ventilation and to use this data to develop a temperature/humidity tolerance index for dogs subjected to shipping containers (14 percent ventilation) during air travel in hot weather months.

Methods

Dogs selected for the study had to be of the same sex and uniform in age, size, weight, body conformation, breed, and evenness of temperament. Breeding background had to be verifiable, and the dogs had to be readily available. The dog type that fit these criteria was the colony-bred beagle. Dogs used in experiments were healthy males between 6 and 7 months of age and weighed from 18 to 23 pounds. They were maintained on a

diet of Purina Puppy Chow® and/or Hill's PD® canned food, depending on their arrival weight. None of the animals received any medication for at least 7 days prior to testing. Their order for testing was determined by body weight, with the heavier dogs tested first. Prior to testing, all dogs were semiconditioned to a wire face muzzle (used during testing to prevent chewing of the test equipment) and a test shipping crate.

On the days of testing, the dogs were fed 4 ounces of Hill's® PD canned food. Thirty minutes later they were weighed and prepared for testing. A flexible thermistor probe was inserted about 6 inches past the anal sphincter to monitor rectal temperature (RT). Both RT and behavior (barking and excessive movement) were monitored continuously for all dogs. At 9:00 a.m. daily the dogs were transported in a test crate to a room outside the test chamber, where baseline data were obtained for 45 minutes; ambient air temperature was 74-75 °F. All dogs were tested individually only once in a crate with 14 percent openness to satisfy required ventilation (3) (Figure 1). At 10:00 a.m. the dogs (one test per day) were handcarried into the exposure chamber and placed in a preheated test crate. Nine temperature/humidity conditions were studied using 10 dogs in each condition. The test environments were provided in the Civil Aeromedical Institute (CAMI) animal environmental chamber (10'H by 10'L by 8'W). Airflow supplying the heat and humidity to the chamber was located in the ceiling and not directed at the open areas of the crate. Environmental conditions desired were obtained 12 hours in advance of testing and maintained throughout heat exposure. Excessive movement was observed through a window in the chamber. Barking could be heard through an intercom system. Chamber and crate temperature/humidity were recorded every 5 minutes.

It had been demonstrated previously that healthy dogs could tolerate a hot environment without residual effects as long as their rectal temperatures remained below 108 °F (4). If a dog's rectal temperature reached 108 °F during the testing, he was removed from the test. If a rectal temperature of 108 °F was not reached, the dogs were monitored during a maximum of 6 hours of exposure. Following testing, dogs were returned to their living quarters and observed for a minimum of 7 days for any signs of postexposure sequelae.

Results

Table 1 shows the percentage of dogs which safely tolerated 6 hours of continuous exposure to each environmental condition while confined in a crate with 14 percent of its wall surface area open for ventilation. In this study, the use of the phrase "safely tolerate" refers to the natural ability of the dogs to maintain a rectal temperature less than 108 °F at all times during exposure to a hot/humid environment and not demonstrate

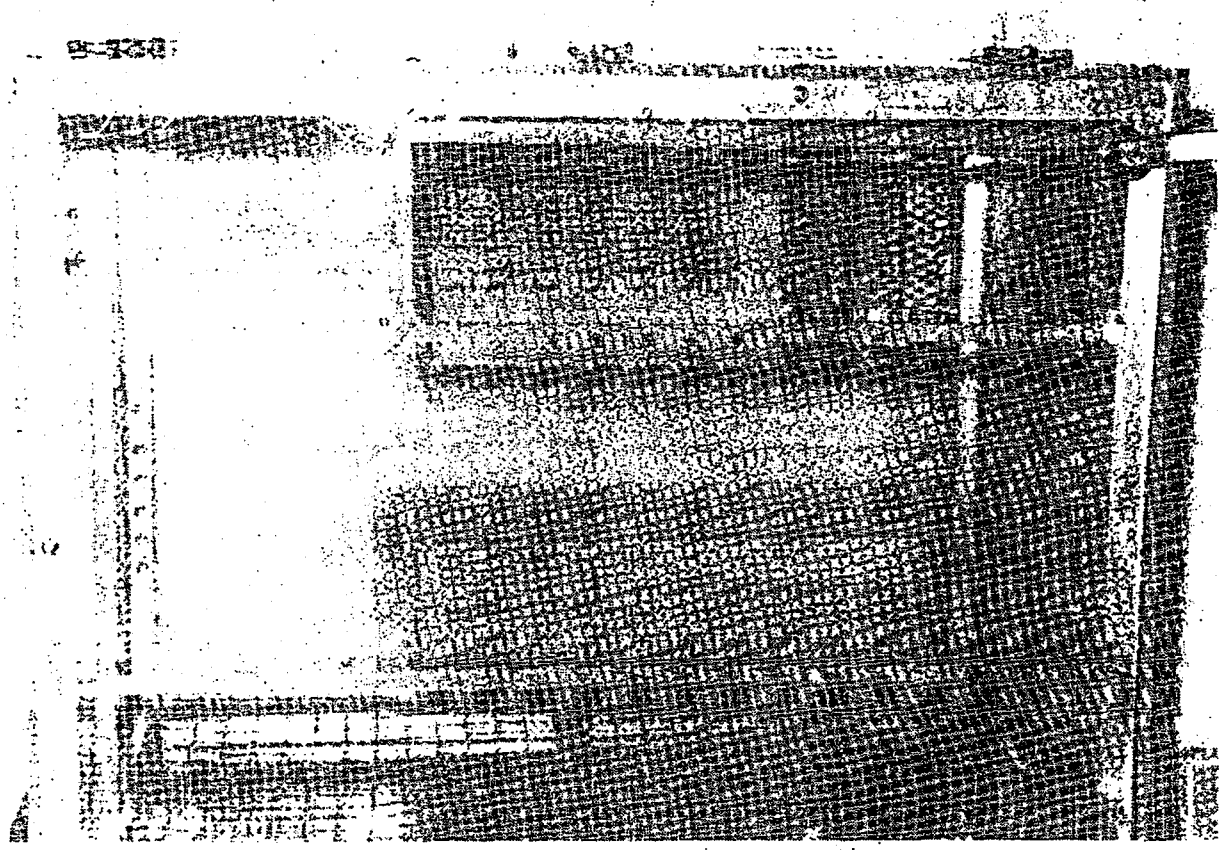


Figure 1. Simulated shipping crate (30"L by 22"H by 18"W) used for exposing beagle dogs to heated environments. Each of the two parallel long sides provides 16 percent ventilation. The two parallel short ends are not open for ventilation. Total openness of the crate (considering all four sides) for ventilation purposes equals 14 percent.

Table 1. Percentage of Dogs Safely Tolerating 6 Hours of Continuous Exposure to Hot Air Temperature/Humidity Conditions While Confined in a Crate Having 14 Percent of Its Wall Surface Open for Ventilation.

Temperature/Humidity Environment °F/%RH	Tolerance* %
85/90	100
90/70	100
95/50	100
95/70	70
95/90	20
100/30	100
100/50	80
100/70	0
105/50	10

*Ten dogs per environmental condition

ill effects from the exposure. None of the exposed dogs were allowed to succumb to any of the nine hot/humid environments studied.

Table 2 shows the average time in minutes at which dogs exposed to each environment started open-mouth panting and at what rectal temperature the open-mouth panting began. Data indicate that, when the air temperature remained constant, the dogs exposed to the higher humidity start the panting process earlier than those at lower humidities. If humidity remained constant, the dogs exposed to the higher air temperatures also started panting earlier than those at lower temperatures. However, there was little difference in each group's rectal temperature when open-mouth panting started.

The ability of the dogs to safely tolerate hot environments was dependent on the air humidity (Table 3), as well as air temperature. Data suggests that, for dogs to maintain approximately the same effective rate of evaporative cooling, relative humidity needed to be lowered by 20 percent (e.g., 90 to 70 percent RH) for every 5 °F increase in air temperature above 85 °F.

Only four temperature/humidity conditions were safely tolerated by all exposed dogs for 6 hours. Data from these four conditions is presented in greater detail in Tables 4, 5, 6, and 7. Each group's average rectal temperatures increased as the environment's air temperature increased. However, all dogs were able to maintain a rectal temperature less than 108 °F throughout exposure because relative humidity was sufficiently lowered as air temperature increased (Table 4). Figure 2 shows the pattern of average rectal temperature for each test condition during 6 hours of exposure. The average rectal temperature at the end of 6 hours for dogs exposed at 85 °F/90 percent RH was lower than the starting value. Habituation

Dogs tested in each environment displayed discontent from the test conditions by barking and exhibiting excessive movement (movement other than the expected repositioning of the body during a 6-hour period). However, not all dogs, at each test condition, displayed barking or excessive movement. Those that did bark all started during the first hour of exposure, whereas only some of the dogs that displayed excessive movement initiated this activity during the first hour of testing. Table 5 shows that the average time spent barking increased as the air temperature of the test environment increased. However, there was no clear relationship between excessive movement and the test environment temperature (Table 6). More than 50 percent of all barking and excessive movement took place during the first hour of testing (Table 7).

Table 2. Relationship of Temperature or Humidity Change to Time When Open-Mouth Panting Begins

Temperature/Humidity (°F/%RH)	Average Time When Panting Began (Minutes)	Average Rectal Temperature When Panting Began (°F)
100/30	9.6	102.5
100/50	8.8	102.2
100/70	8.3	102.6
95/50	13.1	102.7
95/70	10.5	102.4
95/90	7.7	102.4
95/50	13.1	102.7
100/50	8.8	102.2
105/50	6.4	102.4
90/70	10.5	102.4
95/70	9.6	102.5
100/70	8.3	102.6

Table 3. Effects of Relative Humidity on Animal Tolerance When Air Temperature and Ventilation Remain Constant

Environmental Condition			
Crate Openness	Air Temperature	RH	Animal Tolerance*
%	°F	%	%
14	95	50	100
		70	70
		90	20
	100	30	100
		50	80
		70	0

*Ten dogs were exposed to each environment. Tolerance meant a dog could remain in the environment for 6 hours and maintain a rectal temperature less than 108 °F at all times.

Table 4. Average Start, Final, and Peak Rectal Temperatures of Dogs Safely Tolerating 6 Hours of Heat/Humidity Exposure

ENVIRONMENT	RECTAL TEMPERATURE (°F)					
	Start		Final*		Peak **	
°F/%RH	Average	Range	Average	Range	Average	Range
85/90	101.4s=0.325	101.0-102.0	100.7s=0.493	99.9-101.5	102.9s=1.136	101.4-105.2
90/70	101.5s=0.678	100.7-101.3	101.6s=0.530	100.7-102.3	103.8s=1.340	102.3-106.6
95/50	101.3s=0.417	101.0-102.2	101.8s=1.275	100.0-104.3	104.4s=0.845	102.5-105.4
100/30	101.6s=0.340	101.1-102.0	102.5s=1.027	101.3-104.9	104.6s=1.346	102.6-107.3

Ten dogs were tested at each environment.

*Final rectal temperature was the last recorded at the end of 6 hours exposure.

**Peak rectal temperature was the highest temperature reached during the 6 hours exposure.

s = standard deviation

Table 5. Average Number of Periods and Minutes in Which Barking Occurred During 6 Hours of Heat Exposure

Environment Temperature/Humidity	Dogs Barking During Exposure	Periods During Which Barking Occurred*	Time of Actual Barking
(°F/%RH)	(Number)	(Number)	(Minutes)
85/90	8	6.5	9.7
90/70	10	10.4	11.6
95/50	9	16.7	12.7
100/30	7	18.2	29.1

Ten dogs were tested at each environment, but average values are expressed per actual number of active dogs in each category.

*Each hour consists of 12 equal 5-minute periods.

Table 6. Average Number of Periods and Minutes in Which Excessive Movement Occurred During 6 Hours of Heat Exposure

Environment Temperature/Humidity	Dogs Displaying Excessive Movement	Periods During Which Excessive Movement Occurred*	Time of Actual Excessive Movement
(°F/%RH)	(Number)	(Number)	(Minutes)
85/90	8	7.3	12.3
90/70	7	6.5	7.8
95/50	9	11.0	12.5
100/30	6	7.2	10.2

Ten dogs were tested at each environment, but average values are expressed per actual number of active dogs in each category.

*Each hour consists of 12 equal 5-minute periods.

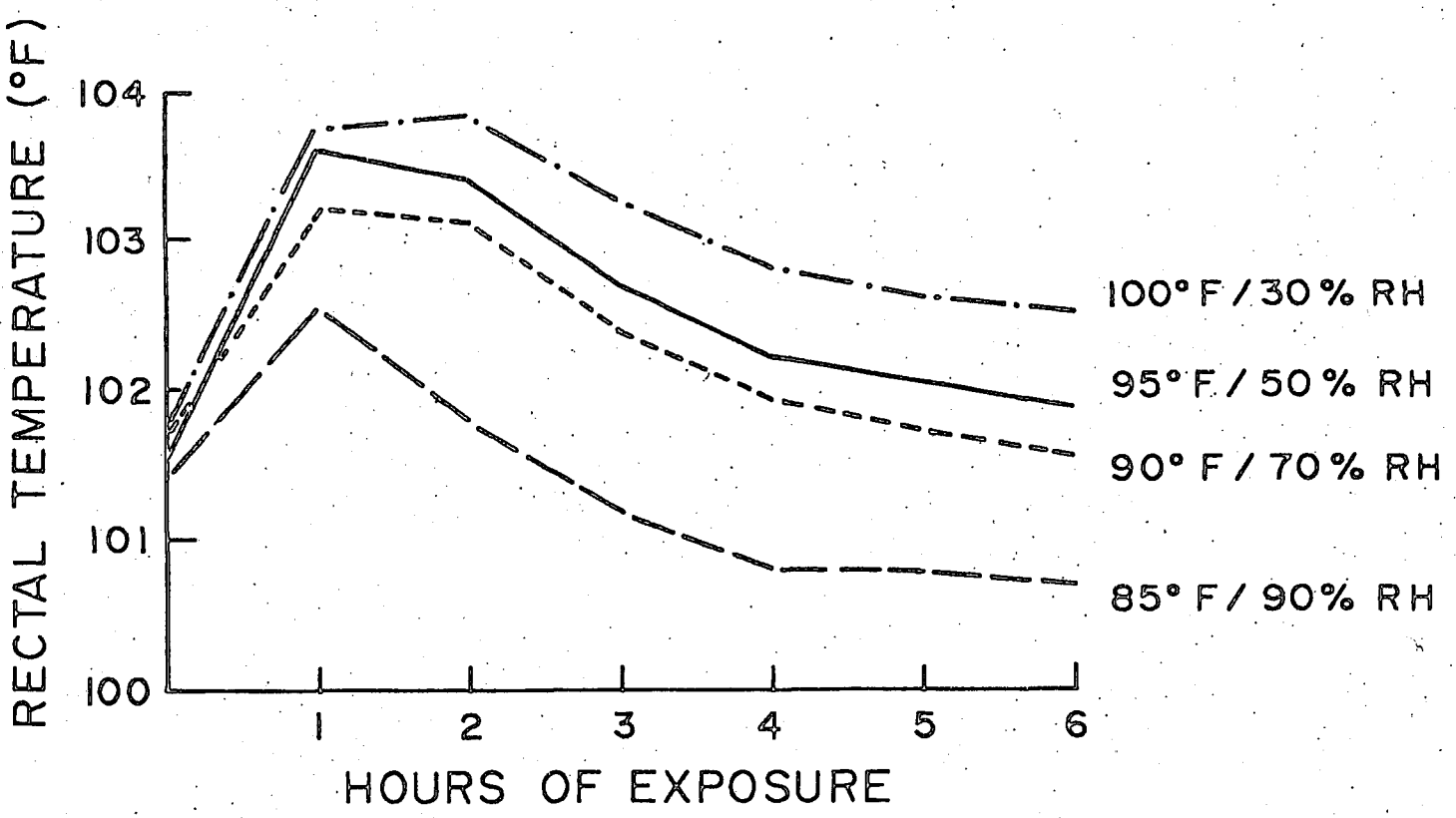


Figure 2. The average rectal temperature (hourly values are an average of 12 readings 5 minutes apart) for each test group of dogs is plotted against hours of heat/humidity exposure.

Table 7. Percent of Total Barking and Excessive Movement That Occurred During the First Hour of the Total 6 Hours of Heat Exposure*

First Hour Occurrences

Environment Temperature/Humidity (°F/%RH)	Barking		Excessive Movement	
	Percent of Total Periods	Percent of Total Minutes	Percent of Total Periods	Percent of Total Minutes
85/90	63	67	52	63
90/70	55	60	49	54
95/50	43	72	42	53
100/30	46	53	64	76

*Refer to Tables 5 and 6 for total periods and minutes of barking and excessive movement.

Results from all nine environments studied provided the data necessary to formulate equations that would show which hot weather temperature/humidity combinations could or could not be safely tolerated by 100 percent of the dogs exposed.

Fitting of Tolerance Data

Assiduous inspection of the data indicated that a linear equation (of the form 4T + H + constant) described the line of separation between 100 percent tolerance and less than 100 percent tolerance. T = the air temperature (F) of the exposure environment, H = the relative humidity (%RH) of the environment, and the constant = 430. A parallel line also appeared in the area of zero tolerance. A difference of 60 existed in the 4T + H between 100 percent tolerance and zero tolerance. If we let X = 4T + H - 430, then when X = 0, we have 100 percent tolerance, and at X = 60, we have zero tolerance. The trivial mathematical solution shows that there is 100 percent tolerance for X less than zero, and zero tolerance for X greater than 60. Assuming an "S shaped" response over the interval between X = 0 and X = 60, a cubic equation, which has been used frequently to fit biological response, was used to fit the range.

A general form of the cubic equation is:

$$ax^3 + bx^2 + cx + d = 1 \qquad \text{[Eq.1]}$$

If we let x=0, then d=1. We want the cubic to be zero at x=60.

$$\text{i.e.:} \quad a60^3 + b60^2 + c60 + 1 = 0 \qquad \text{[Eq. 2]}$$

Additional properties needed are for derivatives to be equal to zero when x=0 and when x=60. The derivative of equation (1) is:

$$3ax^2 + 2bx + c = 0$$

when $x = 0$, then $c = 0$

when $x = 60$, $3a60^2 + 2b60 = 0$

which leads to $b = -90a$.

Substituting into equation (2), we solve for $a = 1/108{,}000$. Substituting into the general cubic equation we have:

$$1/108{,}000\ x^3 - \frac{90}{108{,}000} * x^2 + 1 = \text{tolerance}$$

and $$\left[1 - \frac{x^2 (90-x)}{108{,}000}\right] * 100 = \text{percent tolerance} \qquad \text{[Eq.3]}$$

Equation [3] is used to determine a tolerance less than 100 percent (when x falls between 0 and 60). A tolerance of less than 100 percent means that it is expected that some percentage less than 100 of the dogs exposed to that particular temperature/humidity combination would not be able to safely tolerate the exposure as previously described.

By using the above equations, a tolerance index (Table 8) was developed to show the percentage of healthy adult dogs that would be expected to safely tolerate the given high temperature and humidity conditions during transport.

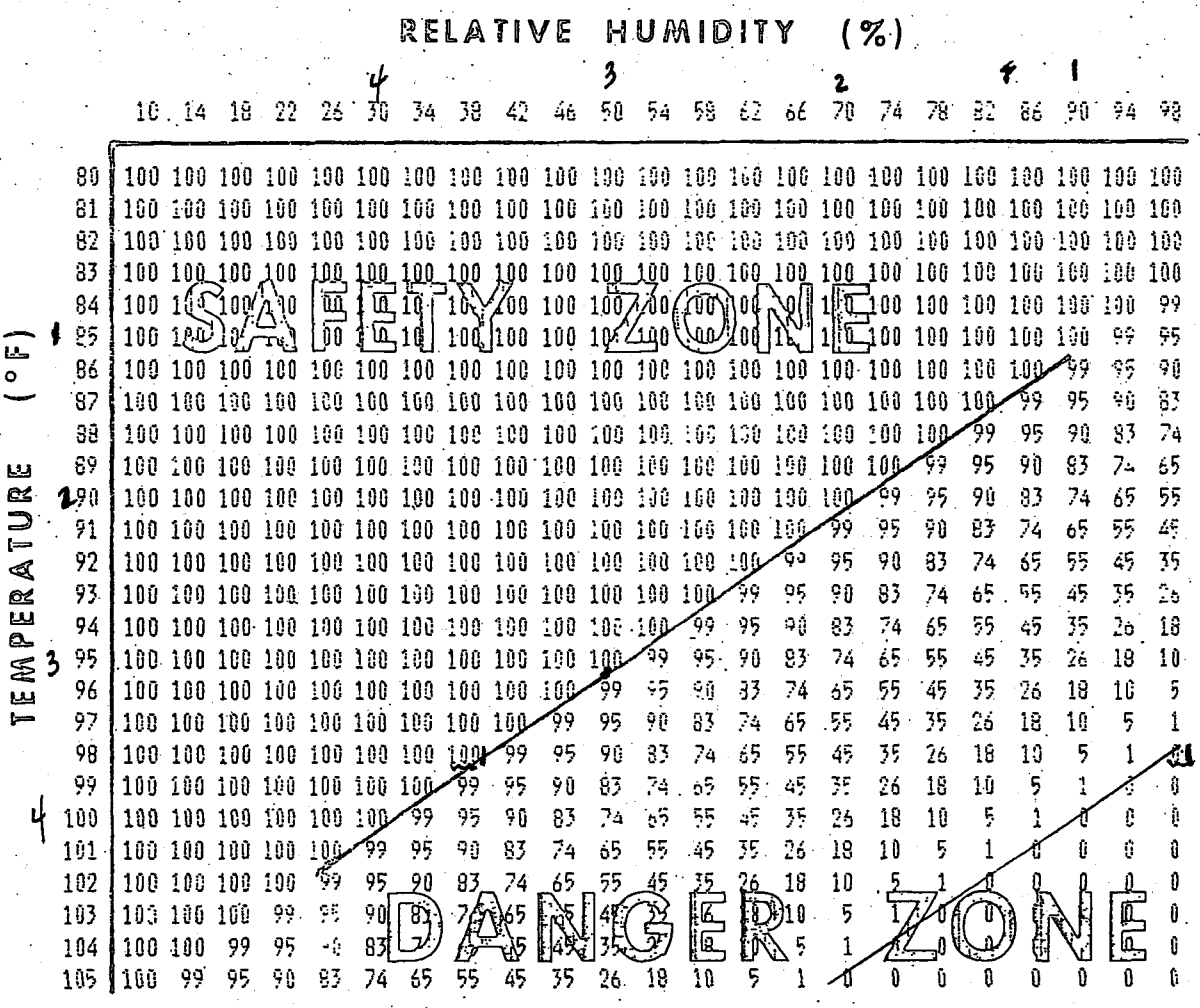
Discussion

It is easily understood how an increase in atmospheric temperature can cause an increase in body temperature, especially when the air temperature rises to near body temperature and above. Humidity alone does not directly cause the body temperature to rise. However, when the air temperature is near 80 F and higher, high humidity can promote an increase in body temperature by decreasing evaporative heat loss through open-mouth panting (1). The net quantity of heat lost by evaporation is an inverse function of the environmental temperature and humidity (5).

Besides the usual problems induced by high temperature and humidity, it must be recognized that what a dog experiences when living in a typical hot/humid environment (e.g., at home, in the shade, relaxed, with water available, and munching on morsels of food) is not the same as the stressful confinement of a shipping crate with restricted ventilation. We have observed that, under nonstress conditions, a dog's rectal temperature can rise several degrees Fahrenheit when it is first placed in a crate (even though it has had previous experience being in the crate). If the dog is allowed to relax with few outside disturbances, its rectal temperature will return to normal levels. Some of the observed dogs appeared to accept the confinement of the crate more easily than others. While recording baseline data outside the test chamber, we noted that some animals' acceptance seemed to be related to their ability to maintain visual contact with or awareness of the investigator who was seated several feet away.

When the dogs were placed in the hot/humid environment of the test chamber, many became disturbed and exhibited behavioral responses. The two categories of recorded responses were barking and excessive movement. Barking was transmitted by means of an intercom between the chamber and outside. Excessive movement (observed visually) was any movement other than normal postural changes, such as pawing at the crate wall or floor, continuous circling, slithering around the crate floor, and twisting/turning. For most dogs, this type of activity occurred more

Table 8. High Temperature/Humidity Index for Shipping Healthy Adult Beagle Dogs



The calculated safety zone shows the temperature/humidity combinations healthy adult dogs could safely tolerate for 6 hours of continuous exposure when confined in a shipping crate with no less than 14 percent of its total wall surface open for ventilation. Temperature/humidity combinations beyond 100 °F/30% RH and 85 °F/90% RH were not tested on dogs. The calculated danger zone indicates the chances of a dog safely tolerating those temperature/humidity combinations when tolerance is less than 100 percent.

intensely within the first hour in the test environment. Initial isolation in this strange environment may have contributed slightly to early barking. Usually within an hour, the dogs would then generally calm down and appear to accept the situation with only sporadic episodes of activity. Rectal temperature would generally rise when barking or excessive movement occurred. However, when the dogs became quiet, rectal temperature would decline unless activity had been quite intense.

Open-mouth panting with the tongue extended was normal during heat exposure. However, two dogs at 85 °F/90%RH and one dog at 90 °F/70%RH never exhibited open-mouth panting during 6 hours of heat exposure. The peak rectal temperatures for these three dogs were 101.4, 101.6, and 102.3 °F respectively. The time when panting began appeared to be influenced by an increase in either air temperature or humidity, all other conditions remaining constant. Rectal temperatures when panting started were very similar among the groups, regardless of the environment.

General observations of the test animals seemed to indicate that the first 30 to 60 minutes of exposure to hot environments are critical for a dog in establishing the ability to successfully tolerate the heat. Early open-mouth panting with little or no excitement appears to enable the dogs to maintain a lower rectal temperature for a longer period.

Conclusions

Based on separate studies at CAMI, a hot/humid environment which causes a dog's rectal temperature to rise above 108 °F exposes that animal to possible heat stroke and even death. Such environments should not be considered safe for shipping dogs.

Healthy adult dogs transported in USDA-approved shipping kennels having no less than 14 percent overall ventilation capacity should be expected to safely tolerate air temperatures of 100 °F or less during 6 hours of transport, provided proper consideration is given to the humidity of the shipping environment.

Our studies also indicated that any given dog's behavior cannot be reliably predicted when that dog is confined to a shipping kennel and exposed to a stressful hot/humid environment. When a fractious dog is anticipated, assistance in helping that dog maintain a relative state of quiescence is advantageous. This can usually be accomplished by administering a low level tranquilizer.

The temperature/humidity index discussed in this report should serve as a useful guide for shippers and airlines when transporting dogs during the summer months.

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Relative humidity recommendations for dogs at ambient temperatures >85 degrees F

Published data are available for 6-7 month old male beagles, 18-23 pounds. The 'tolerance range' of temperature and humidity conditions for a 6 hour exposure were measured (Hanneman and Sershon, 1987). Based on these findings the authors concluded that for every 1 degree increase in temperature (T) you needed to have a 4% decrease in relative humidity (RH) (in other words, a 20% decrease in RH for any 5 degree F increase in T > 85 degrees F) to keep dogs in the 'tolerance range' where 100% of them would survive.

These measurements were based on 4 measured treatments, 10 dogs per treatment, and an additional 5 calculated from the other measures, over a temperature range of 85 degrees F through 105 degrees F – a range representative of PA in the summer – and a RH range of 30-90%. Survivorship ranged from 0-100%. These data were then used to construct a 'tolerance zone' where 100% of dogs would survive for 6 hours. The table below shows the RH that must be available to guarantee survivorship during a 6 h exposure.

Temperature in degrees F – up to and including T noted:	RH in % must be less than or equal to:
86	86
87	82
88	79
89	75
90	70
91	66
92	62
93	58
94	54
95	50
96	46
97	42
98	38
99	34
100	30
101	26
102	22
103	18
104	14
105	10

This means that at any time and for any duration when the ambient air temperature – the air temperature to which the dog could be exposed when measured under US weather bureau standard conditions (i.e., free airflow, 2 m off ground, thermometer in shade, et cetera) - indoor or outdoor - is >85 degrees F, given that the dogs have unfettered access, they must have access to an area where the RH is maintained at or below the % listed in the table above for any given temperature. It is unlikely

that this requirement could be met without providing shade and air movement, and those factors must be provided at the height of the dog (e.g., the dog must be in the moving air stream so that air of the required humidity is the air inspired during the inspiration phase of panting – the primary means by which dogs engage in evaporative cooling).

The available data are not exhaustive. They make no allowances for age, breed, sex, health, size, hair coat, facial conformation (brachycephalic/dolicocephalic), exposure durations greater than 6 h, et cetera. Accordingly, we should note the following and err on the side of protecting the dog in these regulations.

The extant data set an upper bound for short-haired, young, fit, male dogs >18 lbs, exposed to the listed temperatures for no more than 6 h. These recommendations WILL NOT be sufficiently conservative for:

- Dogs < 18 lbs
- Dogs nursing or ill
- Dogs with heavy or long coats
- Brachycephalic dogs
- Giant breeds or those with especially heavy musculature or layered fat.

In such circumstances this table is not sufficient to guarantee survival since metabolism – and therefore panting rate – is higher in smaller dogs, and metabolic acidosis will occur when non-cooling panting occurs. As noted by the authors of this study, "when the air temperature is near 80 degrees F and higher, high humidity can promote an ***increase*** in body temperature by ***decreasing evaporative heat loss through open mouth panting***. The net quantity of heat lost by evaporation is an inverse function of the environmental temperature and humidity." (emphasis added) (Bard, 1961; Ingram and Mount, 1975).

Accordingly, the only rational requirement is that for dogs outside the study parameters, whenever the ambient air temperature, as defined above, is >85 degrees F, these dogs are maintained at RHs that are at least 10% LESS than those specified in the table above. This figure is a conservative estimate based on providing a margin of error as estimated by relative increases in heart rate (HR) and respiratory rate (RR) in small v. large dogs. To be safe, we'd recommend that the RH be decreased by at least 20%.

Bard P. Body temperature regulation. In: Bard P., ed. Medical Physiology, 11th edition, St. Louis, Mosby, 1961:526-555.

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These measurements were based on 9 experimental treatments, 10 dogs per treatment, over a temperature range of 85 degrees F through 105 degrees F – a range representative of PA in the summer – and a RH range of 30-90%. Survivorship ranged from 0-100%. These data were then used to construct a 'tolerance zone' where 100% of dogs would survive for 6 hours. The table below shows the RH that must be available to guarantee survivorship during a 6 h exposure.

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be provided at the height of the dog (e.g., the dog must be in the moving air stream so that air of the required humidity is the air inspired during the inspiration phase of panting – the primary means by which dogs engage in evaporative cooling).

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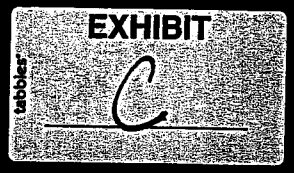
Chapter 5

Issues and Guidelines for Veterinarians in Recognizing, Reporting, and Assessing Animal Neglect and Abuse



Gary J. Patronek, VMD, PhD

Introduction

Within the past several years, it has been suggested that the veterinary profession should assume a greater role in addressing cruelty to animals.[1,2] In their 1994 position statement on animal welfare, the American Veterinary Medical Association (AVMA) included the following text:

The AVMA recognizes that veterinarians may have occasion to observe cases of cruelty to animals, animal abuse, or animal neglect as defined by state law or local ordinances. When these observations occur, the AVMA considers it the responsibility of the veterinarian to report such cases to the appropriate authorities. Such disclosures may be necessary to protect the health and welfare of animals and people. [3,4]

In 1996, the AVMA added a statement on the veterinarian's role in reporting cruelty to animals, animal abuse, and animal neglect to the model practice act. This action was intended to increase practitioners' awareness of the need to report cases of animal abuse, and to enhance communication and cooperation with humane and animal control organizations.[5] The statement is as follows:

Section 2—Definitions 8) Practice of veterinary medicine means...e) to report known or suspected cases of cruelty to animals, animal abuse, or animal neglect, as defined by state law or local ordinances, to appropriate humane or law enforcement officials where required by law. [6]

Justifications for reporting cruelty to animals include the veterinary oath to prevent suffering, and also because early intervention may prevent worsening of the neglect or more serious incidents of abuse directed against animals. Because neglected animals may be visible (e.g. the underweight, barking dog tied on a chain), they may also serve as sentinels for child or elder neglect, or unhealthy home environments, such as in the case of animal collectors or "hoarders."

Inclusion of the reporting requirement in the model practice act was an important and controversial step because, by implication, such a provision could then be incorporated by states revising their veterinary practice acts and using the model act as a guide. Recently, this wording has been questioned on the basis it could be construed to limit reporting animal abuse to veterinarians. If this were true, non-veterinarians reporting abuse could be considered in violation of the practice act. Therefore, it was recommended that the wording be removed from the AVMA model practice act.[7] It should be noted, though, that the wording seems to endorse reporting of cruelty, abuse, and neglect only when reporting is already required by state law.

The discussion about mandating reporting has generated considerable controversy. A lack of information, and misinformation, about animal cruelty have no doubt contributed to professional anxiety over this issue. There may be fears about loss of income and becoming entwined in protracted litigation, or worries about an animal being euthanatized as a result of a report. Veterinarians may not know to whom they should make a report of animal abuse or neglect, and they may fear being prosecuted or disciplined themselves if they fail to make a report. Physicians have raised legitimate questions about the merits of mandating reporting of adult domestic violence because of possible negative consequences, including escalation of the abuse, for patients who may not be willing or able to leave an abusive home environment.[8] In this respect, the situation with cruelty to animals may be more similar to that of domestic violence than child abuse, because it can be very difficult to remove an animal from its owner on the basis of a suspicion. Therefore, attempts to intervene could put an animal at increased risk in some circumstances where it is not possible to remove or monitor the animal.

Like physicians, veterinarians have concerns about client confidentiality, and are troubled by ethical conflicts that arise when the interests of patients (children/animals) and clients (parents/owners) diverge. However, since animals are typically treated legally as a form of property, the ethical and practical problems for veterinarians are substantively different from those faced by physicians. From a legal perspective, contrary to physicians, the confidential relationship between physicians and patients does not always explicitly apply to veterinarians and their clients. Courts in some states (Iowa and South Dakota) have explicitly refused to recognize a

Table 1: Statutes and Rules Pertaining to Client Confidentiality by State

State	Reference	Summary of cited reference
AVMA	Principles of Veterinary Medical Ethics*	The ethical ideals of the veterinary profession imply that a veterinarian and their staff will protect the personal privacy of clients, unless required by law to reveal the confidences or unless it becomes necessary in order to protect the health and welfare of the individual, the animals, and or others whose health and welfare may be endangered.
Alabama	930-X-1-.11(15)	A veterinarian shall not violate the confidential relationship between himself or herself and his or her client
Alaska	12 AAC 68.910 (d)	Patient medical records may not be released to a third party without written consent of the owner
Delaware	24 œ 3313 (1)	Prohibits willful violation of any privileged communication
Georgia	24-9-29	No veterinarian shall be required to disclose any information concerning the veterinarian's care of any animal except on written authorization or other waiver by the veterinarian's client or an appropriate court order or subpoena
	50-18-17 (a)	Medical or veterinary or similar files, the disclosure of which would be an invasion of privacy, are considered confidential
Idaho	IDAPA 46-013	Incorporates by reference the AVMA Principles of Veterinary Medical Ethics
Illinois	225 ILLCS 115/25.17	No veterinarian shall be required to disclose any information concerning the veterinarian's care of any animal except on written authorization or other waiver by the veterinarian's client or an appropriate court order or subpoena..... When communicable disease laws, cruelty to animals laws, or laws providing for public health or safety are involved, this privilege is waived.
Kansas	47-839	No veterinarian .....shall be required to disclose any information concerning the veterinarian's care of an animal, except on written authorization or other waiver by the veterinarian's client or an appropriate court order or subpoena
Kentucky	201 KAR 16:010 Sec. 23	A veterinarian shall maintain a confidential relationship with his client, except as otherwise provided by law, or required by considerations related to public health or animal health
Massachusetts	256 CMR: 7.01 (15)	A veterinarian shall maintain a confidential relationship with his / her clients, except as otherwise provided by law, or required by considerations related to public health and / or animal health.
Minnesota	156.081 2 (14)	Prohibits revealing a privileged communication from or relating to a client except when otherwise required or permitted by law
Montana	37-1-316 (9)	Unprofessional conduct to reveal confidential information obtained as a result of a professional relationship without the prior consent of the recipient of services, except as authorized or required by law
New Hampshire	501.01	Incorporates by reference the AVMA Principles of Veterinary Medical Ethics
Nebraska	71-148 (9)	Unprofessional conduct to willfully betray a professional secret except as otherwise provided by law
Oklahoma	10-5-15	A licensed veterinarian shall not violate the confidential relations between himself and his client
Pennsylvania	49 œ 31.21 Principle 7 (c)	Veterinarians and their staffs shall protect the personal privacy of clients, unless the veterinarians are required by law to reveal the confidences or it becomes necessary to reveal the confidences to protect the health and welfare of an individual, the animal, or others whose health and welfare may be endangered
Tennessee	1730-1.13 (6)	It is unprofessional conduct to reveal without written permission knowledge obtained in a professional capacity about animals or owners. Exceptions (b) are to other law enforcement agencies
Virginia	150-20-140.4	Unprofessional conduct shall include violating the confidential relationship between a veterinarian and his client
	150-20-170	Unprofessional conduct includes compromising the confidentiality of the doctor / client relationship
West Virginia	26-4-2.14	A licensed veterinarian shall not violate his or her confidential relationship with the client
Wyoming	Chp 4 Sec 1(b)	Incorporates by reference the AVMA Principles of Veterinary Medical Ethics
	Chp 4 Sec 3 d vi	Contents of medical records shall be kept confidential and not released to third parties unless authorized by the client or required by law

veterinarian-client privilege.[9-11] However, other states do have confidentiality requirements pertaining to the veterinarian-client relationship. These provisions may be in veterinary practice acts, in administrative rules, or in other state statutes pertaining to the health professions. (Table 1)

There are circumstances where confidentiality requirements are explicitly waived to protect public or animal health (Table 1). The AVMA Principles of Veterinary Ethics indicate that a Doctor of Veterinary Medicine has an obligation to protect the privacy of clients, but make an exception if a veterinarian is required by law to reveal the confidence, or if it becomes necessary to protect the health and welfare of the individual, the animals, and/or others whose health and welfare may be endangered.[12] Idaho, New Hampshire, and Wyoming have incorporated the AVMA Principles of Veterinary Ethics into their rules or practice acts by reference. (Table 1) Five states currently require a veterinarian to report suspicions of organized dog fighting (Arizona, California, Wisconsin) or other cruelty to animals (Minnesota, West Virginia). Arizona, Idaho, California, and West Virginia have provisions protecting veterinarians from liability arising from a report made in good faith. (Table 2)

Understanding and complying with laws governing reporting cruelty and confidentiality is complicated by the fact that relevant laws may exist in sections of state law other than veterinary practice acts or the accompanying rules promulgated by state boards. Therefore, it is possible that veterinarians may be unaware of their duties and obligations regarding confidentiality and reporting of cruelty, even if they are familiar with the veterinary practice act in their state. There is some evidence that veterinary teaching hospitals tend to proceed cautiously regarding issues of client confidentiality. In 1989, a survey of 22 active members of the American Veterinary Records Association was conducted.[13] The survey response rate was 86%, and the general consensus was that client authorization was required to release information. However, about half of those surveyed indicated they would release information about vaccination status, neuter status, and discharge instructions without written authorization.

Formal surveys of veterinarians about barriers to reporting suspected animal abuse have not been published, although one study is underway in Massachusetts.[a] Surveys of physicians regarding inquiring about domestic violence among their patients indicate that barriers include feeling that they do not have the time to discuss these issues, that it is not their role to raise them, that such inquiries are too intrusive, and that

Table 2: Regulations Pertaining to Reporting Animal Abuse

State	Reference	Summary of cited reference
Arizona	32-2239 A & B	Veterinarians have a duty to report in writing..... within 5 days of examining or treating a dog he reasonably suspects of having participated in an organized dog fight. He or she is also immune from civil liability for any report made in good faith.
California	4830.5	Whenever any licensee ...has reasonable cause to believe that a dog has been killed or injured through participation in a staged animal fight...it shall be the duty ...to promptly report the same to the appropriate law enforcement authorities...
Idaho	1996 Ida ALS 229 HB 566, Sec. 11 amends 25a	Any Idaho licensed veterinarian shall be held harmless from either criminal or civil liability for any decisions made or services rendered under the provisions of this chapter. Such a veterinarian is, therefore, protected from a lawsuit for his part in an investigation of cruelty to animals. Provided, however, that a veterinarian who participates or makes a report in bad faith or with malice shall not be protected under the provisions of this section.
Minnesota	9100.0700 (s)	It is unprofessional conduct to...fail to report to law enforcement officers inhumane treatment to animals, including staged animal fights or training for fights, of which the veterinarian has direct knowledge
West Virginia	7-10-4a	It is the duty of any licensed veterinarian and the right of any other person to report to a humane officer any animal found, reasonably known or believed to be abandoned, neglected or cruelly treated as set forth in this article, and such veterinarians or other persons may not be subject to any civil or criminal liability as a result of such reporting.
Wisconsin	951.162	Any veterinarian who has reason to believe that an animal has been in a fight in violation of s. 951.08 shall report the matter to the local humane officer or society or county or municipal pound or to a local law enforcement agency. The report shall be in writing and shall include a description and the location of the animal, any injuries suffered by the animal and the name and address of the owner or person in charge of the animal, if known. The general penalty provisions under 939.61 do not apply to this section.

reporting will not help the situation.[14,15] Gender biases have also been noted among physicians, particularly with respect to dealing with spousal abuse.

For veterinarians faced with making animal abuse reports, there are substantial local differences in the type of agencies or individuals responsible for receiving reports of alleged animal abuse. Depending on the community, this can include animal shelters, animal control officers, local or state police, state veterinarians, humane societies, and sheriffs. Therefore, veterinarians may be unaware of the appropriate agency responsible for investigating animal cruelty in their community. When humane societies are the agency responsible for investigation of these cases, some veterinarians may be reluctant to become involved. This could be due to general mistrust, historical adversarial relationships, or simply a lack of confidence and unfamiliarity with the personnel who would conduct an investigation. However, these reservations could be addressed through improved communication and mutual effort to develop effective working relationships.

Medical training has been described as lax in equipping physicians to deal with painful social and personal issues such as family violence,[14,16-18] and this may be one reason physicians are reluctant to become involved. Although there are well established clinical guidelines for recognizing child abuse, surveys have indicated that the problem of domestic violence is not dealt with satisfactorily in family practice residencies. It is likely that instruction regarding animal abuse and neglect is equally limited in veterinary curricula. In teaching hospitals, where the vast majority of students' clinical experience is obtained, almost all of the animals treated are valued family pets. Thus, veterinary students are unlikely to encounter many cases of neglect and abuse during their training, and they are even less likely to be exposed to the procedures for reporting a case.

A Typology of Animal Abuse

An important step in making veterinarians more confident in dealing with animal cruelty and abuse is education about the nature and scope of the problem, the specifics of relevant laws, and procedures for making a report. The epidemiology of animal abuse in the U.S. has not yet been described. The only published study of animal abuse described 1,863 cases reported to 4 SPCA's in South Africa over a 1-year period.[19] About 38% of the reports were found to be justified, and the vast majority of these involved general neglect, such as a dog being tied

Table 3: Typology of Companion Animal Abuse*

Physical abuse	Active maltreatment	Assault Burning Poisoning Shooting Mutilation Drowning Suffocation Abandonment Restriction of movement Incorrect method of training Inbreeding Trapping Transportation (Unprotected, overloaded) Fireworks Bestiality
	Passive neglect or ignorance	Lack of food and water Lack of shelter Lack of necessary veterinary care to alleviate suffering from illness or injury Lack of sanitation General neglect (dirty, lack of grooming, poor body condition)
	Commercial exploitation	Excessive labor Fights Indiscriminate breeding Sport (racing) Experimentation
Mental abuse	Active maltreatment	Instillation of fear, anguish, anxiety Isolation
	Passive neglect	Deprivation of love and affection

*Vermeulen H, Odendaal JSJ. Proposed typology of companion animal abuse. Anthrozoos 6:248-257; 1993.

out without shelter, unsanitary conditions, and lack of necessary veterinary care. This is believed to be similar to what is reported anecdotally within the U.S., although supporting data are currently lacking. However, a study to be published from Massachusetts should add needed information.[b]

Researchers in South Africa have proposed a typology of animal abuse, based on the major categories of child abuse (active and passive physical and mental abuse).[19] (Table 3) However, these categories do not always coincide with explicit legal definitions of animal cruelty, abuse and neglect in the U.S. For example, commercial "exploitation" of a dog through breeding, sport, or competition is not specifically prohibited. There are methods of dog training that many would consider abusive, including shock collars, prong collars, hanging a dog above the ground, harsh physical punishment by the handler, beating the dog and severe correction with a choke chain. Unfortunately, no standard currently exists to define humane vs inhumane training methods. Hopefully, the growing popularity of reward-based, non-aversive training methods among dog training professionals, such as the Association of Pet Dog Trainers (APDT), may facilitate promulgation of humane training criteria.

The category of mental abuse is not specifically identified in any U.S. animal cruelty statute, although many state statutes have provisions that prohibit tormenting an animal. Most state cruelty statutes do not specifically address confinement or exercise for animals. However, Maryland specifically includes a duty to provide proper air and space, Michigan specifically prohibits overcrowding, and Minnesota, Kansas, and Ohio impose a duty for providing exercise. Many veterinarians and non-veterinarians would agree that dogs isolated for long periods by being tied in a yard and deprived of attention and companionship do suffer. One state (Vermont) prohibits tying or tethering a dog in an inhumane manner or in a manner detrimental to its welfare, but does not specify what constitutes inhumane restraint. However, another section of the Vermont law does state that a tether must be at least twice the length of the dog. There have been municipal ordinances passed prohibiting (e.g. Tuscon, AZ; Maumelle, AR; New Hanover, NC; Lawton, OK) or regulating (e.g. Jefferson County, KY) tieouts or chaining of dogs. The Jefferson County ordinance specifies that a dog may be tethered no more than 8 hours in any 24 hour period. There are also specifications about the maximum weight and minimum length of the tether, which must be attached to a pulley or trolley mounted above the ground. Also, the USDA has stated that their experience enforcing the animal welfare act has led them to conclude that continuous confinement of a dog by a tether is inhumane, and should not be an option as a means of primary enclosure.[20] Although isolation or tethering of a dog may be insufficient to legally constitute abuse in most jurisdictions, this could change in the future. Veterinarians are in a position to make a strong case about the effect of isolation on the well-being of a social animal like the dog denied interaction with dogs or humans. It is important to keep in mind that these situations can frequently be addressed through other avenues, because isolation and tethering are sentinels for other forms of neglect that may be more readily actionable, such as inadequate shelter or poor nutrition.

Encountering Animal Neglect and Abuse in Veterinary Practice

Anecdotal reports suggest that veterinarians are particularly wary about legal or ethical mandates to report suspicions that a client is responsible for the injuries of a patient presented for treatment. For child care professionals, Kempe's landmark report paved the way for identification and widespread recognition of pathognomonic signs for child abuse.[21] He suggested that particular patterns of injury, such as multiple fractures at different stages of healing, and unexplained subdural hematomas and retinal hemorrhages, indicated deliberate abuse in children. Compared with physicians, veterinarians are at a disadvantage, because there are no similar guidelines to indicate when an injury in an animal is the result of a deliberate act by the owner or caretaker.[22] Although there are anecdotal reports of deliberate animal abuse by veterinary clients in the UK[23] and the U.S.,[2,24] epidemiology, clinical signs and pathology of the "battered [owned] pet" are, for the most part, unknown. Accumulating this data will be difficult, because most animals that are victims of deliberate abuse will never be brought to a veterinarian for treatment by the abuser. Hopefully, a call for voluntary reporting of cases in the UK will provide additional data to help the veterinary community discriminate between accidental and deliberate injury in client's pets.[23]

However, anecdotal reports and clinical experience indicate certain circumstances in which a veterinarian may encounter neglect, abuse, and cruelty (Table 4). It is important to recognize that differences exist between human and veterinary medical practice in the frequency that different types of abuse are likely to be encountered by clinicians. For example, animal abusers can more easily avoid seeking medical care for their pet than can the caretakers of abused children. Thus, cases of intentional infliction of injury on a pet by a client are probably rare in most veterinary practices,22 as is abuse of a sexual nature. Although deliberate abuse may be rare among veterinary clients, it is probably not uncommon in the community. When veterinarians are called on by police or humane

agents to evaluate animals that have been shot, tortured, burned, or stabbed, the history and injuries sustained are likely to be prima facie evidence of deliberate abuse.

Neglect, Abuse, and the Language of the Law

The types of animals protected under laws in different states varies widely. Many states simply specify "animal," while others go to great lengths to define an animal. For example, the Delaware statute defines animals as "excluding fish, crustaceans, and mollusks." The Kentucky statute refers to "four legged animals." The Indiana statute specifies "vertebrates." The South Dakota statute specifies "mammals, birds, reptiles, amphibians, and fish." The New Jersey, Texas, and North Carolina statutes refer to "living creatures." These distinctions may seem trivial, but there have been instances where the ability to pursue a case has hinged on whether or not the animal alleged to have been mistreated was included under the legal definition of an "animal."

Ownership per se is not always required in order for the duty of care provisions in state cruelty statutes to apply. Many states explicitly state that anyone who cares for, possesses, controls, or otherwise has or assumes custody of an animal is considered legally responsible for its care. Therefore, in some jurisdictions, someone feeding stray animals, or caring for the animals of a friend, has the same duty of care as if they were the owner.

It has been suggested that definitions of abuse should encompass the underlying human motivation, and that the term "cruelty" should be reserved for a small subset of cases in which the animal is harmed and the perpetrator gains satisfaction from causing the harm.[25] This motivational definition is particularly relevant when discussing penalties for various forms of abuse. However, it is important to recognize that most state statutes use the word "cruelty" generically to encompass both deliberate infliction of harm and harm that arises from neglect. Therefore, the operational definitions that focus more on the consequences of the human acts or omissions for the animal may be more useful when attempting to define neglect.

Not only does the vast majority of animal cruelty arise from neglect, but it is also the form of abuse most likely to be encountered by a veterinarian. Unfortunately, the vagueness in wording and the subjective nature of the interpretation of many laws contribute to the discomfort veterinarians have with these issues.[26] Statutes in every state have established certain duties and responsibilities for owners towards animals in their care, and also prohibit certain acts. However, the laws in different states are not consistent in their language or scope. For example, some statutes (e.g. Alabama, Table 5) make broad statements prohibiting cruelty and mistreatment, while others (e.g. Delaware, Table 6) are much more specific in defining terms such as "cruel," "neglect," "abandonment," and "proper shelter." Even when laws are fairly specific, words or phrases may still be sufficiently vague that they require substantial interpretation. For example, in the Delaware code, the provisions requiring proper shelter and proper feed, do not specify how to determine whether "unnecessary physical pain or suffering exist."

A determination of whether or not the owner's duty of care has been breached will be heavily influenced by a subjective assessment of the animal's physical state and living conditions. Clearly a veterinary opinion could carry considerable weight in such a determination. When evaluating any animal for the possibility of neglect, it is useful to consider three general areas: the severity of problems present, the total number of problems, and the duration of the problems. (Figure 1)

General Considerations Regarding Reporting Neglect and Abuse

With these issues in mind, several points merit emphasis:

- Veterinarians are well trained in proper animal husbandry, therefore it should be possible for private practitioners to become more comfortable identifying sub-standard care and animals at risk of neglect.
- It is important, for the profession, that veterinarians, either individually or as organizations, be at the forefront of setting high standards for animal care. This will elevate the status of animals in the community and benefit veterinary practitioners as well.
- Recognizing sub-standard care does not necessarily imply an adversarial situation or becoming involved in protracted legal proceedings. In many cases of neglect, it is possible and much more productive to educate and work with the owner to improve the standard of animal care. This can be done with the support and assistance of the proper enforcement agency.
- Framing these discussions on whether the needs of the animal are being met (operational definition), rather than on the [bad] behavior of the owner (motivational definition), has the advantage of depersonalizing these issues. This lets the veterinarian assume the more comfortable role of being an educator and advocate for the animal, and offering their expertise about proper animal care, rather than as passing judgment on a person. It is also more conducive to maintaining veterinarian-client relationships.
- Diagnostic criteria for identifying the "battered pet"

Table 4: Circumstances in which a Veterinarian may Encounter Animal Abuse, Cruelty and Neglect in Private Practice

Category of animal abuse	Suspected frequency seen in private practice	Criteria for suspicion
Neglect of an individual animal by a person in the community, brought to a veterinarian's attention by a client or someone in the community	Occasional to common	• Poor body condition • Dangerous or unsanitary environment • Inadequate shelter • Dog tied and barking • Excessive number of animals
Large scale neglect by a client who is an animal "collector" or "hoarder"	Probably a few such clients in most practices	• Large number of animals • Poor continuity of care for individual animals • Most office visits for trauma, preventable contagious, and parasitic diseases • Client uses several veterinary hospitals • Heroic efforts requested for newly acquired pets with poor prognoses
Neglect of individual pet by a veterinarian's client	Uncommon to occasional (Seeking veterinary care precludes at least some portion of the definition of neglect)	• Pet extremely thin but client refuses needed workup or treatment • Pet severely matted and client refuses grooming • Client declines medical care or euthanasia to relieve serious illness or injury, e.g. broken limb or dystocia • Lack of concern for animal's welfare
Staged dog fighting	Uncommon except in certain areas	• Characteristic pattern of bite wounds on head, neck, and legs. Much more prevalent in pit bulls and other fighting breeds. • Owner may self-treat injuries
Intentional infliction of injury to a pet by a client	Uncommon to rare	• Injuries not consistent with history; otherwise not yet established, only limited case reports • Owner performing an ear crop on their own dog
Deliberate abuse or infliction of injury, animal brought in by police or humane society	Variable. Depends on accessibility of veterinarian to law enforcement authorities	• History and nature of the injuries may be prima facie evidence of cruelty

Table 5: Code of Alabama 1975

Title 13A. Criminal Code
Chapter 11. Offenses against public order and safety
Article 1. Offenses against public order and decency

§ 13A-11-14 Cruelty to animals.
A person commits the crime of cruelty to animals if, except as otherwise authorized by law, he intentionally or recklessly:
- Subjects any animal to cruel mistreatment; or
- Subjects any animal in his custody to cruel neglect; or
- Kills or injures without good cause any animal belonging to another.

presented by a client are not yet well established. Concerns over ambiguities in identifying these serious, but less common situations, should not preclude veterinarians from speaking out about the much more prevalent animal abuse that arises from neglect in the community, whether due to ignorance or indifference.

- In some states, reporting suspicions of animal abuse could involve breaching client confidentiality and existing ethical codes of conduct. Veterinarians need to be aware of current laws in their own states, and to stay up to date on changes. If state law or professional codes of conduct create a conflict between the welfare of the patient and a veterinarian's ethical obligations to a client, the dilemma may need to be remedied through legislation.

The TACC Score: a Screening Tool for Identifying Animals At-risk

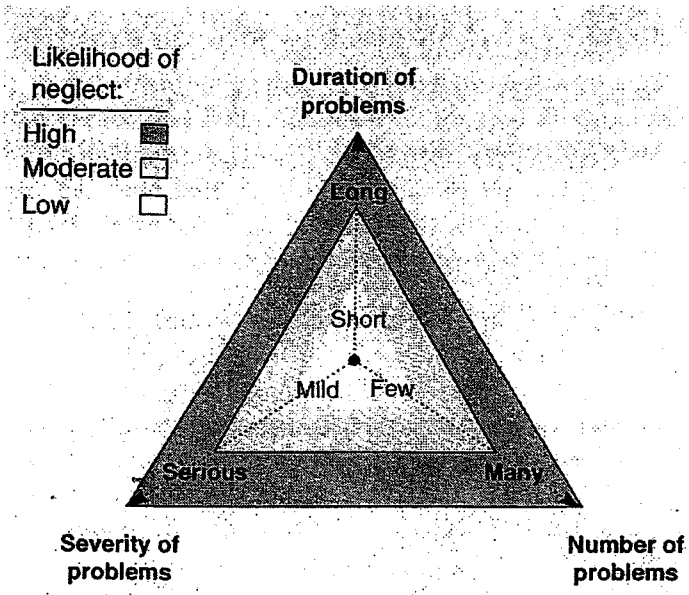
Since the failure to meet the needs of an animal is often not an all-or-none phenomenon, but a problem that occurs in degrees over a spectrum or range of neglect, veterinarians may be uncertain where to draw the line between neglect and a temporary lapse in care by a typically responsible owner. With this in mind, a simple system, the Tufts Animal Condition and Care (TACC) score, has been developed to alleviate some of the ambiguity veterinarians and law enforcement personnel face when assessing whether there is reason to believe an animal may be suffering from either chronic or acute neglect. It is based on an operational, rather than a motivational, definition of neglect. The South Carolina cruelty statute is illustrative of the logic of this approach. It defines neglect as:

Failure to provide proper food, water, protection from the elements, adequate sanitation, adequate facilities or care generally considered to be standard and accepted for an animal's health and well being, consistent with the species, breed, physical condition, and type of animal.

The TACC score incorporates scales to evaluate body condition, to assess risk from exposure to temperature extremes, and to evaluate sanitation and grooming as indicators of the adequacy of animal care. These criteria are useful because they are independent of human intent and of social norms concerning animal care, and are rooted in the consequences for the animal. This is consistent with most state cruelty statutes, which recognize that suffering can arise from acts of omission as well as commission. There is precedent for such a system in the child welfare literature. For example, a Child Care Rating Scale has been used by social workers during home visits to identify infants at risk of neglect.[27]

Body Condition Scale

Figure 1



The responsibility of an owner or caretaker to ensure that an animal receives proper nutrition (which is best indicated by an appropriate body weight) is specified either implicitly or explicitly in state anti-cruelty statutes that impose a duty to provide necessary food, or prohibiting starving an animal, depriving it of necessary sustenance, or failing to feed an animal properly. The purpose of the body condition scale is to establish whether there is a reasonable suspicion that an animal's nutritional needs are not being met, and to determine the urgency for intervention. The use of body condition scores to evaluate the physical condition of livestock is well accepted,[28] and a similar system exists for evaluating horse abuse.[29] A 9 point scale has been developed to assess body condition in dogs.[30,31] This scale has been shown to be reproducible and to be highly correlated with radiographic measurements of body fat, with each point representing a 5% increase in body fat. Five points of this scale, representing ideal to emaciated body conditions, combined with elements of another scale[32] have been adapted here as a screening tool for neglect.

There are many types of neglect that can lead to a dangerously underweight dog:

- Failure of the owner or caretaker to recognize that the dog was too thin
- Owner recognizes dog is too thin but believes he/she does not have the resources to seek or obtain help, or fears that seeking assistance may result in impoundment or euthanasia of the animal(s)
- Owner recognizes dog is thin and fails to act due to indifference
- Failure to control intestinal parasites or provide needed veterinary care to ensure adequate nutrition

However, there are also legitimate reasons that a dog

Table 6: Delaware Code

Title 11. Crimes and Criminal Procedures.
Part I. Delaware Criminal Code
Chapter 5. Specific Offenses.

Subchapter VII. Offenses against public health, order and decency
Subpart A. Riot, disorderly conduct and related offenses

s 1325 Cruelty to animals; class A misdemeanor; class F felony.

For the purpose of this section, the following words and phrases shall include, but not be limited to, the meanings respectively ascribed to them as follows:

(1) "Cruel" includes every act or omission to act whereby unnecessary or unjustifiable physical pain or suffering is caused or permitted.

(2) "Cruel mistreatment" includes any treatment whereby unnecessary or unjustifiable physical pain or suffering is caused or permitted.

(3) "Cruel neglect" includes neglect of an animal, which is under the care and control of the neglector, whereby pain or suffering is caused to the animal or abandonment of any domesticated animal by its owner or custodian.

(4) "Cruelty to animals" includes mistreatment of any animal or neglect of any animal under the care and control of the neglector, whereby unnecessary or unjustifiable physical pain or suffering is caused. By way of example this includes: Unjustifiable beating of an animal; overworking an animal; tormenting an animal; abandonment of an animal; failure to feed properly or give proper shelter or veterinary care to an animal.

(6) "Abandonment" includes completely forsaking or deserting an animal originally under one's custody without making reasonable arrangements for custody of that animal to be assumed by another person.

(7) "Custody" includes the responsibility for the welfare of an animal subject to one's care and control whether one owns it or not.

(8) "Proper feed" includes providing each animal with daily food and water of sufficient quality and quantity to prevent unnecessary or unjustifiable physical pain or suffering by the animal.

(9) "Proper shelter" includes providing each animal with adequate shelter from the weather elements as required to prevent unnecessary or unjustifiable physical pain or suffering by the animal.

(10) "Proper veterinary care" includes providing each animal with veterinary care sufficient to prevent unnecessary or unjustifiable physical pain or suffering by the animal.

(11) "Animal" shall not include fish, crustacea or molluska.

(12) "Serious injury" shall include any injury to any animal which creates a substantial risk of death, or which causes prolonged impairment of health or prolonged loss or impairment of the function of any bodily organ.

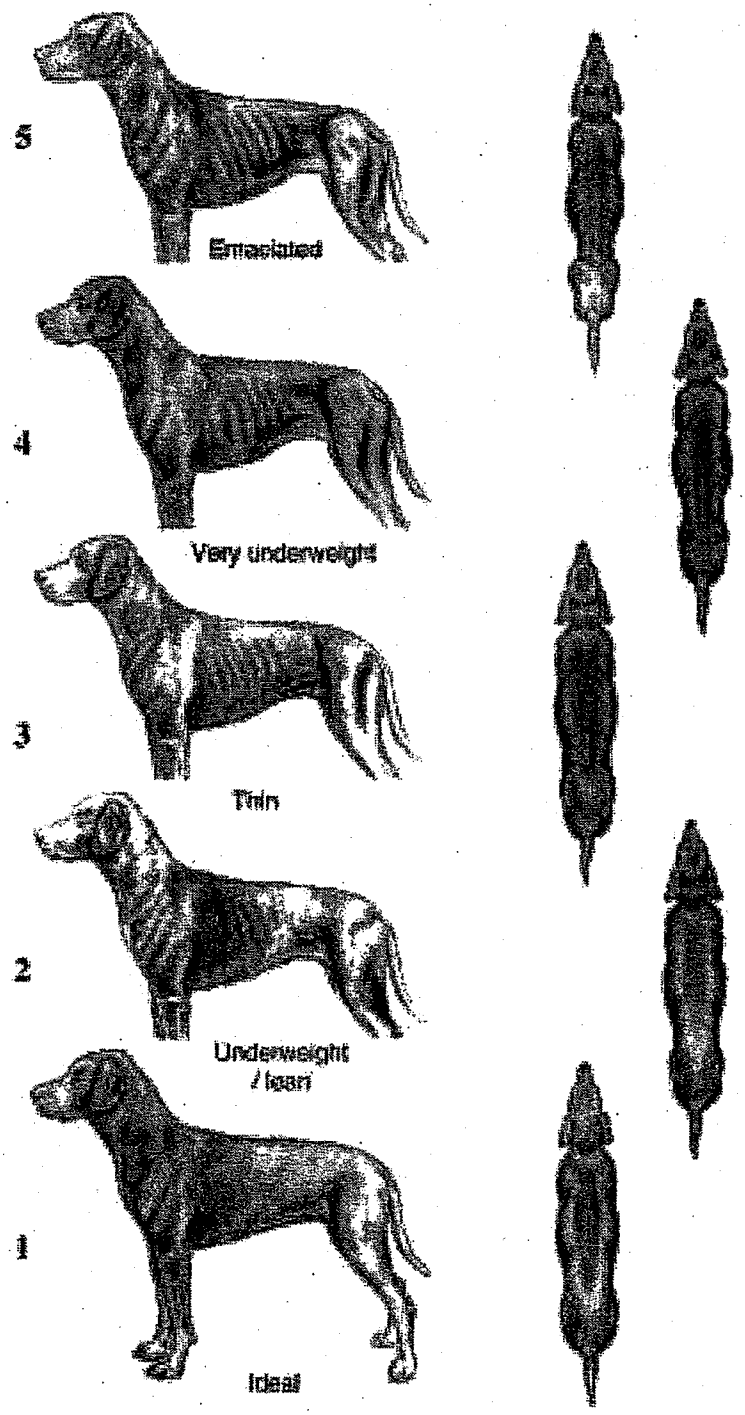
may appear too thin. These include old age, terminal disease, a refractory medical condition under treatment, e.g. malabsorption or maldigestion, a high degree of physical fitness due to training, or normal phenotype for a particular breed. Ultimately, a veterinary examination is required to determine whether poor body condition can be explained by reasons other than a lapse in care. If there is no legitimate reason for the dogs condition, then the TACC score provides a means of quantifying the extent of the neglect.

The body condition scale has been adapted from published canine body condition descriptions.[30-32] (Appendix, Scale 1) It is scored from 1–5, with "1" being a dog that is essentially unremarkable with respect to problems, and "5" a dog that is emaciated. The scoring of a dog should be based, if possible, on both palpation and visual evaluation. For long-haired dogs, a visual examination alone would be inadequate to assess body condition. When using this scale, it is important to take into account different normal canine phenotypes, since some breeds are naturally lean (e.g. sight hounds) and others are naturally heavier (e.g. St Bernard).

For purposes of the TACC score, obesity is not specifically addressed as a condition indicative of abuse. Although rational medical arguments could be made to include obesity, such an inclusion would be counter-productive because the underlying motivation of the owners of overfed dogs, and the wording and intent of existing law, would probably preclude a finding of abuse.

Tufts Animal Care and Condition (TACC) scales for assessing body condition, weather and environmental safety, and physical care in dogs

I. Body condition scale (Palpation essential for long-haired dogs; each dog's condition should be interpreted in light of the typical appearance of the breed)



- All bony prominences evident from a distance
- No discernible body fat
- Obvious loss of muscle mass
- Severe abdominal tuck and extreme hourglass shape

- Ribs, lumbar vertebrae, and pelvic bones easily visible
- No palpable body fat
- Some loss of muscle mass
- Prominent abdominal tuck and hourglass shape to torso

- Tops of lumbar vertebrae visible, pelvic bones becoming prominent.
- Ribs easily palpated and may be visible with no palpable fat
- Obvious waist and abdominal tuck
- Minimal loss of muscle mass

- Ribs easily palpable with minimal SQ fat
- Abdominal tuck evident
- Waist clearly visible from above
- No muscle loss
- May be normal for lean breeds such as sighthounds

- Ribs palpable without excess SQ fat
- Abdomen tucked slightly when viewed from the side
- Waist visible from above, just behind ribs

Body condition scale adapted from Laflamme, DP. Proc. N.A. Vet Conf 1993, 290-91; and Armstrong, PJ., Lund, EM. Vet Clin Nutr 3:83-87; 1996. Artwork by Erik Petersen.

II. Weather safety scale

In warm or hot weather:

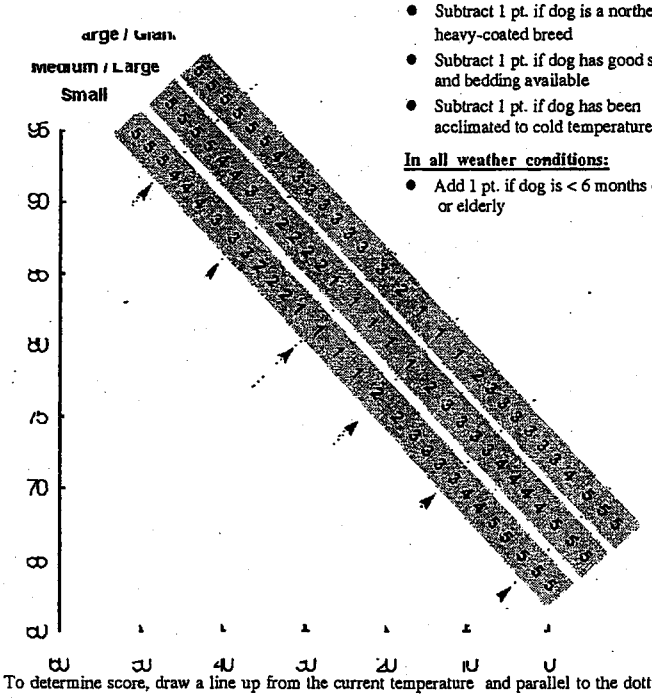
- Subtract 1 pt. if water is available
- Subtract 1 pt. if dog is in a shaded area protected from full sun
- Add 1 pt. if dog is brachycephalic
- Add 1 pt. if dog is obese

In cool or cold weather:

- Add 1 pt. if toy dog
- Add 2 pts. if dog out in rain / sleet
- Subtract 1 pt. if dog is a northern or heavy-coated breed
- Subtract 1 pt. if dog has good shelter and bedding available
- Subtract 1 pt. if dog has been acclimated to cold temperatures

In all weather conditions:

- Add 1 pt. if dog is < 6 months of age or elderly



To determine score, draw a line up from the current temperature and parallel to the dotted lines, and read score on bars. Common sense must be used to take into account the duration of exposure to any given temperature when assessing risk; even brief periods of high heat can be very dangerous, whereas a similar duration of exposure to cold temperatures would not be life-threatening.

III. Environmental health scale

5 **Filthy** - many days to weeks of accumulation of feces and / or urine. Overwhelming odor, air may be difficult to breathe. Large amount of trash, garbage, or debris present; inhibits comfortable rest, normal postures, or movement and / or poses a danger to the animal. Very difficult or impossible for animal to escape contact with feces, urine, mud, or standing water. Food and / or drinking water contaminated.

4 **Very unsanitary** - many days of accumulation of feces and / or urine. Difficult for animal to avoid contact with waste matter. Moderate amount of trash, garbage, or clutter present that may inhibit comfortable rest and / or movement of the animal. Potential injury from sharp edges or glass. Significant odor, breathing unpleasant. Pools of water, mud difficult to avoid.

3 **Unsanitary** - several days accumulation of feces and urine in animal's environment. Animal is able to avoid contact with waste matter. Moderate odor present. Trash, garbage, and other debris cluttering animal's environment but does not prohibit comfortable rest or normal posture. Clutter may interfere with normal movement or allow dog to become entangled, but no sharp edges or broken glass that could injure dog. Dog able to avoid mud or water if present.

2 **Marginal** - As in #1, except may be somewhat less sanitary. No more than 1-2 day's accumulation of feces and urine in animal's environment. Slight clutter may be present.

1 **Acceptable** - Environment is dry and free of accumulated feces. No contamination of food or water. No debris or garbage present to clutter environment and inhibit comfortable rest, normal posture and range of movement or pose a danger to or entangle the animal.

"Environment" refers to the kennel, pen, yard, cage, barn, room, tie-out or other enclosure or area where the animal is confined or spends the majority of its time. All of the listed conditions do not need to be present in order to include a dog in a specific category. The user should determine which category best describes a particular dog's condition.

Interpretation of the TACC score from scales I - IV:

The Tufts Animal Condition and Care (TACC) score is assessed from the number of points read off either the **Body Condition, Weather Safety, Environmental Health,** or **Physical Care** Scale. When multiple scales are evaluated, the highest score on any scale should be used to determine the risk of neglect. Multiple high scores are indicative of greater neglect, risk, or inhumane treatment than a single high score.

Score	Body condition, physical care, environ. health scales	Weather safety scale
≥ 5	Severe neglect and inhumane treatment. An urgent situation that justifies an assertive response to protect the animal.	Potentially life-threatening risk present. Immediate intervention to decrease threat to the animal required (provide water, shelter).
4	Clear evidence of serious neglect and / or inhumane treatment (unless there is a medical explanation for the animal's condition). Prompt improvement required.	Dangerous situation developing. Prompt intervention required to decrease risk (e.g. provide water, shade, shelter, or bring indoors). Warn owner of risk and shelter requirements.
3	Indicators of neglect present. Timely assessment; correction of problems and/or monitoring of situation may be required.	Indicators of a potentially unsafe situation, depending on breed, time outdoors. Inform owner of risk and proper shelter requirements.
2	A lapse in care or discomfort may be present. Evaluate, and discuss concerns with owner. Recommend changes in animal husbandry practices, if needed.	Risk unlikely, but evaluate the situation, and if warranted, discuss your concerns and requirements for proper shelter with the owner.
≤ 1	No evidence of neglect based on scale (s) used	No evidence of risk

Disclaimer: The TACC score is intended to be a simple screening device for determining when neglect may be present, for prioritizing the investigation of reported animal cruelty cases, and as a system for investigative agencies to use to summarize their case experience. The TACC score is not intended to replace definitive assessment of any animal by a veterinarian or law enforcement agent. A low TACC score does not preclude a diagnosis of abuse, neglect, or a dog requiring veterinary care upon more careful examination of an animal and its living situation.

IV. Physical care scale

5 **Terrible** - extremely matted haircoat, prevents normal motion, interferes with vision, perineal areas irritated from soiling with trapped urine and feces. Hair coat essentially a single mat. Dog cannot be groomed without complete clipdown. Foreign material trapped in matted hair. Nails extremely overgrown into circles, may be penetrating pads, causing abnormal position of feet and make normal walking very difficult or uncomfortable. Collar or chain, if present, may be imbedded in dog's neck.

4 **Poor** - substantial matting in haircoat, large chunks of hair matted together that cannot be separated with a comb or brush. Occasional foreign material embedded in mats. Much of the hair will need to be clipped to remove mats. Long nails force feet into abnormal position and interfere with normal gait. Perineal soiling or irritation likely. Collar or chain, if present, may be extremely tight, abrading skin.

3 **Borderline** - numerous mats present in hair, but dog can still be groomed without a total clip down. No significant perineal soiling or irritation from waste caught in matted hair. Nails are overdue for a trim and long enough to cause dog to alter gait when it walks. Collar or chain, if present, may be snug and rubbing off neck hair.

2 **Lapsed** - haircoat may be somewhat dirty or have a few mats present that are easily removed. Remainder of coat can easily be brushed or combed. Nails in need of a trim. Collar or chain, if present, fits comfortably.

1 **Adequate** - dog clean, hair of normal length for the breed, and hair can easily be brushed or combed. Nails do not touch the floor, or barely contact the floor. Collar or chain, if present, fits comfortably.

All of the listed conditions do not need to be present in order to include a dog in a specific category. User should determine which category best describes a particular dog's condition. This scale is not meant for assessment of medical conditions, e.g., broken limb, that clearly indicate a need for veterinary attention.

Weather Safety Scale

Most state cruelty statutes impose a duty of care for providing proper shelter for an animal. For example, the Pennsylvania statute indicates that proper shelter must protect the animal against inclement weather and preserve the animal's body heat and keep it dry. The Rhode Island statute specifies that shelter must provide sufficient protection from the elements for the health and well being of the animal. Regardless of the specific wording, the main point of imposing a duty for proper shelter is to ensure that an animal can maintain normal body temperature, or thermal homeostasis. Thermal homeostasis occurs when there is a balance between heat load and heat dissipation. Heat load is the sum of environmental and metabolic heat.[33] Heatstroke occurs when heat load exceeds heat dissipation. Clinical signs of heat stroke occur when a dog's body temperature exceeds the species-specific critical threshold (>109° F, 43° C). Heat stroke is a multi-systemic disorder precipitated by generalized cellular necrosis. Disorders of acid-base balance and primary renal failure are common clinical sequelae. Even with aggressive immediate treatment, heat stroke may be fatal.

The typical case history of naturally occurring heatstroke in dogs often involves forced confinement to a hot environment, such as a parked car, or exercise.[33-35] In these high risk situations, a dog's body temperatures can exceed lethal levels in a matter of minutes. However, there have also been reports of pets suffering severe heat stroke in circumstances that appear to be low risk, including walking with their owner on a hot day,[36] exposure to direct sun through the window of a car while riding with their owner,[37] or even a heavy coated dog walking with its owner on an apparently cool evening.[38] In a review of 42 canine cases, exercise was a factor in 45%, 28% were confined in a closed environment, and 19% were just exposed to a warm environment.[34]

Dogs cool themselves primarily through panting, which increases heat loss from the respiratory epithelium in the lungs and nasal turbinates. Therefore, dogs with a brachycephalic conformation have lower heat tolerance than dogs that are phenotypically less extreme. In general, dogs are much more sensitive to heat stresses than cold stresses, and have a much lower temperature comfort range than humans.[a]

There are size-related differences in heat and cold tolerance as well. Large dogs have more difficulty radiating heat than small dogs, whereas smaller dogs have more problems conserving heat.[39] Large breed dogs with a tendency towards brachycephalic conformation, such as the St. Bernard, may be at very high risk.[c] Hypothermia occurs when an animal is unable to conserve heat. In general, dogs are better able to withstand cold stresses than heat stresses. The first line of defense is a normal hair coat. Therefore, if the animal is exposed to sleet or rain in cold temperatures and becomes wet, it can compromise the substantial natural protective ability of a dry coat. In conjunction with exercise or high ambient temperature, a heavy hair coat, coupled with large size or obesity, can contribute to a rapid increase in body heat. Exposure to direct sun and inability to reach shade will greatly increase risk, even at temperatures a person might consider comfortable. Experimentally, lack of water in conjunction with high external temperatures has been shown to exacerbate the situation by expediting dehydration, circulatory collapse, and shock.[40] Thus, a dog may be susceptible to heat stroke under conditions that might not be uncomfortable, much less life threatening, for humans. Therefore, it is advisable to err on the side of caution when evaluating the risk of heat exposure for dogs. Small mistakes with heat may cost a dog its life, whereas dogs subjected to cold temperatures may be uncomfortable if they are not acclimated, but the experience is much less likely to prove fatal.

Weather safety indices have been developed as tools to determine when it is safe to ship livestock.[41] The weather safety scale developed here takes into account the greater heat sensitivity and cold tolerance among breeds with heavy hair coats, compared with short-haired breeds. There is precedent for establishing differential safe temperatures based on dog hair coat and phenotype. For example, the guidelines published by the International Air Transport Association (IATA) for air transport of dogs and other species indicate that the minimum and maximum temperatures for journeys of > 30 minutes duration are 50–75° F for brachycephalic dogs, 40–80° F for long-haired dogs, and 50- 90° F for short-haired dogs.[42] Heating and ventilation systems may vary among aircraft, animal holding areas may be at ambient temperature, and temperatures on the tarmac may exceed ambient temperatures. Northwest Airlines has more stringent criteria, and will not transport a dog if the ambient temperature is above 85° F or below 10° F for any amount of time.[d] The animal welfare act specifies that, for dogs whose care is regulated by the act, ambient temperatures must not fall below 45° F nor rise above 85° F for more than 4 consecutive hours in indoor housing or holding facilities, or for more than 45 minutes while being moved to or from a primary conveyance or a terminal facility. A lower limit of 50° F is specified for short haired dogs, for dogs not acclimated to lower temperatures, and for young or aged dogs. Also, dry bedding and other methods of conserving body heat must be provided when temperatures fall below 50° F.[43]

The weather safety index developed here (Appendix,

Scale 2) is based on the limits indicated in the above regulations, and takes into account a dog's size, age, phenotype, the availability of water, and exposure to direct sunlight when evaluating the effect of temperature. In order to use this scale, the best estimate of the temperature that the dog is exposed to in whatever shelter is available, should be used. For example, the fact that a dog is indoors may be irrelevant if the environment does not allow the animal to maintain thermal homeostasis (e.g. in a garage or shed). Similarly, a dog that has access to a well constructed dog house with thick bedding may be able to maintain thermal homeostasis even though it is outdoors during winter months.

Environmental Health Scale

In the environmental health scale (Appendix, Scale 3), the kennel, pen, yard, cage, barn, room, tie-out, or other area where the animal is confined or spends the majority of its time is evaluated for the presence of feces and urine, clutter, trash, and debris. An owner's duty to provide an environment that is sanitary, comfortable, and safe may be explicitly stated in cruelty statutes, or be implicit in the general duty to provide proper shelter. For example, the cruelty statute in Maine specifies a duty to provide humanely clean conditions, in Maryland it specifically includes a duty to provide proper air and space, in Michigan it specifically prohibits overcrowding, and in Minnesota and Ohio it imposes a duty for providing proper air. Massachusetts requires a sanitary environment. The Michigan statute specifically defines sanitary conditions as "free from health hazards including excessive animal waste or other conditions that endanger an animal's health." Common sense suggests that unsanitary conditions can predispose to skin infections and other diseases, and make the dog uncomfortable. Debris and trash can inhibit normal movement, and be dangerous to the animal if there are sharp edges or protrusions that can catch a collar or chain.

Physical Care Scale

A scale for evaluating the condition of the dog's coat and nails to determine if there evidence of neglect is shown in Appendix, Scale 4. Existing cruelty laws do not impose a specific duty to groom a dog. However, allowing a dog to become heavily matted or develop overgrown nails is in conflict with prohibitions against causing unnecessary pain or suffering, and with statutes requiring a normal standard of care. The development of pure breed dogs has resulted in some coat types that require periodic grooming by humans in order to maintain the health and well being of the dog. Such a duty of care is implicit in the prohibition against causing unnecessary suffering. Dogs with these types of coats are unable to adequately self-groom, and failure to provide such grooming eventually results in heavy matting. A heavily matted dog is under extreme discomfort because of the tension on its skin, interference with normal mobility, inability to relieve any discomfort or irritation by scratching or self grooming, and irritation from embedded foreign material, external fecal impaction, and urine scald. Such a condition will make external parasite control impossible. It is not uncommon for fecal impaction in the perineal hair to lead to maggot infection of the flesh in the perineal region.

In the natural state, a dog's nails are kept short through the course of normal movement. However, many domestic pets, particularly those that are confined for extended periods and receive little exercise, require periodic nail trimming. When extreme, overgrown nails can penetrate the footpad, causing pain, lameness, and possibly infection, and force the feet into an unnatural position, causing gait alterations and discomfort.

Interpreting the TACC Score

The TACC score is intended to be a simple, easy to use objective screening tool for evaluating neglect of both individual and multiple animals. It is also intended as a tool for field agents to determine the urgency of evaluation and intervention for an animal, much like the Apgar score used to quickly assess vital status in newborn infants (and recently modified for evaluating neonatal foals).[44] The TACC system may be used by either veterinarians or trained non-veterinarians, including animal control officers, cruelty investigators, and police. It is designed to be useful over a broad range of environmental conditions, and to take into account differences in tolerance for temperature extremes among different ages and breeds. The interpretation of the TACC score is described in the appendix.

When multiple scales are used to obtain a TACC score, a dog whose care or condition is sub-optimal in multiple areas is at greater risk of neglect than a dog with the same degree of neglect in only one area. For example, a malnourished dog will be less tolerant of environmental stress than a well nourished dog of normal body weight, as will a dog whose thermoregulation is impaired by a dirty, heavily matted coat.

Disclaimer and Limitations

The information presented here regarding individual state cruelty statutes is intended only to illustrate points raised in the text. Anyone working with animal cruelty cases must review the laws in their own state on a regular basis to be aware of changes and to understand the laws in their full context.

The TACC score is intended to be a simple screening device for developing an index of suspicion that intentional or unintentional neglect may be present. A low TACC score does not preclude a diagnosis of abuse upon

more careful examination of the animal and its living situation. For example, an indoor pet in good body condition with sanitary living conditions could still be at risk of many forms of mental and physical abuse. Similarly, a high TACC score indicates a strong suspicion of either acute or chronic neglect, although it is not necessarily pathognomonic for neglect, particularly if only one scale is used. However, if an animal receives a high TACC score on multiple scales, the probability of neglect is very likely.

The TACC score is not intended to replace definitive assessment of any animal's situation by a veterinarian or trained law enforcement agent. However, we believe that the TACC system is useful for initial screening of a dog that may be in danger and prioritizing reports of neglect for definitive assessment. It may also be useful for quantifying the degree of neglect, when a determination of neglect is made. Because it is based on objective standards, it hopefully will remove much of the subjectivity that has made evaluating cases of animal abuse so challenging.

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Footnotes

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c Ray Coppinger, Personal Communication, May, 1997. Hampshire College, Amherst, MA.

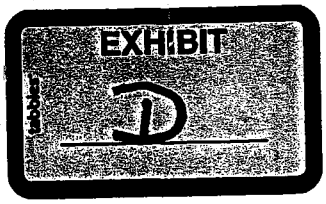
d Gregg Pettelkow, Northwest Airlines, Personal Communication, April 18, 1997.

Acknowledgments

I wish to thank Ms. Belinda Lewis, Mr. Carter Luke, Mr. Stephen Wise, Mr. Walter Kilroy and Capt. Bob Fennessy, and Drs. Ray Coppinger, Patricia Olson, Andrew Rowan, and Leslie Sinclair for their critical review and helpful comments on earlier drafts, or portions, of this manuscript. Ft. Wayne Department of Animal Care and Control, MSPCA Law Enforcement Division, and Ms. Lori Donley for field evaluation of the TACC scales.

Gary Patronek, VMD, PhD

Dr. Patronek is currently the Acting Director at the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine. He was formerly the director for the Chester County SPCA in West Chester, Pennsylvania. A graduate of Purdue University, his PhD thesis work was in epidemiology. He is member of the Indiana Veterinary Medical Association Animal Welfare Committee and the executive committee of the American Association of Veterinarians for Animal Welfare.



Though not required for AAALAC accreditation, all holding rooms ma on lighting cycle function within each room if required by the veterina requirements such as sensor type, location and proofing of on-off or ill room shall be determined on a per project basis.

Lighting operation in animal holding rooms shall be based on species. lighting levels in various areas of an animal facility.

Lighting Levels

Function/Space	Lighting Levels in lux (FC)
Animal facilities	270-800 (25 – 75) multi-level
Aquatic Facilities	540 – 800 (50 - 75) Note 1
Animal Facility Surgery rooms	1075 (100)
Non-human primate holding ante rooms	540 (50)
Procedure, Necropsy and treatment rooms	1075 (100)
Animal Facility Surgery table area	2200 (200)
Storage room	220 - 325 (20 – 30)
Locker and Toilet rooms	220 - 325 (20 – 30)
General storage	220-325 (20 – 30)
Offices and Administration area	430 – 650 (40 – 60)
Cage wash areas	750 (70)
Feed and bedding areas, autoclave and cage wash service areas	220 - 325 (20 – 30)
Receiving/decontamination area	220 - 325 (20 – 30)
Animal Facility corridors	430 – 540(40 – 50)
MPW waste holding	220 - 325 (20 – 30)

Note: 1. Possible dimming to simulate dusk and dawn cycles

Lighting Operation for Large Animals and Non-Human Primates: Diu provides a lighting cycle of 12 hours "on" and 12 hours "off", but shal duration, or provide for multiple cycles in a single day at user discretic provide an illumination level between 375-540 lux (35 – 50 FC), while "off" cycle requires all three lamps to be extinguished.

One local engineered override switch shall be required outside each ho cycle which would bring on the two lamps of the "on" cycle, plus one FC) level within each room.

For large animals and non-human primates one lighting fixture per hol

COMMENT AND RESPONSE DOCUMENT
FINAL-FORM REGULATION
LIST OF COMMENTATORS

Commercial Kennel Canine Health Regulations
AGR 2-170
7 PA Code, Chapter 28a

1. Independent Regulatory Review Commission

LEGISLATIVE COMMENTATORS

1. Honorable Mike Brubaker, State Senator, 36th District, Chairman Senate Agriculture & Rural Affairs Committee, The State Capitol Senate Box 203036, Harrisburg, PA 17120-3036

2. Honorable Michael K. Hanna, Member, Pennsylvania House of Representatives, Chairman House Agriculture & Rural Affairs Committee, 302 Main Capitol, P.O. Box 202076, Harrisburg, PA 17120-2076

3. Following Members, Pennsylvania House of Representatives:
Honorable Sam Smith, Republican Leader
Honorable Jerry A. Stern, Republican Caucus Secretary
Honorable John A. Maher, Republican Chairman
Honorable Samuel E. Rohrer
Honorable Scott E. Hutchinson
Honorable Jim Cox
Honorable Gordon R. Denlinger
Honorable Mark K. Keller
Honorable David R. Millard
Honorable Tina Pickett
Honorable Jeffrey P. Pyle
Honorable Michele Brooks
Honorable Michael E. Fleck
Honorable Carl Walker Metzgar
Honorable Richard R. Stevenson
Honorable Martin T. Causer

4. Honorable James E. Casorio, Jr., Member, Pennsylvania House of Representatives, P.O. Box 202056, Harrisburg, PA 17120-2056

5. Honorable Jennifer L. Mann, Member Pennsylvania House of Representatives, Majority Caucus Secretary, 132nd Legislative District, 333 Main Capitol, P.O. Box 202132, Harrisburg, PA 17120-2132

ARCHITECTS, ENGINEERS AND BIOLOGY AND LAW SCHOOL PROFESSORS

1. ARQ Architects: Lucinda A. Schlaffer, AIA, LEED AP, Partner- ARQ Architects
   1 Government Street, Suite 2, Kittery, ME 03904 and 34 East 25th Street, Baltimore, MD 21218

2. JACKSON & RYAN ARCHITECTS: Martha T. Seng, PAIA, Principal
   2370 Rice Blvd, Suite 210
   Houston, TX 77005

3. DESIGN LEARNED, INC.: C. Scott Learned, PE, LEED AP
   Pennsylvania PE#053213-E
   116 Main Street
   Norwich, CT 063360

4. Arthur E. Dunham, Ph.D., Professor and Associate Chair, Department of Biology
   University of Pennsylvania
   433 South University Ave.
   Philadelphia, PA 19104-6018

5. Robert Mikesell, Ph.D., Senior Instructor, Department of Dairy and Animal Science
   The Pennsylvania State University

6. Kenneth B. Kephart, Ph.D., Professor of Animal Science
   Department of Dairy and Animal Science
   The Pennsylvania State University

7. Verne R. Smith, Esquire, Professor of Law,
   Animal Law and Commercial Business Transactions
   Widener School of Law

HUMANE SOCIETIES

1. The American Society for the Prevention of Cruelty to Animals (ASPCA)
   Commentator:
   Cori A. Menkin, Esq., Senior Director of Legislative Initiatives, Government Relations, and Lila Miller, DVM, Vice- President Veterinary Outreach and Veterinary Advisor, ASPCA, 520 8th Avenue, New York, NY 10018

2. Pennsylvania Society For The Prevention Of Cruelty To Animals
   Commentators:
   Submitted by: Susan Cosby CEO, Pennsylvania SPCA, Liz Williamson Public Relations Associate Pennsylvania Society for the Prevention of Cruelty to Animals Headquartered at: 350 East Erie Avenue, Philadelphia, PA 19134 and Dr. Ravi Murarka, Medical Director, Pennsylvania SPCA

3. Humane Society of the United States

Commentator:
Sarah Speed, Pennsylvania State Director, Humane Society of the United States

4. Federated Humane Societies Of Pennsylvania

Commentator:
Anne Irwin, Legislative Chairman, Federated Humane Societies of PA
Executive Director, Bucks County SPCA

RESCUE ORGANIZATIONS

1. Bill Smith, Main Line Animal Rescue, 303 West Lancaster Ave., Wayne, PA 19087

2. Dogs Trust, Clarissa Baldwin, OBE, Secretary & Chief Executive, 17 Wakley Street, London EC1V 7RQ

DOG ADVOCACY ORGANIZATIONS, ASSOCIATIONS AND DOG CLUBS

1. United Against Puppy Mills

Commentators:
Helen Ebersole, MS, President;
L. Thomas Gemmill, VMD, Veterinary Advisor;
Cyndy Baxter, Esquire, Legislative Chair;
Jenny Stephens, Executive Secretary
P.O. Box 7202, Lancaster, PA 17604

2. Pennsylvania Federation of Dog Clubs (PFDC) and National Animal Interest Alliance (NAIA)

Commentator:
Julian Prager, PFDC Legislative Chair and NAIA Legislative Coordinator
7552 Stein Road, Zionsville, PA 18092-2920

3. Linda North Glick, Legislative Liaison Chair, Dandie Dinmont Terrier Club of America, 103 Red Rambler Drive, Lafayette Hill, PA 19444-2108

4. The Cultured Canine, LLC, Diane Podolsky, CPDT, CTC

DOG AND PET REGISTRY ORGANIZATIONS

1. Michael Glass, America's Pet Registry, Inc., 118 Mulberry Court
Collegeville, Pennsylvania 19426

2. BobYarnall, Jr., President and CEO American Canine Association, Inc.

DOG LAW ADVISORY BOARD MEMBERS

1. Marsha Perelman, 1 Cherry Lane, Wynnewood, Pennsylvania 19096

2. Thomas G. Hickey, Sr., Member, PA Dog Law Advisory Board and DogPAC Chairman, PO Box 406, Lima, PA 19037-0406

3. Joan Brown, Member, PA Dog Law Advisory Board and CEO, Humane League of Lancaster County

4. John Gibble, Member Dog Law Advisory Board, President, Elizabethtown Beagle Club; Past President, Northeast Beagle Gundog Federation; Past President, Pennsylvania Beagle Gundog Association, 829 Trail Road North, Elizabethtown, Pennsylvania 17022

5. Marlene Lippert, Member Pennsylvania Dog Law Advisory Board, 1849 Meiser Road, Thompsontown, Pa 17094

6. Mary Remer, Member Pennsylvania Dog Law Advisory Board

KENNEL AND PET INDUSTRY ASSOCIATION

1. Pennsylvania Professional Dog Breeders Association (PPDBA)
Commentator:
Walt Peechatka, Senior Consultant
Versant Strategies

2. Pennsylvania Farm Bureau (PFB)
Commentator:
John Bell, Esq.
Governmental Affairs Counsel
Pennsylvania Farm Bureau
510 South 31st Street
Camp Hill 17001-8736

3. Pet Industry Joint Advisory Council, Michael C. Maddox, Esq.
1220 19th Street, N.W., Suite 400
Washington, D.C. 20036

4. Sportsmen's And Animal Owners' Voting Alliance (SAOVA)
Commentators:
Robert Youngs, President Susquehanna Brittany Club and Pennsylvania Director, Sportsmen's and Animal Owners' Voting Alliance
And
Susan Wolf, President, Sportsmen's and Animal Owners' Voting Alliance
315 Stoner Road
Mechanicsburg, PA.

5. PA Kennel Assurance Program (PAKAP)

Commentator:
James E. Burkholder, President
316 Good Road
East Earl, PA 17519

6. Pennsylvania State Grange

Commentator:
Betsy E. Huber, President,
20 Erford Road, Suite 310
Lemoyne, PA 17043

KENNEL OWNERS (Form Letter)

Commentators:

1. Form Letter commentators: See Addendum D – Kennel Owner Commentators – attached hereto and made a part hereof

INDIVIDUALIZED KENNEL OWNERS (Individualized Comments)

2. Judith Comstock, Comstock's Country Kennel, Ulster, PA

3. Thomas Oprendek, President, Totally Pets Inc, 7618 city Ave., Philadelphia, PA 19151

4. MaryAnn Riess, Vision Kennel

5. Sandy Reynolds, Plantation Delight

VETERINARIANS

1. Kate Hurley, DVM, MPVM, U.C. Davis, California

2. Pennsylvania Veterinary Medical Association

Commentator:
Lisa A. Murphy, VMD, DABT, and President
12 Briar Crest Square
Hershey, PA 17033

3. Nadira Williams, VMD, United State Department of Agriculture, Animal Care Agency

4. Humane Society Veterinary Medical Association

Commentator:
Barbara Hodges, DVM, MBA, HSVMA Veterinary Consultant
Humane Society Veterinary Medical Association
2100 L Street, NW
Washington, DC 20037

5. Robert A. Whitney, DVM, DACLAM, RADM (08), USPHS (ret.)
314 2nd Street
Steilacoom, WA 98388

6. Willard Stoltzfus, VMD, Black Horse Animal Hospital
5081 Lincoln Highway
Kinzers, PA 17535

7. Thomas L. Wolfle, MS, DVM, PhD, Public Health Service (ret) Captain (06)
Diplomat American College of Laboratory Animal Medicine
Founding Diplomat, American College of Veterinary Behavior.

8. Dr. M. Rosset

FORM LETTER COMMENTS AND COMMENTATORS

1. American Society For The Prevention Of Cruelty To Animals (ASPCA)
Commentators: See attached spreadsheet of all commentators attached hereto as Addendum A and made a part hereof

2. DOGPAC
Commentators: See attached spreadsheet of all commentators attached hereto as Addendum B and made a part hereof, along with the following: Patricia Faller, 1115 Fleetwood Drive, Carlisle, PA 17013; Nancy Tarlini,4615 Millett street, Philadelphia, PA 19136; Erin Tharp, 1351 Perry Valley Road, Liverpool, PA 17045; Lawrence A Huff, 1608 Walnut Street, Suite 501, Philadelphia, PA 19103

3. DOG PAC – Additional Commentators Summiting Individualized Comments:
Commentators:
Robert Batley, 20 County Lane, Glen Mills, PA 19342
Kris Batley, 975 Westtown Road, West Chester, PA 19382-5700
Amanda Eick-Miller, RVT, Certified Professional Dog Trainer Pawsitively Pets, LLC
2544 Earl St., Wooster, Ohio 44691
Jane Leslie Dalton, Partner, Duane Morris, 30 South 17th Street, Philadelphia, PA 19103
Carol G. Huff, President, Real Estate Investment Strategies, Inc., 1608 Walnut Street, Suite 501Philadelphia, PA 19103
Lawrence A. Huff, 1608 Walnut Street, Suite 501, Philadelphia, PA 19103
Christine Chavlick, 1028 Saxonburg Blvd, Glenshaw, PA 15116
Jack L. Mollin, 330 Blanketflower Lane, Princeton Junction, N.J. 08550

4. United Against Puppy Mills (UAPM)
Commentators: See attached spreadsheet of all commentators attached hereto as Addendum C and made a part hereof

ASPCA E MAIL COMMENTATOR LIST

Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
durr	sandra	Philadelphia	PA	19114-3464	174	5	10/5/2009 14:00
cirocco	lisa	Emmaus	PA	18049-9606	134	24	10/5/2009 14:01
Novosel	Richard	Wexford	PA	15090-7820	28	40	10/5/2009 14:04
Wyatt	Jennifer	Whitehall	PA	18052-1725	183	18	10/5/2009 14:04
Waldner	Joseph	Harrisburg	PA	17111-6935	105	15	10/5/2009 14:04
Brophy	Shirley	Holland	PA	18966-2726	178	6	10/5/2009 14:04
Reed	Virginia	Port Allegany	PA	16743-1110	67	25	10/5/2009 14:04
Benjamin Jr	Norman	Wyalusing	PA	18853-9223	110	23	10/5/2009 14:05
TAGLIENTI	ANNA	Philadelphia	PA	19134-1231	180	2	10/5/2009 14:06
Altomare	Tamra	Telford	PA	18969-2186	53	12	10/5/2009 14:07
Tercha	Brian	Chester	PA	19013-5021	159	9	10/5/2009 14:09
Dunkleberger	David	Doylestown	PA	18901-2898	143	10	10/5/2009 14:11
JONES	JANET	Bangor	PA	18013-9650	137	18	10/5/2009 14:12
Berry	Linda	Pittsburgh	PA	15235-3933	32	43	10/5/2009 14:12
Atkins	Mimi	Pittsburgh	PA	15237-2115	21	40	10/5/2009 14:13
Herb	Heidi	Halifax	PA	17032-9409	104	15	10/5/2009 14:13
Sands	Christine	Havertown	PA	19083-2441	166	17	10/5/2009 14:15
Orozco	Marcelle	West Reading	PA	19611-1301	127	11	10/5/2009 14:15
Berrie	Walter	Trainer	PA	19061-5315	159	9	10/5/2009 14:15
gray	kathleen	Center Valley	PA	18034-9471	131	24	10/5/2009 14:16
Sadowski	Diane	Pittsburgh	PA	15237-3962	30	40	10/5/2009 14:17

ASPCA E MAIL COMMENTATOR LIST

Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Ingersoll	Liz	Sciota	PA	18354-9751	189	16	10/5/2009 14:17
dye	penny	Coraopolis	PA	15108-1704	45	42	10/5/2009 14:19
Smith	Carmelita	New Castle	PA	16102-1843	9	47	10/5/2009 14:20
Kerrigan	Patricia	Willow Grove	PA	19090-1641	152	12	10/5/2009 14:20
Graham	Devon	State College	PA	16803-2614	77	34	10/5/2009 14:21
Hofmann	Charmaine	Langhorne	PA	19047-1018	142	6	10/5/2009 14:21
Baird	Debra	Cranberry Township	PA	16066-4737	12	40	10/5/2009 14:24
DECRESCIO	MALINDA	Philadelphia	PA	19128-1400			10/5/2009 14:24
Hlatky	Joseph	Allentown	PA	18103-6985	131	24	10/5/2009 14:24
Forba	Bonnie	Springville	PA	18844-9702	111	20	10/5/2009 14:25
McMichael	Melissa	Monroeville	PA	15146-2908	25	45	10/5/2009 14:25

ASPCA E MAIL COMMENTATOR LIST

Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Beaverson	Cheryl	Red Lion	PA	17356-9783	94	28	10/5/2009 14:26
DECRESCIO	MICHAEL	Philadelphia	PA	19128-1400			10/5/2009 14:26
Nolan	Karen	Duncansville	PA	16635-4553	80	30	10/5/2009 14:26
KELLER	E	Lancaster	PA	17603-5043	96	13	10/5/2009 14:27
Tenboom	Theresa	Havertown	PA	19083-2607	166	17	10/5/2009 14:27
Pachilis	Jessica	Reading	PA	19606-1810	126	11	10/5/2009 14:29
Toner	Patricia	Philadelphia	PA	19134-3808	177	1	10/5/2009 14:29
myers	nelson	Harrisburg	PA	17109-3525	104	15	10/5/2009 14:30
Geldof	sue	Philadelphia	PA	19135-2727			10/5/2009 14:31
Warshawsky	Rita	Scranton	PA	18510-1404	112	22	10/5/2009 14:32
Demchenko	Vera	Lakeville	PA	18438-3008	139	20	10/5/2009 14:32
Kendall	Lois	Ft Washington	PA	19034-3023	151	12	10/5/2009 14:32
Peine	Rachel	Mont Clare	PA	19453-5169	142	6	10/5/2009 14:32
Kreider	Marcia	Martinsburg	PA	16662-1122	80	30	10/5/2009 14:34

ASPCA E MAIL COMMENTATOR LIST

Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Fellenbaum	Patricia	Broomall	PA	19008-2636	165	26	10/5/2009 14:34
Warriner	Debbi	Chalfont	PA	18914-2046	144	10	10/5/2009 14:34
Oakes	William	Erie	PA	16502-1140	2	49	10/5/2009 14:35
Shive	Patricia	Quakertown	PA	18951-3920	145	24	10/5/2009 14:35
McClellan	Erica	Bellefonte	PA	16823-7636	171	34	10/5/2009 14:35
Dengler	Alison	Pittsburgh	PA	15228-2005	42	37	10/5/2009 14:36
Johnnie	Kimberlee	Portage	PA	15946-7101	73	35	10/5/2009 14:36
Lowry	Liz	West Conshohocken	PA	19428-2846	148	7	10/5/2009 14:37
Barr	Stephanie	Ardmore	PA	19003-2809	149	17	10/5/2009 14:37
McCullough	Debbie	Conshohocken	PA	19428-1413	148	17	10/5/2009 14:37
Albright	Jennifer	Mc Donald	PA	15057-1033	46	46	10/5/2009 14:40
Tyndall	Allison	Millersville	PA	17551-1910	43	13	10/5/2009 14:40
deck	venus	lancaster	PA	17602	96	13	10/5/2009 14:41
Eckert	Sara	Saint Marys	PA	15857-3436	75	25	10/5/2009 14:42
Bauer	June	Lancaster	PA	17603-6525	96	13	10/5/2009 14:43
Maugle	Heidimarie	Doylestown	PA	18901-2051	144	10	10/5/2009 14:43
Collins	Marlene	Norristown	PA	19401-1378	70	17	10/5/2009 14:44
Cerqua	Catherine	Quakertown	PA	18951-5314	53	24	10/5/2009 14:44
funk	peg	Catasauqua	PA	18032-1429	133	18	10/5/2009 14:45
de la Rigaudiere	Camille	Downingtown	PA	19335-5309	155	19	10/5/2009 14:46
Moran	Denise	Drexel Hill	PA	19026-2027	163	26	10/5/2009 14:46
Brand	Karen	Audubon	PA	19403-1865	150	44	10/5/2009 14:47
Krause	Audrey	Wernersville	PA	19565-1624	129	48	10/5/2009 14:48
Horst	Jessyca	Kingston	PA	18704-3313	120	20	10/5/2009 14:49
Boothney	Irene	Hawley	PA	18428-7031	139	20	10/5/2009 14:49
Heffron	Melissa	Swoyersville	PA	18704-2005	120	14	10/5/2009 14:49
Siar	Heather	Boyertown	PA	19512-8486	130	44	10/5/2009 14:50
Huselton	Dolores	Butler	PA	16002-0406	12	40	10/5/2009 14:50
Sabin	Anne	Langhorne	PA	19047-1018	142	6	10/5/2009 14:51
Gingrich	Carolyn	Cleona	PA	17042-2421	101	48	10/5/2009 14:51
Davidson	Anne	Folsom	PA	19033-3019	161	26	10/5/2009 14:51
peace	debbie	Pittsburgh	PA	15228-1017	40	37	10/5/2009 14:52
Mullin	Erin	Kingston	PA	18704-4630	120	20	10/5/2009 14:52
Ely	Sheila	Noxen	PA	18636-9760	117	20	10/5/2009 14:53
Ruppert	Deb	Biglerville	PA	17307-9048	193	33	10/5/2009 14:55

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Johnston	Maria	Greensburg	PA	15601-4955	57	39	10/5/2009 14:56
Wasson	karen	Wattsburg	PA	16442-9125	4	21	10/5/2009 14:57
Lester	Lisa	Johnstown	PA	15904-1225	71	35	10/5/2009 14:58
Bordner	Ellen	Lahaska	PA	18931-0304	29	10	10/5/2009 15:00
Barrett	Fran	Great Bend	PA	18821-9527	111	23	10/5/2009 15:00
Wilderman	Robert	Lansdale	PA	19446-1405	151	12	10/5/2009 15:00
korhan	marie	Holland	PA	18966-5338	178	6	10/5/2009 15:01
Weeden	Marilyn	Pottstown	PA	19465-7421	26	44	10/5/2009 15:01
DELLA PENNA	LILLIAN	Malvern	PA	19355-1519		19	10/5/2009 15:01
McMenamin	Perri	Morrisville	PA	19067-3603	140	10	10/5/2009 15:03
RODRIQUEZ	SHARON	East Freedom	PA	16637-8235	80	30	10/5/2009 15:03
Bi	Melissa	PIttsburgh	PA	15108	44	37	10/5/2009 15:06
Davin	Michael	Irwin	PA	15642-2957	56	39	10/5/2009 15:07
Dittmar	Kathleen	Milford	PA	18337-9644	139	20	10/5/2009 15:07
Lisacek	Kimberly	Philadelphia	PA	19145-4313	185	1	10/5/2009 15:07
De Rosa	Kathleen	Upper Chichester	PA	19061-2465	160	9	10/5/2009 15:11
Maciunas	Audrey	Collegeville	PA	19426-4128	147	44	10/5/2009 15:11
Miller	Gordon	Womelsdorf	PA	19567-9773	129	48	10/5/2009 15:11
Conaway	Connie	Canonsburg	PA	15317-1149	48	46	10/5/2009 15:12
Wolf	Lynn	Birdsboro	PA	19508-8583	128	44	10/5/2009 15:12
Reho	Joanne	Star Junction	PA	15482-0224	52	32	10/5/2009 15:12
Bihoreau	Diana	Lebanon	PA	17042-9763	102	48	10/5/2009 15:13
Raifsnider	Bethany	Lancaster	PA	17603-3345	96	13	10/5/2009 15:13
Pilkington	Charles	Villanova	PA	19085-1127	161	17	10/5/2009 15:15
Graver	Jeffrey	Malvern	PA	19355	167	19	10/5/2009 15:15
steich	cindy	Quakertown	PA	18951-3751	145	24	10/5/2009 15:16
Griffenberg	Dolores G	Conshohocken	PA	19428-1745	148	17	10/5/2009 15:17
Cosgray	Erin	Waynesburg	PA	15370-8210	50	46	10/5/2009 15:19
Runkle	Betty	Reading	PA	19606-3481	130	11	10/5/2009 15:19
Pagan	Ali	Philadelphia	PA	19137-1413	177	5	10/5/2009 15:19
smith	lisa	Lansdale	PA	19446-2925	53	24	10/5/2009 15:19
Mendrola	Jeannine	Broomall	PA	19008-1746	165	26	10/5/2009 15:19
V.	BEN	Plymouth	PA	18651-1627	119	14	10/5/2009 15:20
Damiani	Norma	Allentown	PA	18109-1934	133	16	10/5/2009 15:20
Schaub	Shirlee	Philadelphia	PA	19103	182	1	10/5/2009 15:20

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Gerney	Janet	Willow Grove	PA	19090-4352	153	4	10/5/2009 15:20
Hechler	Karen	Denver	PA	17517-9611	99	36	10/5/2009 15:21
sandlin	nedra	Coraopolis	PA	15108-3708	15	46	10/5/2009 15:22
Taylor	Christine	Altoona	PA	16602-3349	79	30	10/5/2009 15:23
Pagan	Alicia	Philadelphia	PA	19111-5822	202	2	10/5/2009 15:23
Mielo	Laurie	Clarks Summit	PA	18411-9625	114	22	10/5/2009 15:23
Olenick	Rose	Philadelphia	PA	19111-4905	202	5	10/5/2009 15:23
Werner	Christine	Lock Haven	PA	17745-2632	76	35	10/5/2009 15:24
Peacock	Kimberly	Perkasie	PA	18944-2466	144	10	10/5/2009 15:24
Folmer-Brown, DVM	Susan	Mechanicsburg	PA	17050-3186	87	31	10/5/2009 15:24
Garman	Susan	Enola	PA	17025-2626	87	31	10/5/2009 15:24
Dittmar	Christian	Milford	PA	18337-9644	139	20	10/5/2009 15:26
BLESSING JR	FRED	Wyomissing	PA	19610-1131	128	48	10/5/2009 15:26
Kromer	Scott	Pottstown	PA	19464-2162	146	44	10/5/2009 15:27
Weidner	Shirlene	Reading	PA	19605-1617	126	11	10/5/2009 15:27
Crane	Helen	Philadelphia	PA	19107-5647	182	1	10/5/2009 15:28
Rendick	Michael	Hazle Township	PA	18202-3274	116	14	10/5/2009 15:28
Wasser	Crista	Ebensburg	PA	15931-1418	72	35	10/5/2009 15:28
Krajkowski	Maryann	Philadelphia	PA	19137-1717	177	5	10/5/2009 15:30
carney	j	Phoenixville	PA	19460-4317	157	19	10/5/2009 15:31
steich	patricia	Sellersville	PA	18960-2316	145	10	10/5/2009 15:31
McKenna	Loretta	Philadelphia	PA	19154-3037	169	5	10/5/2009 15:31
Moore	David	Morton	PA	19070-1912	165	26	10/5/2009 15:31
DeMezza	Rosalie	Levittown	PA	19057-1219	141	6	10/5/2009 15:31
Sheppard	Jonathan	West Grove	PA	19390-9237	158	19	10/5/2009 15:31
Fretz	Jane	Allentown	PA	18103-9745	134	16	10/5/2009 15:32
Prescott	Terry	South Park	PA	15129-9651	39	37	10/5/2009 15:33
Mason	Nicole	Sharpsville	PA	16150-4048	7	50	10/5/2009 15:33
Lawless	Kathy	Harleysville	PA	19438-1940	70	24	10/5/2009 15:36
monardo	vincent	Pittsburgh	PA	15237-3320	21	40	10/5/2009 15:36
Bennett	Julie	Narvon	PA	17555-9773	99	36	10/5/2009 15:36
dunkle	linda	Jersey Shore	PA	17740-0334	84	23	10/5/2009 15:38
Fisher	Helen	Philadelphia	PA	19149-2323	174	2	10/5/2009 15:39
Birchard	Tina	Brackney	PA	18812-8043	111	23	10/5/2009 15:40
Powell	Charlotte	Phila	PA	19116-2926	170	5	10/5/2009 15:40

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Palmisiano	Jean	Pittsburgh	PA	15236-4321	38	37	10/5/2009 15:42
STRZELECKI	MELANIE	Pottstown	PA	19464-1557	146	44	10/5/2009 15:44
Burkle	Carol	Doylestown	PA	18902-6520	29	10	10/5/2009 15:44
flowers	bonnie	New Kensington	PA	15068-6608	54	45	10/5/2009 15:45
Abramovic	Marissa	Irwin	PA	15642-3706	56	39	10/5/2009 15:46
eshbach	marlin	Boyertown	PA	19512-1812	130	11	10/5/2009 15:46
Lecce	Tamara	Irwin	PA	15642-4708	58	39	10/5/2009 15:46
Landis	Cianne	Lansdale	PA	19446-5924	70	44	10/5/2009 15:46
Reddig	Rosemarie	Newtown	PA	18940-2320	31	10	10/5/2009 15:47
Martino	Joseph	Philadelphia	PA	19111-3541	170	5	10/5/2009 15:48
Killinger	Tracey	Chambersburg	PA	17202-9202	89	33	10/5/2009 15:49
Lisnock	Rosemary	Drums	PA	18222-2730	116	27	10/5/2009 15:49
Bolton	Mary	West Chester	PA	19380-6942	156	19	10/5/2009 15:51
Bradley	Veronica	Berwyn	PA	19312-2033	167	26	10/5/2009 15:51
Lynch	James E	Bethlehem	PA	18020-7633	138	18	10/5/2009 15:52
Loughman	Victoria	Leola	PA	17540-1235	43	36	10/5/2009 15:53
Probola	Eric	East Pittsburgh	PA	15112-1404	34	43	10/5/2009 15:53
O'Rourke	Sylvia	Williams Township	PA	18042-6984	136	24	10/5/2009 15:53
Weitzenkorn	Kat	Pottstown	PA	19464-3022	146	44	10/5/2009 15:54
Bosler	Jan	Doylestown	PA	18901-2234	143	10	10/5/2009 15:56
Henry	Kristen	Philadelphia	PA	19148-1126	184	1	10/5/2009 15:56
Horvath	John	Zion Grove	PA	17985-9503	124	29	10/5/2009 15:57
Feick	Sandy	Birdsboro	PA	19508-2217	130	11	10/5/2009 15:57
Zelazny	Alicia	Indiana	PA	15701-1626	87	31	10/5/2009 15:58
Keller	Antoinette	Philadelphia	PA	19136-3819	172	2	10/5/2009 15:58
Backus	Lara	Sewickley	PA	15143-0586	44	37	10/5/2009 15:58
Novack	Natalie	Philadelphia	PA	19114-2620	169	5	10/5/2009 15:58
Sauers	S.L.	Carnegie	PA	15106-1704	45	37	10/5/2009 16:05
Asuncion	Dominque	Philadelphia	PA	19129-1545	197	7	10/5/2009 16:07
Peine	Tim	Mont Clare	PA	19453-5169	54B	54	10/5/2009 16:08
Getz	Ruth	Pittsburgh	PA	15226-1134	22	42	10/5/2009 16:09
Clark	Yvonne	Wilkes Barre	PA	18702-5420	121	14	10/5/2009 16:10
evans	karen	Philadelphia	PA	19136-1230	169	5	10/5/2009 16:13
Shoemaker	Lisa	Philadelphia	PA	19131-2509	194	7	10/5/2009 16:13
Saunders	Rose Marie	Lancaster	PA	17603-4807	145	24	10/5/2009 16:13

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Evans	Michelle	Erie	PA	16509-3164	3	49	10/5/2009 16:13
Mathias	Christine	Holland	PA	18966-2323	178	6	10/5/2009 16:17
Napier	Linda	Wayne	PA	19087-2856	157	19	10/5/2009 16:18
Murray	Rosemary	Royersford	PA	19468-2542	146	44	10/5/2009 16:20
Poorman	Allison	Murrysville	PA	15668-1241	25	41	10/5/2009 16:21
Hoodak	Terry	Yardley	PA	19067-2820	31	10	10/5/2009 16:21
Binderman	Roberta	Philadelphia	PA	19103-4640	182	1	10/5/2009 16:23
Payne	Samantha	Philadelphia	PA	19104-4452	188	8	10/5/2009 16:23
Irving	Janice	Bensalem	PA	19020-4054	18	6	10/5/2009 16:24
ASENCIO	JENNIE	Levittown	PA	19054-4235	140	10	10/5/2009 16:25
Corbitt	Kitty	Oxford	PA	19363-1163	13	9	10/5/2009 16:26
Higgins	Linda	Flourtown	PA	19031-2014	154	7	10/5/2009 16:26
Creamer	Timothy	Lancaster	PA	17602-2758	96	13	10/5/2009 16:27
bukovich	carolyn	Venetia	PA	15367-2355	40	37	10/5/2009 16:29
hexon	janese	Pittsburgh	PA	15217-2637	23	43	10/5/2009 16:30
Osimo	terri	Warminster	PA	18974-3009	29	12	10/5/2009 16:32
Spieler	Charlotte	Bensalem	PA	19020-2913	18	6	10/5/2009 16:35
Costa	Carol	Wexford	PA	15090-7909	28	40	10/5/2009 16:36
HUBER	DONNA	Hatboro	PA	19040-4821	152	12	10/5/2009 16:38
Tallichet	Elizabeth	State College	PA	16801-8245	171	34	10/5/2009 16:38
Penglase	Penny	Philadelphia	PA	19137-2124	177	5	10/5/2009 16:39
Arieta	Melissa	Lehighton	PA	18235-9365	122	29	10/5/2009 16:42
Speight	Don & Paula	Media	PA	19063-4138	161	9	10/5/2009 16:42
Hart	Suzanne	Effort	PA	18330-9308	118	16	10/5/2009 16:42
Andre	Rosalynn	York	PA	17402-4652	93	28	10/5/2009 16:43
Becker	Joyce	Pocono Pines	PA	18350-0755	118	14	10/5/2009 16:43
Warren	Doreen	Erie	PA	16511-1135	1	49	10/5/2009 16:44
Conahan	Laurie	Hughesville	PA	17737-9032	84	23	10/5/2009 16:45
Houck	Gilbert	New Cumberland	PA	17070-2151	88	31	10/5/2009 16:45
Gasson	Susan	Ardmore	PA	19003-1934	166	17	10/5/2009 16:45
BOWMAN	KAREN	Levittown	PA	19054-3616	140	10	10/5/2009 16:45
Schmidt	Courtnie	Norristown	PA	19401-5207	150	44	10/5/2009 16:45
nardone	maria	West Chester	PA	19382-4960	156	19	10/5/2009 16:47
Lawville	Nancy	Drexel Hill	PA	19026-1423	164	26	10/5/2009 16:48
Saylor	Virginia	Greensburg	PA	15601-6850	59	39	10/5/2009 16:50

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Fry	Patricia Ann	Mohnton	PA	19540-7822	128	48	10/5/2009 16:50
Kuczynski	patricia	Feasterville Trevose	PA	19053-6325	142	6	10/5/2009 16:51
Oravec	Gwen	Bethlehem	PA	18018-5106	133	18	10/5/2009 16:53
hershberger	greg	West Sunbury	PA	16061-3130	8	21	10/5/2009 16:53
carr	michele	Collegeville	PA	19426-1750	147	44	10/5/2009 16:53
maldonado	jill	Philadelphia	PA	19103-1095	182	1	10/5/2009 16:56
Lonsdorf	Deborah	Narberth	PA	19072-2404	148	17	10/5/2009 16:56
Rudi	Lisa	Philadelphia	PA	19104-2937	188	8	10/5/2009 16:56
degiosafatto	anthony	Philadelphia	PA	19111-2734	172	3	10/5/2009 16:57
Smith SGM USA RET	Charles	York	PA	17402-2718	47	13	10/5/2009 16:58
ledger	tim	Morrisville	PA	19067-5931	140	10	10/5/2009 16:58
Miller	Shirley	Leesport	PA	19533-0156	125	11	10/5/2009 16:59
casciegna	barbara	Yardley	PA	19067-5717	31	10	10/5/2009 17:00
morgan	earl	Radnor	PA	19087-3608	165	17	10/5/2009 17:00
Frank	William D	Altoona	PA	16602-4533	79	30	10/5/2009 17:01
Pakes	Kelly	Rome	PA	18837-9420	110	23	10/5/2009 17:02
Bensel	James	Leeper	PA	16233-1516	63	21	10/5/2009 17:07
procanyn	brenda	Whitehall	PA	18052-3455	133	18	10/5/2009 17:07
Schultz	Martha	Lafayette Hill	PA	19444-1930	148	7	10/5/2009 17:09
McQuade	James	Pittsburgh	PA	15217-2637	23	43	10/5/2009 17:09
Brightbill	Robin	Harrisburg	PA	17112-8929	105	15	10/5/2009 17:12
Traynor	Patricia	Hatfield	PA	19440			10/5/2009 17:13
rheuban	leigh	Phila	PA	19114-1954	169	5	10/5/2009 17:13
Toth	Pauline	Philadelphia	PA	19122-1516	181	2	10/5/2009 17:15
Longenecker	Greta	North Wales	PA	19454-3612	61	12	10/5/2009 17:15
Parker	Patricia	Lewisburg	PA	17837-1517	85	23	10/5/2009 17:17
Smith	Carole	New Oxford	PA	17350-8756	193	33	10/5/2009 17:17
Terek	Elizabeth	Quakertown	PA	18951-5220	145	24	10/5/2009 17:18
Piunti	Pamela	Chalfont	PA	18914-2319	160	9	10/5/2009 17:20
Kemp	Ryan	Philadelphia	PA	19128-5219	194	7	10/5/2009 17:21
Lowery	Michael	Bear Creek Township	PA	18702-8252	118	14	10/5/2009 17:21
Kistler	Robert	Bechtelsville	PA	19505-9304	134	11	10/5/2009 17:22
Tomaszewski	Melissa	Reading	PA	19606-9071	130	11	10/5/2009 17:22
White	Kathleen	Wellsboro	PA	16901-1367	68	25	10/5/2009 17:23
lieberman	steve	Phila	PA	19152-1824	174	5	10/5/2009 17:23

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Edwards	Mary Jane	Pittsburgh	PA	15234-1024	42	37	10/5/2009 17:25
Howard	Barbara	West Chester	PA	19380-1532	158	19	10/5/2009 17:25
Lucas	Larra	Glen Rock	PA	17327-1001	93	28	10/5/2009 17:26
Sanner	Joan	Cambridge Springs	PA	16403-2066	6	50	10/5/2009 17:29
Mills	Emily	Titusville	PA	16354-4147	6	50	10/5/2009 17:29
Eberle	Dianne	New Columbia	PA	17856-9216	85	23	10/5/2009 17:30
Brown	Diane	Lewisberry	PA	17339-8920	196	31	10/5/2009 17:32
mcfarlane	joyce	Philadelphia	PA	19128-1617	194	3	10/5/2009 17:33
Neizmik	Terri	West Mifflin	PA	15122-3031	38	43	10/5/2009 17:34
foster	joni	Grove City	PA	16127-1326	8	50	10/5/2009 17:36
Hlutkowsky	Shari	Pittsburgh	PA	15241-1518	40	37	10/5/2009 17:37
Licwinko	Monica	Norristown	PA	19401-3022	70	17	10/5/2009 17:37
beccari	maureen	Richboro	PA	18954-1335	178	6	10/5/2009 17:38
Mazur	Lisa	Natrona Heights	PA	15065-1843	33	38	10/5/2009 17:38
Moore	Troy	Nottingham	PA	19362-9784	13	9	10/5/2009 17:39
Janusko	Robert	Bethlehem	PA	18018-1807	135	18	10/5/2009 17:39
Dopsovic	Michelle	Slatington	PA	18080	183	29	10/5/2009 17:39
Bringenberg	Audrey	Bethlehem	PA	18018-2860			10/5/2009 17:40
DeFee Mendik	Natalie	Claridge	PA	15623-1940	54	39	10/5/2009 17:40
Goodwin	Trudy	Wyalusing	PA	18853-9438	110	23	10/5/2009 17:42
Morelli	Elizabeth	Oakmont	PA	15139-1051	33	38	10/5/2009 17:42
forman	wendy	Philadelphia	PA	19103-4634	182	1	10/5/2009 17:45
Bockowski	Laura	North Wales	PA	19454-3341	61	12	10/5/2009 17:45
May	Lacey	Buffalo Mills	PA	15534-7926	69	30	10/5/2009 17:46
Tabrosky	Judy	Pittsburgh	PA	15229-1807	20	40	10/5/2009 17:47
Gentile	Stacey	Waterford	PA	16441-9019	3	21	10/5/2009 17:48
Fisher	Robin	Philadelphia	PA	19111-3538	202	5	10/5/2009 17:50
Caolo	Rosemary	Scranton	PA	18510-1902	112	22	10/5/2009 17:51
Tileston, MA, MT-BC, C	Peggy	Philadelphia	PA	19119-2663	200	4	10/5/2009 17:51
Clisham	Carlynn	Harrisburg	PA	17112-3714	105	15	10/5/2009 17:52
ciullo	diane	Scranton	PA	18505-1610	112	22	10/5/2009 17:54
Hill	Julie	Glenside	PA	19038-5409	153	4	10/5/2009 17:54
Reinhart	Donna	Phila	PA	19128-3053	200	3	10/5/2009 17:56
coleman	kimberley	Coaldale	PA	18218-1527	124	29	10/5/2009 17:56
Hritz	Clifford	Philadelphia	PA	19146-1945	186	8	10/5/2009 17:56

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
FISHER	SUSAN	Willow Grove	PA	19090-1314	152	12	10/5/2009 17:57
Stewart	Mary	Clearfield	PA	16830-2681	74	25	10/5/2009 17:58
rybas	barbara	Andalusia	PA	19020-7109	18	6	10/5/2009 17:59
Bensel	Jimmy	Stevens	PA	17578-8100	37	36	10/5/2009 17:59
kehr	pam	York	PA	17406-8643	94	13	10/5/2009 18:01
Peck	Michael	Williamsport	PA	17701-4065	83	23	10/5/2009 18:02
Michalisko	Jamie	York	PA	17402-4300	47	13	10/5/2009 18:03
Doyle	Marianne	Broomall	PA	19008-3419	165	26	10/5/2009 18:05
Popatak	Cheryl	Pittsburgh	PA	15202			10/5/2009 18:06
MARTINEZ-ARGENTO	ANNA	York	PA	17402-4413	94	28	10/5/2009 18:07
Altrath	Denise	Fredericksburg	PA	17026-9769	102	48	10/5/2009 18:08
Armour	Paula	Erie	PA	16510-1802	4	49	10/5/2009 18:10
Pirolli	Kelly	Philadelphia	PA	19154-1426	170	5	10/5/2009 18:10
O'Bryant	Ronda	Butler	PA	16002-4008	12	40	10/5/2009 18:14
Tarasovitch	Denise	Fairview	PA	16415-2303	3	49	10/5/2009 18:14
boyer	karen	New Holland	PA	17557-9362	99	36	10/5/2009 18:14
Sonne	Jane	Bethlehem	PA	18018-1422	135	18	10/5/2009 18:15
Bolen-Ellinger	Monica	Wallingford	PA	19086-6601	161	9	10/5/2009 18:17
DOUGAL	TERRI	Monroeton	PA	18832-8722	110	23	10/5/2009 18:18
Randazzo	David	Meadville	PA	16335-2724	6	50	10/5/2009 18:18
richards	kathy	Bethlehem	PA	18018-6426	133	18	10/5/2009 18:18
Dancho	Alison	Nazareth	PA	18064-8558	138	18	10/5/2009 18:18
Haag	Wendy	Wallingford	PA	19086-6743	168	9	10/5/2009 18:19
good	Ryan	Williamsport	PA	17701-2546		23	10/5/2009 18:19
Pullifrone	Tambra	Littlestown	PA	17340-1358	91	33	10/5/2009 18:21
hill	sharon	Wallingford	PA	19086-6921	161	9	10/5/2009 18:21
Moore	William	Narvon	PA	17555-9325	99	36	10/5/2009 18:22
Bernhard	Brian	Wallingford	PA	19086-6743	168	9	10/5/2009 18:23
welz	mj and dave	Erie	PA	16508-2236	2	49	10/5/2009 18:24
Barve	Purnima	King Of Prussia	PA	19406-2004	149	17	10/5/2009 18:24
Hernandez	Elizabeth	Hatboro	PA	19040-4321	152	12	10/5/2009 18:24
Lengel	Karen	Blue Ridge Summit	PA	17214-0339	90	33	10/5/2009 18:25
Lindenberger	Janis	Mechanicsburg	PA	17055-3512	88	31	10/5/2009 18:25
Sodroski	Phyllis	Jamison	PA	18929-1774	29	6	10/5/2009 18:25
DeMedio	Linda	Plymouth Meeting	PA	19462-1846	61	17	10/5/2009 18:26

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Cook	Terri	Lansdale	PA	19446-3424	53	24	10/5/2009 18:26
Reid	Sue	Ottsville	PA	18942-9714	143	10	10/5/2009 18:27
bagnoli	nancy	Lancaster	PA	17601-1507	41	36	10/5/2009 18:27
Augustine	Lisa	Wyoming	PA	18644-6016	120	14	10/5/2009 18:27
marthaler	carol	eie	PA	16509	3	49	10/5/2009 18:28
Pentz	Mike	Harrisburg	PA	17109-2366	105	15	10/5/2009 18:28
Ganse	Fran	Lancaster	PA	17603-9310	41	13	10/5/2009 18:29
Testa	Janet	Phila	PA	19147-2907	182	1	10/5/2009 18:30
Bowser	Erica	Beaver Springs	PA	17812-9304	82	27	10/5/2009 18:31
pellegrini	judy	Seven Valleys	PA	17360-9181	93	28	10/5/2009 18:31
CUERVO	LAUREN	Churchville	PA	18966-1353	178	6	10/5/2009 18:31
Misa	Susan	Hop Bottom	PA	18824-9760	111	20	10/5/2009 18:31
McCullough	Donna	New Wilmington	PA	16142-2311	7	50	10/5/2009 18:32
Nestler	Idyle	New Tripoli	PA	18066-2124	187	29	10/5/2009 18:33
lacca	rita	Phila	PA	19148-3019	184	1	10/5/2009 18:33
Steinhauer	Yolanda	York	PA	17403-1906	95	28	10/5/2009 18:34
Weinstein	Bob	Belle Vernon	PA	15012-1730	58	39	10/5/2009 18:35
Rodriguez	Deborah	Lancaster	PA	17603-2819	96	13	10/5/2009 18:35
cantelupe	paula	Sharon	PA	16146-3154	7	50	10/5/2009 18:36
Misetic	Eva	Malvern	PA	19355-3116	156	19	10/5/2009 18:37
Cassidy	Virginia	Schwenksville	PA	19473-2355	147	24	10/5/2009 18:39
Frankowski	Kiersten	Pittsburgh	PA	15219-6546	20	38	10/5/2009 18:42
ciappetta	nadine	New Kensington	PA	15068-7063	54	45	10/5/2009 18:42
JAMES	KAITLIN	Hatboro	PA	19040-2100	152	12	10/5/2009 18:42
CARSON	DEBBIE	Charleroi	PA	15022-3022	49	46	10/5/2009 18:44
Thomas	Randy	Middletown	PA	17057-1609	106	15	10/5/2009 18:45
Harm	Amanda	York	PA	17404-2110	95	28	10/5/2009 18:45
Hershberger	Lori	Blandon	PA	19510-9685	124	29	10/5/2009 18:46
freeman	mary l	Plymouth	PA	18651-1612	119	14	10/5/2009 18:46
HAMPTON	K	LAN	PA	17601-3700	97	13	10/5/2009 18:46
Bowes	Jennifer	Havertown	PA	19083-5222	164	26	10/5/2009 18:46
Sorozan	Maria	Meadowbrook	PA	19046-2553	153	4	10/5/2009 18:47
Guthridge	Gail	Wayne	PA	19087-1419	157	19	10/5/2009 18:47
HARDEN	VIRGINIA	Middletown	PA	17057-3568	98	15	10/5/2009 18:47
Dippre	Dawn	Scranton	PA	18505-1919	112	22	10/5/2009 18:48

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Armer	Nancy	Reading	PA	19605-3325	126	11	10/5/2009 18:50
Curry	Susan	Hatfield	PA	19440-2300	151	12	10/5/2009 18:52
Smith	Erica	Thornton	PA	19373-1126	168	26	10/5/2009 18:53
Altmeyer Jr	George	Newtown	PA	18940-1771	31	10	10/5/2009 18:54
Shindle	Gary	Conestoga	PA	17516-9735	43	13	10/5/2009 18:56
Horak	Beverly	New Hope	PA	18938-1241	29	10	10/5/2009 18:57
Cameron	Zachary	Leesport	PA	19533-8802	129	11	10/5/2009 18:58
Bobak	Alyssa	Pittsburgh	PA	15213-3543	23	42	10/5/2009 18:59
Vehar	Wendy	York Haven	PA	17370-8816	47	15	10/5/2009 19:00
Georgino	Lisa	Saint Marys	PA	15857-3435	75	25	10/5/2009 19:01
Busch	Sue	Newtown	PA	18940-3716	31	10	10/5/2009 19:01
Furey	Grace	North Wales	PA	19454-1022	151	12	10/5/2009 19:01
Diamond	Estelle	Newtown Sq	PA	19073-4101	161	26	10/5/2009 19:02
Hill	Jeanene	Reading	PA	19601-2913	98	48	10/5/2009 19:02
Barskey	Dianne	Ashland	PA	17921-1145	126	11	10/5/2009 19:03
kleinbach	Mary Lou	Mertztown	PA	19539-9200	130	11	10/5/2009 19:03
Arboreen	Leroy	Philadelphia	PA	19146-1540	186	8	10/5/2009 19:03
kopp	sandra	Steelton	PA	17113-1524	103	15	10/5/2009 19:04
fulton	rose	Carlisle	PA	17013-8714	199	31	10/5/2009 19:05
Corrigan	Riina	Furlong	PA	18925-1409			10/5/2009 19:05
wissenz	kathleen	Warminster	PA	18974-3658	144	12	10/5/2009 19:07
bauer	colleen	Masontown	PA	15461-1776	50	32	10/5/2009 19:07
henry	lori	Sharpsville	PA	16150-1340	7	50	10/5/2009 19:07
Reed	Amanda	Brookville	PA	15825-4606	66	25	10/5/2009 19:08
neill	rich	Bethel Park	PA	15102-2707	40	37	10/5/2009 19:09
collins	ray	Phoenixville	PA	19460-1513	26	19	10/5/2009 19:10
Hill	David	Reading	PA	19601-2913	127	11	10/5/2009 19:12
Misciagna	Inge C	Lafayette Hill	PA	19444-2008	148	7	10/5/2009 19:12
Sackett	Ellen	Limerick	PA	19468-1839	146	44	10/5/2009 19:12
McAlonan	Pamela	West Chester	PA	19380-2711	156	19	10/5/2009 19:14
Ciraulo	Debra	Bernville	PA	19506-9032	129	11	10/5/2009 19:16
Gibson	Barbara	Philadelphia	PA	19116-1223	170	5	10/5/2009 19:21
Coup	Sally	Shamokin Dam	PA	17876-8201	108	27	10/5/2009 19:22
Lutzko	Linda	Alburtis	PA	18011-5014	187	11	10/5/2009 19:23
gorneau	ruth	West Chester	PA	19382-8326	160	9	10/5/2009 19:23

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Shively	Trudy	Montoursville	PA	17754-1403	84	23	10/5/2009 19:27
Elder	Melissa	Mifflin	PA	17058-0215	82	34	10/5/2009 19:27
Hafner	Katie	North Wales	PA	19454-1038	151	12	10/5/2009 19:27
Patton	Melissa	King Of Prussia	PA	19406-1864	149	17	10/5/2009 19:29
Gross	Julie	Orefield	PA	18069-9113	183	16	10/5/2009 19:31
Smith	Jeffrey A.	West Chester	PA	19380-3814	156	19	10/5/2009 19:32
Chapell	Allan	Shinglehouse	PA	16748-3512	67	25	10/5/2009 19:32
Stamus	Cathy	Philadelphia	PA	19145-1628	186	8	10/5/2009 19:32
BOUCHARD	HEATHER	Mohnton	PA	19540-1716	128	11	10/5/2009 19:32
Meyer	Claudia	Coatesville	PA	19320-2064	26	44	10/5/2009 19:33
MERGLIANO	JAMES	Drexel Hill	PA	19026-4408	164	26	10/5/2009 19:34
Chuba-DiPaolo	Deanna	Duquesne	PA	15110-1957	35	45	10/5/2009 19:34
smith	jill	Pittsburgh	PA	15204-2218	27	42	10/5/2009 19:35
English	Barbara	Warren	PA	16365-3451	3	49	10/5/2009 19:35
sandhagen	amy	Pittsburgh	PA	15234-3204	22	37	10/5/2009 19:35
Kubachka Jr.	Thomas A.	Hatboro	PA	19040-4448	152	12	10/5/2009 19:35
Schmitt	Catherine	Philadelphia	PA	19149-2610	172	2	10/5/2009 19:35
Martin	Tasha	Coraopolis	PA	15108-9426	44	37	10/5/2009 19:37
Corrigan	Kevin	Furlong	PA	18925-1409	29	10	10/5/2009 19:38
Szumlanski	Donna	New Castle	PA	16101-8653	9	47	10/5/2009 19:38
Dornheim	Edmund	Glenside	PA	19038-3903	154	4	10/5/2009 19:41
Habecker	Susan	Lebanon	PA	17046-2026	102	48	10/5/2009 19:41
Davison	Kimberly	Norristown	PA	19403-4216	70	17	10/5/2009 19:45
Butcher	Karen	Lansford	PA	18232-1409	122	14	10/5/2009 19:47
Hanna	Robert	West Chester	PA	19382-5205	156	19	10/5/2009 19:53
Heckel	Patty	Leola	PA	17540-1111	43	36	10/5/2009 19:54
Florijn	Michael	Upper Gwynedd	PA	19446-5331	61	12	10/5/2009 19:55
Saylock	Janice	Duryea	PA	18642-1026	118	22	10/5/2009 19:56
Adams	Sheila	Millersburg	PA	17061-9454			10/5/2009 19:57
Perry	Randall	Eddystone	PA	19022-1442	159	9	10/5/2009 19:58
O'Donnell	Deanne	Greensburg	PA	15601-5344	57	39	10/5/2009 19:58
O'Donnell	DeDe	Greensburg	PA	15601-5344	57	39	10/5/2009 20:00
Uhl	Rebecca	Media	PA	19063-5339	168	9	10/5/2009 20:00
Connell	Regina	Boothwyn	PA	19061-2619	160	9	10/5/2009 20:00
Shepard	Dianne	Charleroi	PA	15022-2547	49	46	10/5/2009 20:01

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Reichenbach	Susan	Philadelphia	PA	19154-1509	170	5	10/5/2009 20:02
Thomas	Ruth	Norristown	PA	19403-2935	150	44	10/5/2009 20:03
Burke	Linda	Wynnewood	PA	19096-4039	166	17	10/5/2009 20:04
Rohrbaugh	Alana	Shrewsbury	PA	17361-1642	93	28	10/5/2009 20:04
Goodwin	Heather	Kutztown	PA	19530-1416	187	11	10/5/2009 20:05
baker wingate	ramona	Altoona	PA	16601-1012	79	30	10/5/2009 20:05
Kemmery	Megan	York	PA	17404-5043	95	28	10/5/2009 20:05
Kelly	Robert	Lehighton	PA	18235-4200	122	29	10/5/2009 20:08
Seibel	Erika	Eighty Four	PA	15330-2589	48	46	10/5/2009 20:08
Evans	Lisa	Ivyland	PA	18974-1226	178	6	10/5/2009 20:09
King	Sandra	Etters	PA	17319-9604	92	15	10/5/2009 20:10
Wooodward	Laura	Lancaster	PA	17603-2510	41	13	10/5/2009 20:12
POPE	BARBARA	Dubois	PA	15801-3638	75		10/5/2009 20:12
Martin Vandeusen	Mary	Northumberland	PA	17857-1521	108	27	10/5/2009 20:12
An	Linda	Ambridge	PA	15003-1104	16	47	10/5/2009 20:13
Hoffman	Sharon	Pittsburgh	PA	15237-1873	21	40	10/5/2009 20:13
Pierwsza	Jan	Natrona Heights	PA	15065-1841	33	38	10/5/2009 20:14
Yost	Laurie	Elizabethtown	PA	17022-8485	37	48	10/5/2009 20:16
ASKEY	BONNIE	Clearfield	PA	16830-3054	74	25	10/5/2009 20:17
Christmas	Sue	Philadelphia	PA	19139-3726	191	8	10/5/2009 20:18
Bearer	Susan	Dubois	PA	15801-3040	75	25	10/5/2009 20:19
Vandiver	Bettie	Souderton	PA	18964-2174	53	12	10/5/2009 20:19
Calderone	Taylor	Womelsdorf	PA	19567-7025	129	48	10/5/2009 20:22
McCleary	Ashley	York	PA	17403-3836	95	28	10/5/2009 20:22
Pfeifer	Nezka	Scranton	PA	18505-2349	112	22	10/5/2009 20:22
Iannetta	Michael	Trainer	PA	19061-5228	159	9	10/5/2009 20:23
Altmeyer	George	Yardley	PA	19067-5780	31	10	10/5/2009 20:26
Miller	David	Reading	PA	19606-8516	126	11	10/5/2009 20:26
Welz	David	Erie	PA	16508-2236	2	49	10/5/2009 20:27
Giorgio-Poole	Marilyn	Ligonier	PA	15658-2418	59	41	10/5/2009 20:30
MCCULLEN	HOPE	Easton	PA	18042-6560	136	24	10/5/2009 20:33
Valent	Angela	Pottsville	PA	17901-1311	123	29	10/5/2009 20:34
Gut	Roslyn	Philadelphia	PA	19116-2804	170	5	10/5/2009 20:35
Noll	Rachel	Annville	PA	17003-8856	101	48	10/5/2009 20:36
Detka	Cindy	Indiana	PA	15701-7113	60	41	10/5/2009 20:39

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Van Wert	Krista	Philadelphia	PA	19123-2701	181	1	10/5/2009 20:39
Teel	Richard J.	Philadelphia	PA	19120-1331	203	3	10/5/2009 20:39
buchter	dot	Philadelphia	PA	19125-2212	175	2	10/5/2009 20:40
Wissler	Melinda	Holtwood	PA	17532-9717	100	13	10/5/2009 20:42
Grove	Bonnie	Chester	PA	19013-2018	159	9	10/5/2009 20:43
Clair	Diane	Myerstown	PA	17067-2162	102	48	10/5/2009 20:43
Dollar	Tina	Harrisburg	PA	17111-5612	106	15	10/5/2009 20:45
wintermute	tammy	Easton	PA	18045-5988	137	24	10/5/2009 20:46
Rohrbaugh	Kathy	Shrewsbury	PA	17361-1409	93	28	10/5/2009 20:46
Ignatenkovas	Vida	Philadelphia	PA	19111-1815	172	3	10/5/2009 20:52
Wojcik	Jennifer	Philadelphia	PA	19134-4910	177	1	10/5/2009 20:53
Jones	kimberly m	Warrington	PA	18976-1777	144	12	10/5/2009 20:54
Rogers	Joanne	Hershey	PA	17033-1858	106	15	10/5/2009 20:56
SPRINGER	Kim	Hermitage	PA	16148-7103	17	50	10/5/2009 20:59
Brewer	Deb	Abbottstown	PA	17301-8962	193	33	10/5/2009 21:02
Hoogerwerff	Carla	Essington	PA	19029-1109	162	26	10/5/2009 21:02
Runer	Evelyn	Yardley	PA	19067-7910	31	10	10/5/2009 21:09
Zitelli	Jennifer	West Mifflin	PA	15122-1822	35	43	10/5/2009 21:10
Watson	Lois	Pittsburgh	PA	15219-5740	19	38	10/5/2009 21:11
Schwartz	Janice	Broomall	PA	19008-1709	165	26	10/5/2009 21:15
Keim Comley	Nancy	Holicong	PA	18928-0338	29	10	10/5/2009 21:19
Payson	Lindsey	Folsom	PA	19033-2202	161	26	10/5/2009 21:21
Anderson	Katie	Pittsburgh	PA	15234-1024	42	37	10/5/2009 21:22
Dunn	Dan	Newtown	PA	18940-1101	31	10	10/5/2009 21:22
martin	jill	Collegeville	PA	19426-1265	147	44	10/5/2009 21:23
Gladfelter	Elizabeth	Bethlehem	PA	18018-1351	135	18	10/5/2009 21:28
hinckley	gary	Towanda	PA	18848-9348	110	23	10/5/2009 21:34
Vilsack	Gayje	Conneaut Lake	PA	16316-6113	5	50	10/5/2009 21:38
ingle	terry	Easton	PA	18042-3376	136	24	10/5/2009 21:38
Wallace	Elizabeth	Philadelphia	PA	19130-3219	195	1	10/5/2009 21:40
ovington	chris	Phila	PA	19114-2620	169	5	10/5/2009 21:43
Crosby	Jessica	Terre Hill	PA	17581-0119	37	36	10/5/2009 21:44
loftus	patrick	Hazleton	PA	18201-4848	116	14	10/5/2009 21:45
Capria	Nicole	Philadelphia	PA	19147-3336	175	1	10/5/2009 21:48
Nelson	Thomas	Lansdowne	PA	19050-1304	163	8	10/5/2009 21:53

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
STONE	LESLIE	Morton	PA	19070-1923	165	26	10/5/2009 21:55
Hawraney	Gail	Newtown	PA	18940-2500	178	10	10/5/2009 22:05
Lewis	Karmen	Philadelphia	PA	19146-1716	186	1	10/5/2009 22:05
Dick	Jess	Loysburg	PA	16659-9531	78	30	10/5/2009 22:13
Kamison	Steve	Philadelphia	PA	19107-6727	182	1	10/5/2009 22:14
Nguon	Nhu	Philadelphia	PA	19147-3743	182	1	10/5/2009 22:24
meltzer	gwenn	Woodlyn	PA	19094-1427	159	26	10/5/2009 22:29
miele	denyse	South Williamsport	PA	17702-7501	83	23	10/5/2009 22:34
Cuglieri	Victoria	Glenshaw	PA	15116			10/5/2009 22:34
Hughes	Carolyn	McSherrystown	PA	17344-1518	91	33	10/5/2009 22:36
Richards	Vicki	New Britain	PA	18901-5148	144	10	10/5/2009 22:39
Ward	Kathy	Bryn Mawr	PA	19010-1432	166	17	10/5/2009 22:40
Gilliland	Kenneth	Philadelphia	PA	19111-5603	203	3	10/5/2009 22:40
Lyons	Dorothy	Pittsburgh	PA	15207-1438	23	43	10/5/2009 22:45
Herron	Annie	Pittston	PA	18640			10/5/2009 22:45
Auker	Hilary	Denver	PA	17517-9440	37	36	10/5/2009 22:46
Brodeur	Linda	Bethlehem	PA	18017-3312	135	18	10/5/2009 22:49
Scharer	Kristen	Greensburg	PA	15601-5316	57	39	10/5/2009 22:50
Carlson	Gwen	Penfield	PA	15849-5405	75	25	10/5/2009 22:52
Wells	Tammy	Beach Lake	PA	18405-9739	139	20	10/5/2009 22:53
balish	Joan	Scranton	PA	18510-2327	112	22	10/5/2009 22:55
Sabo	Elizabeth	Carmichaels	PA	15320-1333	50	46	10/5/2009 22:57
Scott	Tina	Pittsburgh	PA	15212-2552	20	38	10/5/2009 23:00
kerstetter	kevin	Spring City	PA	19475-1305	146	44	10/5/2009 23:04
powell	barbara	Spring City	PA	19475-1305	146	44	10/5/2009 23:05
trent	viola	Pittsburgh	PA	15229-3000	20	40	10/5/2009 23:08
Winscom	Lee Ann	Media	PA	19063-5413	192	7	10/5/2009 23:13
Ehrhart	Laurie	Newport	PA	17074-1121	86	34	10/5/2009 23:21
D'Angelo	Chris	Harrisburg	PA	17109-2706	105	15	10/5/2009 23:26
Simons	Kimberly	Beaver	PA	15009-9205	15	47	10/5/2009 23:28
Quinn	Maureen	Philadelphia	PA	19131-2803	194	7	10/5/2009 23:30
Carroll	Douglas	Lake Ariel	PA	18436-4544	115	20	10/5/2009 23:32
Piper	Alyson	Philadelphia	PA	19111-2604	172	3	10/5/2009 23:38
Horton	Timothy	Canonsburg	PA	15317-5834	46	46	10/5/2009 23:39
Wenig	Debra	Philadelphia	PA	19125-2239	175	2	10/5/2009 23:45

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Shytuhina	Anastasija	Lansdale	PA	19446-3061	53	24	10/5/2009 23:46
Moritz	Lisa	Bensalem	PA	19020-1944	18	6	10/5/2009 23:46
Hermann	Barbara	Levittown	PA	19055-2232	141	6	10/5/2009 23:57
Kelly	Patricia	Pittsburgh	PA	15239-2769	25	45	10/6/2009 0:11
INGRAHAM	PATTY	Erie	PA	16503-1640	1	49	10/6/2009 0:19
Apice	Tom	Trevose	PA	19053-4639	142	6	10/6/2009 0:26
Meadows	Natalie	Philadelphia	PA	19130-1825	195	1	10/6/2009 0:29
Beckinger	Patricia	Glassport	PA	15045-1537	38	45	10/6/2009 0:36
Humphrey	Mary	Altoona	PA	16601-2747	79	30	10/6/2009 0:57
Breining	Andrew	Camp Hill	PA	17011-2430	87	31	10/6/2009 1:04
Sweeney	Leslie	Media	PA	19063-5025	168	9	10/6/2009 1:25
Olszewski	Cas	Erie	PA	16509-1234	2	49	10/6/2009 1:29
CHERMAK	SHELBY	Pittsburgh	PA	15210-4137	36	42	10/6/2009 1:36
Caracci	Katherine	Philadelphia	PA	19131-1716	194	7	10/6/2009 1:43
chermak	pamela	Pittsburgh	PA	15210-4137	36	42	10/6/2009 1:47
EDWARDS	MIDGE	Moscow	PA	18444-9579	112	22	10/6/2009 1:51
Arlof	Diane	Pittsburgh	PA	15206-2920	24	38	10/6/2009 2:01
Ruk	Fran	Natrona Heights	PA	15065-3000	33	38	10/6/2009 2:14
Shoemaker	Larry	Gettysburg	PA	17325-8939	91	33	10/6/2009 2:33
Swanger	Sally	Centre Hall	PA	16828-9104	171	34	10/6/2009 3:18
IAQUINTO	SHIRLEY	Phila	PA	19120-3519	179	3	10/6/2009 3:20
coulter	charles	albrightsville	PA	18210	118	29	10/6/2009 3:59
Teitsworth	Peggy	Riverside	PA	17868-0374	108	27	10/6/2009 4:16
Wenrich	Karen S	Birdsboro	PA	19508-8577	128	44	10/6/2009 4:18
Zimmerman	Patricia	Pine Grove	PA	17963-8710	125	29	10/6/2009 4:49
Wisla	Lori	Schwenksville	PA	19473-2000	147	44	10/6/2009 4:56
Nobilini	Bob and Donna	Bensalem	PA	19020-2936	18	6	10/6/2009 4:56
Petrisko	Michael	Albrightsville	PA	18210-0637	122	14	10/6/2009 5:01
Weiand	Teresa	Millerstown	PA	17062-8774	86	34	10/6/2009 5:05
Falandysz	Raymond	Harrisburg	PA	17111-4258	106	15	10/6/2009 5:06
lavigna	mum	Greensburg	PA	15601-6373	59	39	10/6/2009 5:06
Gladilina	Jeanne	Hatboro	PA	19040-4140	152	12	10/6/2009 5:10
Gawronski	Lucy	Kintnersville	PA	18930-9404	145	10	10/6/2009 5:13
Buser	Rich	Schwenksville	PA	19473-1728	147	24	10/6/2009 5:14
Martin	Linda	Brookhaven	PA	19015-2112	161	9	10/6/2009 5:18

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Perch	Jeanne	Mifflinville	PA	18631-0283	109	27	10/6/2009 5:23
McDermott	Joann	Hanover	PA	17331-1843	91	33	10/6/2009 5:24
Bonk	Denise	Philadelphia	PA	19134-5514	177	5	10/6/2009 5:25
Lewis	Marcia	Easton	PA	18042-6221	136	24	10/6/2009 5:28
Sceiford	Lnda	Erie	PA	16509-2520	3	49	10/6/2009 5:29
Fennimore	Vivienne	Quakertown	PA	18951-1010	145	24	10/6/2009 5:40
HOckenberry	Karen	Ellwood City	PA	16117-8147	10	47	10/6/2009 5:42
Amber	Janet	New Ringgold	PA	17960-9561	124	29	10/6/2009 5:45
McCaw	Sarah	Philadelphia	PA	19104-3918	188	8	10/6/2009 5:48
kenyon	bobby	Lancaster	PA	17603-5440	96	13	10/6/2009 5:57
DelOrefice	Sharon	Oaks	PA	19456-1201	150	19	10/6/2009 5:58
Barker	Leslie	Monongahela	PA	15063-4313	39	46	10/6/2009 5:59
Powala Schuck	Patricia	Freedom	PA	15042-1024	14	47	10/6/2009 6:04
Jupena	Joyce	New Stanton	PA	15672-1214	57	39	10/6/2009 6:14
Thomas	Christine	Valencia	PA	16059-3809	28	40	10/6/2009 6:14
Sheaffer	Lori	York	PA	17408-9320	196	28	10/6/2009 6:19
newton	sean	Apollo	PA	15613-8411	55	38	10/6/2009 6:19
Valerio	Beverly	Morton	PA	19070-1112	165	26	10/6/2009 6:20
Genova	Kimberly	New Castle	PA	16101-1703	9	47	10/6/2009 6:25
BARUCH	JACQUELINE	Towanda	PA	18848-1640	117	20	10/6/2009 6:28
Matsco	Kara	Bridgeport	PA	19405-1625	149	17	10/6/2009 6:29
Lentz	Jo-Anne	Hellertown	PA	18055-1008	136	18	10/6/2009 6:36
Moore	Christine	Millersville	PA	17551-9641	100	13	10/6/2009 6:37
Rivera	Elizabeth	Philadelphia	PA	19122-2006	181	3	10/6/2009 6:39
Whitehorn	Susan	Hunker	PA	15639-1324	58	39	10/6/2009 6:43
lechner	kezia	Philadelphia	PA	19118-4326	198	4	10/6/2009 6:44
Brooks	Sharon	Millersville	PA	17551-1528	43	13	10/6/2009 6:50
LIDWELL	HOLLY	Chest Springs	PA	16624-0092	73	35	10/6/2009 6:52
Schoenleber	Beth	Doylestown	PA	18902-1858	29	10	10/6/2009 6:52
Lock	Norman	Philadelphia	PA	19111-3811	202	5	10/6/2009 6:53
Mininger	Ruth	Hatfield	PA	19440-2761	53	12	10/6/2009 6:53
Greenwald	Ellen	Philadelphia	PA	19135-2721	172	2	10/6/2009 6:56
Leibowitz	Beverly	Lancaster	PA	17601-3751	97	13	10/6/2009 6:58
Hall	Suzanne	Mont Alto	PA	17237-0732	90	33	10/6/2009 7:02
Robinson	Jennifer	Chesterbrook	PA	19087-1212	157	19	10/6/2009 7:05

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Lehman	Susan	Collegeville	PA	19426-1445	70	44	10/6/2009 7:06
Pellegrino	Stefanie	Scranton	PA	18504-1502	113	22	10/6/2009 7:06
Brown	Lynn	Cheltenham	PA	19012-1024	154	4	10/6/2009 7:11
myers	nancy	Chalfont	PA	18914-3932	144	10	10/6/2009 7:13
Woomer	JoAnna	Tyrone	PA	16686-7828	81	30	10/6/2009 7:17
Welsh	PaUL	Evans City	PA	16033-9217	12	40	10/6/2009 7:20
Brown	Justine	Lykens	PA	17048-1322	104	27	10/6/2009 7:22
Gicking	Jeff	Sugarloaf	PA	18249-3705	116	27	10/6/2009 7:22
Chipps	Elizabeth	Marianna	PA	15345-0091	49	46	10/6/2009 7:26
KENNY	DONNA	Croydon	PA	19021-6218	141	6	10/6/2009 7:27
McLeod	Patti	Newtown	PA	18940-2340	31	10	10/6/2009 7:27
Mandes	Wendy	West Chester	PA	19380-4430	156	19	10/6/2009 7:28
Baker	Tammy	Hamburg	PA	19526-8107	124	29	10/6/2009 7:28
Kable	Cindy	Highspire	PA	17034-1301	103	15	10/6/2009 7:28
Bellano	Lorraine	Springfield	PA	19064-3201	165	26	10/6/2009 7:28
Golembiewski	Nancy	Lower Burrell	PA	15068-8705	54	45	10/6/2009 7:31
Ott	Jonathan	Birdsboro	PA	19508-2402	130	11	10/6/2009 7:33
Kyler	Joan	Philadelphia	PA	19147-3402	175	1	10/6/2009 7:33
Winters	Kathleen	Lititz	PA	17543-7611	97	13	10/6/2009 7:36
McFetridge	Angela	Bethlehem	PA	18015-9423	135	18	10/6/2009 7:38
Sweeney	Richard	Media	PA	19063-5025	168	9	10/6/2009 7:38
Miller	Alicia L.	Pittsburgh	PA	15203-1804	36	42	10/6/2009 7:40
Eckhart	Tiffani	Monaca	PA	15061-2767	15	47	10/6/2009 7:41
Katz	Iris	Holland	PA	18966-2162	178	6	10/6/2009 7:41
Trometter	Sherri	Sunbury	PA	17801-5538	108	27	10/6/2009 7:44
Pepkowski	nONA	Perkasie	PA	18944-2140	145	24	10/6/2009 7:44
Stoner	Maria	Harrisburg	PA	17112-9254	104	15	10/6/2009 7:44
Goldman	Lynne	Wycombe	PA	18980-0353	29	10	10/6/2009 7:44
Montag	Allison	Sarver	PA	16055-1701	11	40	10/6/2009 7:47
Scott	Angela	Doylestown	PA	18902-9048	144	10	10/6/2009 7:49
Dundore	Sandra	Lebanon	PA	17042-7688	101	48	10/6/2009 7:51
Sommers	Tiffany	Terre Hill	PA	17581-0696	99	36	10/6/2009 7:53
White	Michelle	Etters	PA	17319-9015	92	15	10/6/2009 7:53
Zeiset	Naomi	Lykens	PA	17048-1162	104	27	10/6/2009 7:54
mccann	eileen	Perkiomenville	PA	18074-9330	147	24	10/6/2009 7:54

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Lake	Denise	Sharon	PA	16146-4152	7	50	10/6/2009 7:55
Ross	Karen	Ellwood City	PA	16117-2545	10	47	10/6/2009 7:58
ROSE	DENISE	Lebanon	PA	17046-3826	101	48	10/6/2009 7:59
Hartzell	Sarah	Catasauqua	PA	18032-1409	133	18	10/6/2009 8:00
Hunt	Marlene	Pittsburgh	PA	15235-4737	32	43	10/6/2009 8:00
Pryor	Cathleen	Steelton	PA	17113-2416	103	15	10/6/2009 8:01
O'Brien	Debbie	Media	PA	19063-1153	166	17	10/6/2009 8:01
Baker	Shawn	Lansdale	PA	19446-2903	53	24	10/6/2009 8:03
alloway	lynn	Chester	PA	19013-5414	159	9	10/6/2009 8:04
Anderson	Melissa	Reading	PA	19606-1503	126	11	10/6/2009 8:05
Badamo	Elaine	Barnesville	PA	18214-2317	123	29	10/6/2009 8:06
Hartman	Judy	Greensburg	PA	15601-4754	57	39	10/6/2009 8:07
Rodger	Michele	Warminster	PA	18974-4720	29	12	10/6/2009 8:08
Hendrickson	Victoria	Cambridge Springs	PA	16403-3448	6	50	10/6/2009 8:08
Hershberger	Rachael	Shillington	PA	19607-9546	128	11	10/6/2009 8:10
Dadone	Ronnie	West Chester	PA	19382-7487	168	26	10/6/2009 8:11
Glauser	Terry	Wallingford	PA	19086-6602	161	9	10/6/2009 8:11
WEAVER	Peggy	Oil City	PA	16301-2241	64	21	10/6/2009 8:12
di gennaro	jane	Milford	PA	18337-7729	189	20	10/6/2009 8:12
willow	steven	Mc Clure	PA	17841-8115	82	34	10/6/2009 8:14
DOWNEY	CHRISTINE	Warminster	PA	18974-2273	29	12	10/6/2009 8:14
Murphy	Robert	Smethport	PA	16749	67	25	10/6/2009 8:16
Yovanov	Melissa	Spring City	PA	19475-9527	128	11	10/6/2009 8:19
Mattioli	Debra	Rydal	PA	19046-1414	153	4	10/6/2009 8:20
Pearson	Cynthia	Elkins Park	PA	19027-1338	154	4	10/6/2009 8:21
Miller	Kathleen	Philadelphia	PA	19148-3716	184	1	10/6/2009 8:21
Rodgers	Russell	Erie	PA	16507-1095	2	49	10/6/2009 8:24
serviss	joan	Blakeslee	PA	18610-0916	118	29	10/6/2009 8:26
McVeigh	Bonnie	Coraopolis	PA	15108-2968	44	37	10/6/2009 8:29
GARDIAN	KATHLEEN	Emmaus	PA	18049-9717	134	24	10/6/2009 8:31
Hartranft	Bronwen	Lititz	PA	17543-8480	37	36	10/6/2009 8:31
laplante	margaret	West Lawn	PA	19609-2202	128	48	10/6/2009 8:31
Wendell	Patricia R.	Jeannette	PA	15644-4765	54	39	10/6/2009 8:32
Sweger	Wendy	Millerstown	PA	17062-9781	86	34	10/6/2009 8:33
klein	patricia	Zionsville	PA	18092-2067	131	24	10/6/2009 8:34

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Barry	Matt	Munhall	PA	15120-3305	35	43	10/6/2009 8:36
Lira	Lynn	Pittsburgh	PA	15227-4356	36	43	10/6/2009 8:38
Dolwick	Brenda	McKean	PA	16426-1741	3	49	10/6/2009 8:38
Stevulak	Melissa	West Chester	PA	19382-7388	168	26	10/6/2009 8:39
Brown	Connie	Coatesville	PA	19320-2576	158	44	10/6/2009 8:40
torina	karen	New Hope	PA	18938-1202	29	10	10/6/2009 8:40
reagan	robert	Phila	PA	19154-1510	170	5	10/6/2009 8:41
villante	evonne	Philadelphia	PA	19148-2364	184	1	10/6/2009 8:43
ORTH	DAVID	Reading	PA	19608-9273	129	48	10/6/2009 8:44
postlewait	heather	East Norriton	PA	19401-1754	70	17	10/6/2009 8:47
Maio	Nicholas	King Of Prussia	PA	19406-2753	149	17	10/6/2009 8:50
Mahalidge	Alita	Peckville	PA	18452-2314	115	22	10/6/2009 8:51
Fernandes	Sharon	Malvern	PA	19355-2862	167	19	10/6/2009 8:51
Zingler	Chris	Springfield	PA	19064-3201	165	26	10/6/2009 8:51
Meiberg	Linda	Philadelphia	PA	19147-2422	175	1	10/6/2009 8:52
Smerlick	Tami	Pocono Lake	PA	18347-9725	176	22	10/6/2009 8:52
Gailey	Teresa	Dauphin	PA	17018-9411	104	15	10/6/2009 8:52
Beers	Jenn	Harrisburg	PA	17112-2729	105	15	10/6/2009 8:54
Hoffman	henry	Nanty Glo	PA	15943-1251	72	35	10/6/2009 8:56
Houghtaling	Carly	Horsham	PA	19044-1024	151	12	10/6/2009 8:56
Stempin	Barbara	West Wyoming	PA	18644-1651	120	14	10/6/2009 8:57
McIntyre	Gail	Lansdale	PA	19446-6089	70	44	10/6/2009 8:57
Lakoff	Cathy	West Chester	PA	19382-7835	168	26	10/6/2009 8:59
Cervino	Heather	Doylestown	PA	18901-5036	144	10	10/6/2009 9:02
Collins	Maureen	Downingtown	PA	19335	158	19	10/6/2009 9:06
riggall	Wendy	Willow Grove	PA	19090-1912	152	12	10/6/2009 9:07
Kielkopf	Michele	Royersford	PA	19468-1830	146	44	10/6/2009 9:07
Dishong	Rachel	Palmyra	PA	17078-2623	101	48	10/6/2009 9:08
Motznik	Ed	Pittsburgh	PA	15237-2806	21	40	10/6/2009 9:08
Homler	Mark	jersey Shore	PA	17740	84	23	10/6/2009 9:08
Stultz	Melissa	Harrisburg	PA	17111-1947	104	15	10/6/2009 9:09
kirkpatrick	beverly	Bryn Mawr	PA	19010-1008	165	17	10/6/2009 9:10
Isgan	Carol Ann	Langhorne	PA	19047-1012	142	6	10/6/2009 9:11
priebe	karen	Reading	PA	19606-9504	128	11	10/6/2009 9:11
Hockenberry	Kendra	Ellwood City	PA	16117-8147	10	47	10/6/2009 9:12

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Hlatky	Nancy	Allentown	PA	18102-4328	131	24	10/6/2009 9:12
Toma	Christine	Johnstown	PA	15904-1837	71	35	10/6/2009 9:13
kurtz	ninette	East Stroudsburg	PA	18301-9270	189	18	10/6/2009 9:14
Ayers	Terri	Duncansville	PA	16635-8501	80	30	10/6/2009 9:15
Moyer	Rose	Cressona	PA	17929-1500	125	29	10/6/2009 9:15
Lewis	Mark	Easton	PA	18042-6221	136	24	10/6/2009 9:17
Stricker	Linda	Philadelphia	PA	19145-5709	185	1	10/6/2009 9:18
Medvid	Denise	Harrisburg	PA	17111-5117	106	15	10/6/2009 9:19
Raniero	Kelly	Etters	PA	17319-9026	92	15	10/6/2009 9:19
rutter	helen	Hopwood	PA	15445-2104	51	32	10/6/2009 9:21
Edwards	Amy	Erie	PA	16511-1110	1	49	10/6/2009 9:22
longo	karen	Sewickley	PA	15143-9597	44	37	10/6/2009 9:23
HALL	DOROTHY	York	PA	17403-5019	93	28	10/6/2009 9:23
Kish	Tracy	Morrisville	PA	19067-4921	140	10	10/6/2009 9:24
Kitchenman	Isabel	Philadelphia	PA	19152-3436	172	2	10/6/2009 9:26
constantine	LUCILLE	Hershey	PA	17033-1863	106	15	10/6/2009 9:27
Ballas	Dorothy	Coplay	PA	18037-2531	187	16	10/6/2009 9:29
Beu	Jessica	Pittsburgh	PA	15212-4540	19	38	10/6/2009 9:29
LOUCKS	Mj	Altoona	PA	16602-4945	79	30	10/6/2009 9:32
Beu	Lorraine	Pittsburgh	PA	15214-3404	19	38	10/6/2009 9:34
McNamara	Peggy	Phila	PA	19124-2210	177	2	10/6/2009 9:41
Vale	Toni	Felton	PA	17322-9427	94	13	10/6/2009 9:42
Kroll	Kathy	Stroudsburg	PA	18360-2315	176	18	10/6/2009 9:42
Collins	Elizabeth	Swarthmore	PA	19081-1124	165	26	10/6/2009 9:42
Animucka	Alicia	Philadelphia	PA	19154-2005	170	5	10/6/2009 9:42
rhoads	craig	Whitehall	PA	18052-3845	133	18	10/6/2009 9:44
Legradi	Lori	Mc Clure	PA	17841-9237	82	34	10/6/2009 9:44
McCreary	Iain	Reading	PA	19606	130	11	10/6/2009 9:45
St.Clair	Debra	Watsontown	PA	17777-8575	108	27	10/6/2009 9:46
Santina	Maureen	Upper Black Eddy	PA	18972-2505	143	10	10/6/2009 9:52
Thompson	Ashleigh	Souderton	PA	18964-1634	53	10	10/6/2009 9:56
Thompson	Benjamin	Souderton	PA	18964-1634	53	10	10/6/2009 9:57
Bono	Donna	Pittsburgh	PA	15221-4221	34	43	10/6/2009 9:57
Cogan	Roberta	Philadelphia	PA	19120-1704	203	3	10/6/2009 9:58
KAPALKA	MARLENE	West Wyoming	PA	18644-1735	120	14	10/6/2009 9:59

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Broskey	Michelle	Trevose	PA	19053-7216	178	6	10/6/2009 10:00
Hunsicker	Brad	Lehighton	PA	18235-5532	122	29	10/6/2009 10:05
Christian	Gina	Philadelphia	PA	19111-5308	202	3	10/6/2009 10:07
Teck	Renee	Finleyville	PA	15332-3111	39	46	10/6/2009 10:11
Valevas	Marian	Skippack	PA	19474-0529	70	44	10/6/2009 10:11
McGourn	Elizabeth	Philadelphia	PA	19130-2608	195	1	10/6/2009 10:13
Frizzell	MK	Wallingford	PA	19086-6701		9	10/6/2009 10:13
LAcey	Gillian	Stewartstown	PA	17363-8264	94	28	10/6/2009 10:13
Donnelly	Holly	Eddystone	PA	19022-1347	159	9	10/6/2009 10:14
ruch	patricia	Harleysville	PA	19438-2863		24	10/6/2009 10:19
Scheetz	Jan	Harleysville	PA	19438-3959	70	24	10/6/2009 10:20
Esnouf	Patricia	Drexel Hill	PA	19026-1502	164	26	10/6/2009 10:28
mason	gloria	New Freeport	PA	15352-1761	50	46	10/6/2009 10:30
Vagelakos	George	East Stroudsburg	PA	18302-8535	189	20	10/6/2009 10:30
Hunter	Joann	Vandergrift	PA	15690-2071	55	38	10/6/2009 10:31
Hruschka	Heidi	Lancaster	PA	17601-2980	97	13	10/6/2009 10:31
Hankins	Deborah	Malvern	PA	19355-2607	167	19	10/6/2009 10:31
Temple	Frances	Chalfont	PA	18914-1427	144	10	10/6/2009 10:33
Kramer	Raelyn	Gettysburg	PA	17325-8957	91	33	10/6/2009 10:35
Fowler	Tracy	West Chester	PA	19380			10/6/2009 10:35
Lesko	Gene	Fairview	PA	16415-1521	5	49	10/6/2009 10:39
Lawson	Rebecca	Mechanicsburg	PA	17055-6414	88	31	10/6/2009 10:40
Dudas	Brittany	Bridgeport	PA	19405-1305	149	17	10/6/2009 10:40
Miller	Nancy	Doylestown	PA	18901-3653	143	10	10/6/2009 10:41
Renkel	Peggy	Middleburg	PA	17842-9242	85	27	10/6/2009 10:43
reinhart	james	Transfer	PA	16154-1618	7	50	10/6/2009 10:45
Alexander	Erin	Pittsburgh	PA	15236-1043	36	43	10/6/2009 10:45
Saruk	Louise	West Chester	PA	19382-8561	160	9	10/6/2009 10:50
Miller	Mark	Philadelphia	PA	19133-2816	181	2	10/6/2009 10:56
KNELLINGER	Suzanne	Warrington	PA	18976-1819	144	12	10/6/2009 10:58
Zimmerman	Andrea	Palmyra	PA	17078-1431	101	48	10/6/2009 10:59
Sudbrink	Susan	Lititz	PA	17543-9073	97	13	10/6/2009 10:59
Faller	Micki	Pittsburgh	PA	15206-4229	23	43	10/6/2009 10:59
currey	nancy	Waynesboro	PA	17268-9141	90	33	10/6/2009 11:00
McAlonan	Conor	West Chester	PA	19380-2711	156	19	10/6/2009 11:00

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
BIERS	ANITA	Washington	PA	15301-5735	48	46	10/6/2009 11:02
Hatcher	Lisa	Newtown Square	PA	19073-1005	167	19	10/6/2009 11:02
Cline	Diane	New Cumberland	PA	17070-2402	92	31	10/6/2009 11:06
Slusser	Mary	Pittsburgh	PA	15205-2927	27	42	10/6/2009 11:10
FIEBELKORN	RENEE	Erie	PA	16505-1204	3	49	10/6/2009 11:11
Wright	Linda	Port Allegany	PA	16743-4207	67	25	10/6/2009 11:11
Walter	Connie	Dillsburg	PA	17019-9136	92	31	10/6/2009 11:16
Taylor	Susan	Hatfield	PA	19440-3949	53	12	10/6/2009 11:20
Elliott	Colleen	Dallas	PA	18612-9123	117	20	10/6/2009 11:20
gordon	Wendy	Philipsburg	PA	16866-2904	77	35	10/6/2009 11:21
W. Miles	Frankie	McKeesport	PA	15132-2209	35	45	10/6/2009 11:21
Duvall	Ramona	Elizabeth	PA	15037-1321	39	46	10/6/2009 11:22
Orres	Patricia	New Castle	PA	16101-5427	10	47	10/6/2009 11:23
McQuay	Crystal	Sayre	PA	18840-1826	110	23	10/6/2009 11:29
Jeffers	Terri	Avella	PA	15312-2673	46	46	10/6/2009 11:33
Curry	Terri	Bala Cynwyd	PA	19004-1926	194	17	10/6/2009 11:36
Pallatino	Mary Ellen	Pittsburgh	PA	15206-4534	23	43	10/6/2009 11:41
Leonard	Don	Media	PA	19063-5630	160	9	10/6/2009 11:43
Umbs	Alissa	New Castle	PA	16105-1616	9	50	10/6/2009 11:45
Engel	Carol	Mc Donald	PA	15057-2900	46	46	10/6/2009 11:45
Deeney	Shannon	Philadelphia	PA	19128-4310	194	7	10/6/2009 11:46
Flyte	Tammy	Le Raysville	PA	18829-9716	110	23	10/6/2009 11:53
Rutt	Melissa	Allentown	PA	18104-3668	132	16	10/6/2009 11:53
Goonan	Shiva	Mountville	PA	17554-1859	41	13	10/6/2009 11:54
Penderville	Kalyn	Houston	PA	15342-1134	46	46	10/6/2009 11:56
brennan	cathy	Pittsburgh	PA	15218-1310	34	43	10/6/2009 11:58
Fofi	Sandy	Carbondale	PA	18407-2757	115	22	10/6/2009 11:59
Naugle	Geraldine	Carbondale	PA	18407-2125	114	22	10/6/2009 12:06
Thomas	Patricia	North Huntingdon	PA	15642-2362	56	39	10/6/2009 12:07
Yarnell	Tracy	Exton	PA	19341-2773	167	19	10/6/2009 12:13
Henry	Natalie	Apollo	PA	15613-8921	60	38	10/6/2009 12:14
Scutti	Corrine	Philadelphia	PA	19148-4404	184	1	10/6/2009 12:14
Husar	Lisa	Pittsburgh	PA	15236-2474	38	43	10/6/2009 12:15
Bishop	Gail	Hummelstown	PA	17036-9018	106	15	10/6/2009 12:16
McCallips	Diane	Lewistown	PA	17044-7309	82	34	10/6/2009 12:16

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
McClain	Melissa	Philadelphia	PA	19137-1621	177	5	10/6/2009 12:17
McPherson	Vicki	Allison Park	PA	15101-1064	33	40	10/6/2009 12:21
Stiles	Kim	Lock Haven	PA	17745-2029	76	35	10/6/2009 12:25
Figel	Karen	Butler	PA	16002-9165	12	41	10/6/2009 12:25
Morgan	Shirley	Oakford	PA	19053-4839	18	6	10/6/2009 12:27
Zenmon	Denna	Pittsburgh	PA	15219-5024	19	38	10/6/2009 12:31
Detterline	Shirl	West Chester	PA	19380-2100	167	19	10/6/2009 12:44
Rivas	Lillian	Wilkes Barre	PA	18702-4257	121	14	10/6/2009 12:46
Capwell	Debi	South Abington Township	PA	18411-9014	113	22	10/6/2009 12:51
Neuman	Judith	Morrisville	PA	19067-6606	140	10	10/6/2009 12:52
Bungarz	Jackie	Hamburg	PA	19526-2018	125	29	10/6/2009 12:52
Richards	Vivien	Reading	PA	19606-2919	128	11	10/6/2009 12:53
Figaniak	Laurie	Bryn Mawr	PA	19010-2603	149	17	10/6/2009 12:55
Hoenigswald	Frances G.	Philadelphia	PA	19143-1897	188	7	10/6/2009 12:58
Engstrom	Shruti	Bryn Mawr	PA	19010-1007	165	17	10/6/2009 12:59
Breidenstein	Diana	Ardmore	PA	19003-1533	149	17	10/6/2009 13:01
Brodie	Megan	Philadelphia	PA	19104-4548	188	8	10/6/2009 13:01
Dallmer	Joan	Quakertown	PA	18951-4717	145	24	10/6/2009 13:05
Bieber	Rabecca	Pittsburgh	PA	15227-2303	36	42	10/6/2009 13:07
Miller	Valerie	Manchester	PA	17345-1528	47	28	10/6/2009 13:07
Knopf	Marvin	Huntingdon Valley	PA	19006-1534	152	12	10/6/2009 13:10
Kaufmann	Barbara	Merion Station	PA	19066-1214	148	17	10/6/2009 13:10
Wolfe	Patt	Wynnewood	PA	19096-3524	149	17	10/6/2009 13:10
rocker	misty	Ruffs Dale	PA	15679-1110	58	39	10/6/2009 13:11
Barilone	Gabriella	Philadelphia	PA	19147-4505	182	1	10/6/2009 13:12
Gianios	Christy	Mechanicsburg	PA	17050-7917		31	10/6/2009 13:13
Gonzalez	Crystopher	Philadelphia	PA	19145-3924	185	1	10/6/2009 13:15
Shiavi	Doreen	Media	PA	19063-2003	168	26	10/6/2009 13:17
Blanchard	Corinna	Bethlehem	PA	18020-3393	138	18	10/6/2009 13:18
Cole	Kim	Annville	PA	17003-9101	102	48	10/6/2009 13:24
Ferro	Patricia	Clifton Heights	PA	19018-1123	163	26	10/6/2009 13:29
Sekela	Lori	Carlisle	PA	17015-4379	106	15	10/6/2009 13:33
Dixon	Beverly	Pittsburgh	PA	15213-1135	19	38	10/6/2009 13:35
Steibing	Denise	Conyngham	PA	18219	116	27	10/6/2009 13:36
kopp	christine	York	PA	17404-2627	95	28	10/6/2009 13:47

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
manculich	Tammy	Homer City	PA	15748-5322	62	41	10/6/2009 13:54
ZUBLER	DAWN	Millville	PA	17846-8659	109	27	10/6/2009 14:00
Houghtaling	Paula	Horsham	PA	19044-1024	151	12	10/6/2009 14:00
Rhoads	Kacy	Newport	PA	17074-7661	86	34	10/6/2009 14:01
Field	Eda	North Wales	PA	19454-4241	151	12	10/6/2009 14:05
Kelly	Ann	Pittsburgh	PA	15212-4884	20	38	10/6/2009 14:09
Levine	Roberta	Levittown	PA	19055-2207	141	6	10/6/2009 14:13
McMichaels	Sandra	Pittsburgh	PA	15236-2473	38	43	10/6/2009 14:17
Korchok	Lori	Harleysville	PA	19438-2142	70	24	10/6/2009 14:17
Wolbach	Janice	Bethlehem	PA	18018-3328	135	18	10/6/2009 14:18
Cramer	Carin	Philadelphia	PA	19125-2917	182	1	10/6/2009 14:31
springer	Kim	Greenville	PA	16125-2615	17	50	10/6/2009 14:34
Higgins	Charlotte	Philadelphia	PA	19129-1425	197	7	10/6/2009 14:36
Power	Terri	Easton	PA	18045-7475	137	24	10/6/2009 14:38
Withers	William	Glassport	PA	15045-1504	38	45	10/6/2009 14:42
Sweeney	Erin	Pittsburgh	PA	15216-3654	22	42	10/6/2009 14:43
Nadzady	Wendy	Greencastle	PA	17225-8378	90	33	10/6/2009 14:50
Szymanski	Mildred	Pittsburgh	PA	15237-2621	21	40	10/6/2009 14:56
orlando	susan	Churchville	PA	18966-1393	178	6	10/6/2009 14:56
Plunkett	Laura	Sarver	PA	16055-9401	11	40	10/6/2009 15:00
Thomas	Lisa	Pen Argyl	PA	18072-1901	138	18	10/6/2009 15:01
Zajac	Gary	Harrisburg	PA	17110-3911	104	15	10/6/2009 15:09
Yeager	Deb	Wrightsville	PA	17368-9336	47	13	10/6/2009 15:12
miller	colette	McAdoo	PA	18237-1828	124	29	10/6/2009 15:13
Beschizza	Heather	Pittsburgh	PA	15212-5053	20	38	10/6/2009 15:18
George	Stacy	Warrington	PA	18976-1412	144	12	10/6/2009 15:24
Taylor	Robert	Pottstown	PA	19464-3750	146	44	10/6/2009 15:27
Kepins	Laurie	Seven Fields	PA	16046-4207	12	40	10/6/2009 15:29
Andrews	Ann	Imperial	PA	15126-9243	44	37	10/6/2009 15:38
Johnson	Sabine	Pittsburgh	PA	15212-5053	20	38	10/6/2009 15:45
Horwitz	Ruth	Royersford	PA	19468-3049	150	19	10/6/2009 15:55
Blanchard	Carley	Hellertown	PA	18055-1233	136	18	10/6/2009 15:56
Baker	Marlene	Murrysville	PA	15668-9479	54	41	10/6/2009 16:02
Weibley	Edie	Carlisle	PA	17015-9429	199	31	10/6/2009 16:15
Dlabik	Arnold	Adamsburg	PA	15611-0061	58	39	10/6/2009 16:21

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Jones	Barry	Conyngham	PA	18219-0681	116	27	10/6/2009 16:26
Higgins	Michelle	Noxen	PA	18636-6422	117	20	10/6/2009 16:28
Hepler	Donald	Natrona Heights	PA	15065-1817	33	38	10/6/2009 16:28
Fulginiti	Wendy	Camp Hill	PA	17011-6710	88	31	10/6/2009 16:28
Kerston	Jeffrey	White Oak	PA	15131-1246	35	45	10/6/2009 16:29
Airey	Marianne	East Norriton	PA	19403-4005	70	17	10/6/2009 16:30
Lloyd	Jeff	Apollo	PA	15613-1747	55	38	10/6/2009 16:36
Mills	Shawn	Saint Clair	PA	17970-1304	123	29	10/6/2009 16:39
Beningo	Shirley	Morgantown	PA	19543-0632	128	48	10/6/2009 16:46
Blotzer	Edward	Jeannette	PA	15644-1142	56	39	10/6/2009 16:49
Berger	Donna	Palmerton	PA	18071-9613	122	29	10/6/2009 16:57
Truszkowski	Jaimie	Mountain Top	PA	18707-1220	119	20	10/6/2009 17:00
Whitenight	Heidi and Patty	Schwenksville	PA	19473-1428	146	44	10/6/2009 17:03
Strayer	Staci	Altoona	PA	16602-4915	79	30	10/6/2009 17:06
Brekne	Patti	Easton	PA	18040-7929	137	24	10/6/2009 17:08
Northridge	Ann	Bellefonte	PA	16823-9012	77	34	10/6/2009 17:17
Cottrell	Patricia	Turtle Creek	PA	15145-1523	34	45	10/6/2009 17:18
Scott	Denise	Pittsburgh	PA	15218-2437	34	43	10/6/2009 17:23
Price	Bernadette	Chalfont	PA	18914-1827	144	10	10/6/2009 17:28
donofrio	karen	Philadelphia	PA	19104-2944	188	8	10/6/2009 17:28
hobbs	gin	Philadelphia	PA	19125-2137	175	2	10/6/2009 17:33
Hartzell	Joanne	Youngwood	PA	15697-1623	57	39	10/6/2009 17:34
Orlando	Pamela	Horsham	PA	19044-1013	151	12	10/6/2009 17:37
Welsh	DEE	Columbia	PA	17512-1127	98	36	10/6/2009 17:45
Polon	Trish	Erie	PA	16503-1546	1	49	10/6/2009 17:49
caster	denise	West Mifflin	PA	15122-2741	38	43	10/6/2009 17:51
Denning	Cindi	Hazleton	PA	18202-8059	116	14	10/6/2009 17:52
Wolfe	Joanna	Elysburg	PA	17824-7089	107	27	10/6/2009 17:52
Farischon	Chris	Pottstown	PA	19465-9337	26	44	10/6/2009 18:01
GREGORD	JUNE	Pittsburgh	PA	15211-1120	22	42	10/6/2009 18:08
Gorman	Mila	Blue Bell	PA	19422-2152	148	44	10/6/2009 18:13
lloyd	susan	Apollo	PA	15613-1747	55	38	10/6/2009 18:17
dudeck	michelle	Monessen	PA	15062-1525	58	46	10/6/2009 18:17
Tomme	Sally	Macungie	PA	18062-8535	134	11	10/6/2009 18:22
Decker	Barbara	Philadelphia	PA	19152-3436	172	2	10/6/2009 18:26

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
stempin	leslie	West Wyoming	PA	18644-1651	120	14	10/6/2009 18:26
Lamborn	Lori	Millersville	PA	17551-2035	43	13	10/6/2009 18:31
brown	kris	Glenville	PA	17329-9280	93	28	10/6/2009 18:34
Weinstein	Dana	Norristown	PA	19403-1884	70	44	10/6/2009 18:34
baker	crystal	Philadelphia	PA	19104-1758	190	7	10/6/2009 18:37
Pupis	Mike	Newtown Square	PA	19073-3305	168	26	10/6/2009 18:38
Peabody	Laurie	West Chester	PA	19382-7672	168	26	10/6/2009 18:55
Apice	Joanne	Philadelphia	PA	19116-3252	170	5	10/6/2009 18:58
Hoag	Matt	Ambler	PA	19002-4817	151	12	10/6/2009 19:03
Sauritch	Timothy	Fairless Hills	PA	19030-3209	140	10	10/6/2009 19:04
Gehr	Nancy	Saylorsburg	PA	18353-9512	189	16	10/6/2009 19:04
Dysard	Vickie	Petersburg	PA	16669-3100	81	30	10/6/2009 19:06
kozlowski	gina	Philadelphia	PA	19137-1916	177	5	10/6/2009 19:08
Feldman	Judy	Penn Valley	PA	19072-1630	148	17	10/6/2009 19:09
hippensteel	wally	Shippensburg	PA	17257-1712	89	31	10/6/2009 19:11
Boda	Rachel	New Kensington	PA	15068-4938	54	45	10/6/2009 19:14
Knipple	William	Johnstown	PA	15904-1746	71	35	10/6/2009 19:15
Brown	Diana	Pittsburgh	PA	15215-3125	24	38	10/6/2009 19:34
Shirey	Theresa	Royersford	PA	19468-3024	150	19	10/6/2009 19:35
Slusser	Nancy	Benton	PA	17814-7634	109	27	10/6/2009 19:41
Frees	Janine	Millerstown	PA	17062-8985	86	34	10/6/2009 19:49
Richards	Bradley	Reading	PA	19606-2919	128	11	10/6/2009 19:50
Dorsch	Stacey	Turtle Creek	PA	15145-1924	34	45	10/6/2009 19:52
Fulginiti	Robert	Lancaster	PA	17601-4429	97	13	10/6/2009 19:56
Jenks	Ramona	Canonsburg	PA	15317-1491	48	46	10/6/2009 20:16
tyson	danielle	Horsham	PA	19044-1947	151	12	10/6/2009 20:18
Fidler	Trina	Gettysburg	PA	17325-7889	91	33	10/6/2009 20:26
berger	susan	Pittsburgh	PA	15217-4209	23	43	10/6/2009 20:40
deninno	SANDY	scranton	PA	18504-1004		22	10/6/2009 20:41
Ronsicki	Diane	Dunlevy	PA	15432-0102	49	32	10/6/2009 20:43
Ulrich	Nancy	South Williamsport	PA	17702-7025	83	23	10/6/2009 20:46
Ulrich	Harry	South Williamsport	PA	17702-7025	83	23	10/6/2009 20:47
Wontor	D	Lords Valley	PA	18428-9067	139	20	10/6/2009 20:58
Holden-Conwell	Kristy	Collegeville	PA	19426-4402	150	19	10/6/2009 21:03
Thomas	Georgiana	Pittsburgh	PA	15237-4178	28	40	10/6/2009 21:04

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Brandt	Dina	Gardners	PA	17324-0194	193	33	10/6/2009 21:08
Brenner	Michael	Bala Cynwyd	PA	19004-2025	194	17	10/6/2009 21:14
Conwell	Eleanor	Chesterbrook	PA	19087-5541	157	19	10/6/2009 21:28
chermak	pamela	Pittsburgh	PA	15210-4137	36	42	10/6/2009 21:34
Stone	Barbara	Ridley Park	PA	19078-1304	162	26	10/6/2009 21:35
Waldo	Debra	Pittsburgh	PA	15227-3004	36	42	10/6/2009 21:43
Williams	Shawn	Jamestown	PA	16134-9609	17	50	10/6/2009 21:44
Sowerbrower	Dianna	Johnstown	PA	15904-1746	71	35	10/6/2009 21:46
Penascino	Kim	Pittsburgh	PA	15216-1942	27	42	10/6/2009 21:49
Wilson	JoAnn	Bradford	PA	16701-1730	67	25	10/6/2009 21:52
Roberts	Richard	Benton	PA	17814-7634	109	27	10/6/2009 21:54
Snyder	Lori	New Oxford	PA	17350-9422	91	33	10/6/2009 21:55
Abrams	Thomas	Bear Creek	PA	18702		14	10/6/2009 22:00
Landis	Michele	Pittsburgh	PA	15241-2636	40	37	10/6/2009 22:06
Son	Sam	Lancaster	PA	17601-2819	97	13	10/6/2009 22:09
Liberty	Arthur	Ambridge	PA	15003-1506	14	47	10/6/2009 22:29
Thomas	Lorie	Aliquippa	PA	15001-2629	16	47	10/6/2009 22:35
Thomas	Nancy	Aliquippa	PA	15001-2629	16	47	10/6/2009 22:38
Mrvos	Marylou	Pittsburgh	PA	15243-1537	42	42	10/6/2009 22:47
Schwager	Sharon	Philadelphia	PA	19152-2907	172	5	10/6/2009 23:09
Miguel	Donald	E Stroudsburg	PA	18302-9784	189	20	10/6/2009 23:20
Farver	John	Catawissa	PA	17820-1029	109	27	10/6/2009 23:41
Leone	Donna	Philadelphia	PA	19125-3522	177	2	10/6/2009 23:50
Katterson	Melissa	South Heights	PA	15081-0253	16	47	10/7/2009 0:03
Busch	Dan	Philadelphia	PA	19106-3914	175	1	10/7/2009 0:09
Rentschler	Carolyn	Reading	PA	19607-1669	127	11	10/7/2009 0:25
Robertson	Lynn	Phoenixville	PA	19460-2373	157	19	10/7/2009 0:46
Wester	Deanna	Pittsburgh	PA	15215-2125	21	38	10/7/2009 0:47
McDonnell	Sara	East Greenville	PA	18041-2609	131	24	10/7/2009 1:09
Savage	Gerald	Philadelphia	PA	19134-5817	177	1	10/7/2009 1:55
shoemaker	joanie	Phila	PA	19124-4802	177	2	10/7/2009 2:41
dominick	mary	Philadelphia	PA	19149-5597	174	2	10/7/2009 2:46
MAYO	DIANE	Wilkes Barre	PA	18702-3703	121	14	10/7/2009 3:17
Soltis	B	Downingtown	PA	19335-1219	198	3	10/7/2009 3:35
Petroski	Laura	Mountain Top	PA	18707-9381	119	20	10/7/2009 3:55

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Meigs	Ronald	Somerset	PA	15501-8544	69	32	10/7/2009 5:45
bell	denise	Philipsburg	PA	16866-2904	77	35	10/7/2009 5:48
holfelder	betty	Verona	PA	15147-2344	32	43	10/7/2009 6:14
LeBlanc	Shannon	Fairfield	PA	17320-8250	91	33	10/7/2009 6:17
Wright-Campbell	Huron	York	PA	17402-5013	93	28	10/7/2009 6:19
Young	Diana	Pleasant Gap	PA	16823-9655	171	34	10/7/2009 6:20
Goodman	Carolyn	Radnor	PA	19087-4645	149	17	10/7/2009 6:28
Crimmel	Ellen	Lewistown	PA	17044-2565	82	34	10/7/2009 6:34
Wheatstone	Kristia	Pen Argyl	PA	18072-1932	138	18	10/7/2009 6:37
brunner	carly	Mars	PA	16046-8701	12	40	10/7/2009 6:40
Keys	Nancy	Tarrs	PA	15688-2109	58	39	10/7/2009 6:42
Nichols	Gail	Havertown	PA	19083-3740	166	17	10/7/2009 6:43
macaulay	ann	Verona	PA	15147-3602	32	43	10/7/2009 6:45
Kot	Kristin	Harrisburg	PA	17110-1025	103	15	10/7/2009 6:47
Kianese	Jim	Irwin	PA	15642-8701	58	39	10/7/2009 6:53
diehl	lamar	Kutztown	PA	19530-8557	187	16	10/7/2009 7:01
Dressel	Tracy	York	PA	17403-4605	95	28	10/7/2009 7:03
sheaffer	Karen	Vandergrift	PA	15690-1623	55	38	10/7/2009 7:06
kershner	peggy	Catawissa	PA	17820-8301	107	27	10/7/2009 7:16
Loomis	Kristen	Oreland	PA	19075-1105	153	12	10/7/2009 7:31
Dlabik	Kelly	Greensburg	PA	15601-1104	57	39	10/7/2009 7:40
Mattei	Rosann	Glen Mills	PA	19342-1227	160	9	10/7/2009 7:41
Stith	Betty	Philadelphia	PA	19144-1823	201	3	10/7/2009 7:49
Stith	Tanisha	Philadelphia	PA	19144-1823	201	3	10/7/2009 7:51
OReilly	Jennifer	Damascus	PA	18415-0082	139	20	10/7/2009 8:03
tymitz	Leah	Warminster	PA	18974-1813	144	12	10/7/2009 8:04
Houpt	Amanda	Aston	PA	19014-1110	161	9	10/7/2009 8:06
Pawlowski	Michelle	North Huntingdon	PA	15642-6321	58	39	10/7/2009 8:08
Manley	Jill	Enola	PA	17025-1802	87	31	10/7/2009 8:10
Cacciola	Barbara	Elkins Park	PA	19027-2259	154	4	10/7/2009 8:12
Grasso	Liana	Philadelphia	PA	19147-2110	182	1	10/7/2009 8:13
Cole	Jennifer	Towanda	PA	18848-9315	110	23	10/7/2009 8:15
Moyer	Judie	Hamburg	PA	19526-1112	124	29	10/7/2009 8:23
Filipponi	Paula	Bryn Mawr	PA	19010-1427	166	17	10/7/2009 8:26
Rollman	Lindsay	Ephrata	PA	17522-2548	43	36	10/7/2009 8:26

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Gresh	Pat	Mountain Top	PA	18707-9071	117	20	10/7/2009 8:27
Weisen	Arthur	Media	PA	19063-5518	168	9	10/7/2009 8:27
Cawthern	Peggy	Elysburg	PA	17824-7221		27	10/7/2009 8:38
Ruel	Melissa	Mount Joy	PA	17552-8879	37	36	10/7/2009 8:44
Coyne	Jane	Selinsgrove	PA	17870-8455	85	27	10/7/2009 8:44
Price	Donna	Monroeville	PA	15146-1208	25	45	10/7/2009 8:49
Morehouse	Alice	Edinboro	PA	16412-3618	3	49	10/7/2009 8:49
navarro	anthony	Pittsburgh	PA	15203-1415	36	42	10/7/2009 8:54
Devers	Deborah	York	PA	17401-3857	95	28	10/7/2009 8:55
Zimmerman	George	Pittsburgh	PA	15206-1182	24	38	10/7/2009 9:02
Surmaitis	Lea-Ann	Parryville	PA	18244-0053	122	29	10/7/2009 9:08
smacinski	Alice	Harleysville	PA	19438-2133	70	24	10/7/2009 9:16
Davidson	Lindsay	Honey Brook	PA	19344-8724	26	36	10/7/2009 9:22
Ford	Barbara	Shamokin	PA	17872-5013	107	27	10/7/2009 9:22
Rutt	Jennifer	Allentown	PA	18103-3923	131	16	10/7/2009 9:29
dunn	jennfer	Pittsburgh	PA	15201-2522	20	38	10/7/2009 9:30
Anderson	Patricia	Latrobe	PA	15650-3225	55	39	10/7/2009 9:37
Deckman	Mary	Plumsteadville	PA	18949-0763	143	10	10/7/2009 9:40
Marinakis	Marie	Newtown Square	PA	19073-1208	167	19	10/7/2009 9:55
Weisen	Michelle	Media	PA	19063-5518	168	9	10/7/2009 9:58
Walker	Yvonne	West Chester	PA	19382-4907	156	19	10/7/2009 10:05
hanigan	kathy	huntingdon valley	PA	19006	29	12	10/7/2009 10:07
Cooper	Janet	West Chester	PA	19382-4907	156	19	10/7/2009 10:12
Corbett	Cristine	Pittsburgh	PA	15201-2834	20	38	10/7/2009 10:15
Wingert	Christina	Hanover	PA	17331-4141	193	28	10/7/2009 10:19
Potemski	Elizabeth	Philadelphia	PA	19128-1740	194	3	10/7/2009 10:31
Daugherty	Reza	Havertown	PA	19083-5007	166	17	10/7/2009 10:33
hollis	Susan	Ebensburg	PA	15931-1410	72	35	10/7/2009 10:34
Tasco	C	Shavertown	PA	18708-8039	117	20	10/7/2009 10:38
Rauscher	Denise	North Wales	PA	19454-3429	61	12	10/7/2009 10:46
campbell	jason	York	PA	17402-5013	93	28	10/7/2009 10:46
Mudry	Benjamin	West Chester	PA	19380-6800	156	19	10/7/2009 11:01
gibale	melanie	Shavertown	PA	18708-9771	120	20	10/7/2009 11:04
Kresge	Charlotte	Saylorsburg	PA	18353-0361	189	16	10/7/2009 11:14
Anderson	Pamela	West Chester	PA	19380-1767	167	19	10/7/2009 11:20

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Thomas	Mary Fran	Wilkes Barre	PA	18702-7914	121	14	10/7/2009 11:27
Heitmiller	Carolyn M	Pottsville	PA	17901-2303	123	29	10/7/2009 11:41
Steinmetz	Beth	Bryn Mawr	PA	19010-3846	166	17	10/7/2009 11:57
Nemenz	Lori	Erie	PA	16505-1540	3	49	10/7/2009 11:58
Blackwell	Jodi	Revloc	PA	15948	72	35	10/7/2009 12:05
Smith	Deb	Harrisburg	PA	17110-3033	104	15	10/7/2009 12:05
Bose	Monika	Pittsburgh	PA	15241-2821	40	37	10/7/2009 12:07
Robbins	Alice	Chesterbrook	PA	19087-5510	157	19	10/7/2009 12:12
holt	shannon	Philadelphia	PA	19152-4504	172	2	10/7/2009 12:24
Aller	Amy	Middletown	PA	17057-4662	98	15	10/7/2009 12:42
D'Annibale	Diane	Coatesville	PA	19320-2535	158	44	10/7/2009 12:45
Leonard	Mary	Pittsburgh	PA	15237-4052	30	40	10/7/2009 12:45
Stupka	Stephanie	Springfield	PA	19064-3214	165	26	10/7/2009 12:46
Robbins	Diane	Hummelstown	PA	17036-9018	106	15	10/7/2009 13:03
MCDONALD	TIMOTHY	Franklin	PA	16323-2739	64	21	10/7/2009 13:08
Padgett	Sally	North East	PA	16428-3761	4	21	10/7/2009 13:08
abert	nanette	Mansfield	PA	16933-1031	68	25	10/7/2009 13:16
Schluth	lori	Lansdale	PA	19446-3445	53	24	10/7/2009 13:18
Rubin	Debbie	Lititz	PA	17543-6506	97	13	10/7/2009 13:21
Landis	Kathy	Millersville	PA	17551-9747	100	13	10/7/2009 13:23
Berger	Paula	Wallingford	PA	19086-6785	168	9	10/7/2009 13:34
Cooper	Kristina	Erie	PA	16510-6403	2	49	10/7/2009 13:35
McDonald	Tim	Oil City	PA	16301-2269	64	21	10/7/2009 13:37
mastromonaco	maureen	Monroeville	PA	15146-4632	25	45	10/7/2009 14:26
Smiley	Brian	New Oxford	PA	17350-1520	193	33	10/7/2009 14:27
Bonner	Donna	Chester	PA	19013-5808	159	9	10/7/2009 14:49
Ohler	Rebecca	Philadelphia	PA	19146-3130	186	1	10/7/2009 14:51
O'Connor	Erin	Douglassville	PA	19518-9505	130	11	10/7/2009 14:56
Rossi	Bonita	Exton	PA	19341-1157	155	19	10/7/2009 14:58
Hawran	Mary	Honesdale	PA	18431-7822	139	20	10/7/2009 15:18
Rhinehart	Lisa G	Mechanicsburg	PA	17050-2098	87	31	10/7/2009 15:24
Rathbone	Marjorie	Bryn Mawr	PA	19010-2237	165	17	10/7/2009 15:26
Galer	Linda	Flourtown	PA	19031-1206	148	7	10/7/2009 15:28
Fala	Cheryl	Lansdale	PA	19446-6631	61	12	10/7/2009 15:59
Ellena	Kelly	Tarentum	PA	15084-1836		40	10/7/2009 16:13

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Ziegler	Cameron	Broomall	PA	19008-1126	165	26	10/7/2009 16:36
Deiss	Heather	Whitehall	PA	18052-6216	183	18	10/7/2009 16:43
Telleck	Penni	Pittsburgh	PA	15221-4002	34	43	10/7/2009 17:00
Kotarsky	Paula	Berwick	PA	18603-5821	109	27	10/7/2009 17:21
Van Skiver	Madeline	Philadelphia	PA	19148-1901	184	1	10/7/2009 17:23
Chesek	Suzann	Etters	PA	17319-8909	92	31	10/7/2009 17:23
Lenhart	Stephanie	Palmerton	PA	18071-1214	122	29	10/7/2009 17:38
LEKNES	VIVIAN	West Chester	PA	19382-5071	156	19	10/7/2009 17:38
Kelly	Stephen	Levittown	PA	19054-3918	140	10	10/7/2009 17:41
McEntire	Amanda	Clarion	PA	16214-1046	63	21	10/7/2009 17:48
Dumbaugh	Jennifer	Butler	PA	16001-4724	11	21	10/7/2009 17:50
Heaps	William	Berwick	PA	18603-4710	109	27	10/7/2009 17:51
benjamin	bonnie	Southeastern	PA	19399-0081	157	19	10/7/2009 17:55
Dunst	Darlene	Laurys Station	PA	18059-1300	187	16	10/7/2009 18:09
kuzma	laura	Ambridge	PA	15003-1506	16	47	10/7/2009 18:14
Cohen	Karen	Philadelphia	PA	19119-3045	200	4	10/7/2009 18:15
Wemer	Cynthia	Harrisburg	PA	17111-4680	105	15	10/7/2009 18:26
Cormier	Donna	Philadelphia	PA	19137-2016	177	5	10/7/2009 18:39
Andreev	Patricia	Yardley	PA	19067-4351	31	10	10/7/2009 18:44
Fewer	Megan	Harleysville	PA	19438-2016	70	24	10/7/2009 19:05
venuto	pat	West Chester	PA	19382-6150	158	9	10/7/2009 19:10
Gibson	Deborah	Jersey Shore	PA	17740-1508	84	23	10/7/2009 19:23
Glover	Denise	Warrington	PA	18976-2127	144	12	10/7/2009 19:48
younker	carolyn	Chambersburg	PA	17202-8820	89	33	10/7/2009 20:00
DiCicco	janet	Duryea	PA	18642-1132	118	22	10/7/2009 20:07
Riley	Chris	Danville	PA	17821	107	27	10/7/2009 20:16
kerns	donald	Media	PA	19063-2122	168	26	10/7/2009 20:33
Bucci	Beth	Wayne	PA	19087	165	17	10/7/2009 20:37
Rogerson	Tony	Bath	PA	18014-9189	138	16	10/7/2009 20:37
Pulwer	Ruth	Ardmore	PA	19003-2927	166	17	10/7/2009 20:44
Herman	Jill	Greensburg	PA	15601-4932	57	39	10/7/2009 20:48
Brockson	Kim	Morton	PA	19070-0080	163	26	10/7/2009 21:32
Martin	Gregory	Shippensburg	PA	17257-9522	89	31	10/7/2009 21:37
Bochter	Lisa	Pittsburgh	PA	15226-1920	22	42	10/7/2009 21:47
Karolewski	Elizabeth	Wayne	PA	19087-3918	161	17	10/7/2009 21:59

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Lewkowicz	Tracey	Pittsburgh	PA	15224-1416	20	38	10/7/2009 22:11
Remington	Laura	New Freedom	PA	17349-9658	93	28	10/7/2009 22:33
Innamorato	Carol	Pittsburgh	PA	15237-2210	21	40	10/7/2009 22:41
Sandvik	Christine	Collegeville	PA	19426-1719	147	44	10/8/2009 3:36
Rathi	Neeti	Mechanicsburg	PA	17050-5007	87	31	10/8/2009 3:50
HAYDU	sHERI	Milford	PA	18337-7136	189	20	10/8/2009 5:52
Radvon	Andrea	Perkasie	PA	18944-1047	145	10	10/8/2009 5:59
cuomo	christopher	Harrisburg	PA	17103-1620	103	15	10/8/2009 6:16
Glogowski	Susan	Moosic	PA	18507-1550	113	22	10/8/2009 7:20
Cowell	Lynn	Meadville	PA	16335-1221	6	50	10/8/2009 7:36
Buckley	Jackie	Cooperstown	PA	16317-1504	64	21	10/8/2009 7:39
downs	gina	Philadelphia	PA	19121-5019	197	3	10/8/2009 7:43
Lewkowicz	Amy	Munhall	PA	15120-3104	35	43	10/8/2009 8:07
Zaunick	Michael	Bradford	PA	16701-3068	67	25	10/8/2009 8:18
Shallenberger	Diana	Harmony	PA	16037-9403	8	21	10/8/2009 8:29
Ott	Sally	Pottstown	PA	19465-8089	26	44	10/8/2009 8:38
Dienstman	Robin	Philadelphia	PA	19144-4557	198	3	10/8/2009 8:57
Hahn	Christine	Green Lane	PA	18054-2140	147	24	10/8/2009 9:03
Brandl	Joanne	Callery	PA	16024-0258	12	40	10/8/2009 9:14
Remley	Carla	Scranton	PA	18504-3011	113	22	10/8/2009 9:29
Abbott	Kim	Lansdale	PA	19446-6815	53	24	10/8/2009 9:43
McClanahan	Mary	State College	PA	16801-7601	171	34	10/8/2009 9:49
Beiswinger	Virginia	Audubon	PA	19403-5606	150	44	10/8/2009 9:51
Kwasniewski	Lisa	Heidelberg	PA	15106-3920	45	42	10/8/2009 9:51
french	shirley	Summit Hill	PA	18250-1742	122	14	10/8/2009 9:52
Morales	Emily	West Chester	PA	19382-5021	156	19	10/8/2009 10:39
McCarthy	Christine	North Wales	PA	19454-2853	61	12	10/8/2009 10:58
Morales	Anne	West Chester	PA	19380-2022	158	19	10/8/2009 11:17
Zwarych	M	Allentown	PA	18102-4434	132	16	10/8/2009 11:28
Keller	David	Southampton	PA	18966-1311	178	6	10/8/2009 11:39
Gallagher	Susan	Secane	PA	19018-3534	163	26	10/8/2009 11:43
Morales	Michael	Lansdale	PA	19446-1582	151	12	10/8/2009 11:48
Eckhart	Jason	Monaca	PA	15061-2767	15	47	10/8/2009 12:27
Kranchick	Claudia	Hershey	PA	17033-1878	106	15	10/8/2009 12:29
Davis-	Ruth	Waynesboro	PA	17268-1255	90	33	10/8/2009 12:40

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Pirrung	Erica	Sewickley	PA	15143-1646	53	32	10/8/2009 12:44
Jabour	Judith	Pittsburgh	PA	15236-1323	38	43	10/8/2009 12:50
KOhl	Jessica	West Lawn	PA	19609-2033	129	48	10/8/2009 13:09
DiGiacomo	Patricia	Philadelphia	PA	19128-1514	194	3	10/8/2009 13:11
Margulies	Susan	Lansdale	PA	19446-1582	151	12	10/8/2009 13:16
Tower	Naomi	North Wales	PA	19454-3784	61	12	10/8/2009 13:16
Heller	Elizabeth	Drexel Hill	PA	19026-1113	164	26	10/8/2009 13:23
Bone	Lisa	Easton	PA	18045-5060	137	24	10/8/2009 13:40
Young	Grace	Blandon	PA	19510-9683	124	29	10/8/2009 14:29
Pierce	Christina	Scranton	PA	18505-2933	113	22	10/8/2009 14:37
Follet	Diane	Wescosville	PA	18106-9619	134	16	10/8/2009 15:24
Stone	Anne	Berwyn	PA	19312-1440	157	19	10/8/2009 15:46
Pupo	Cathy	Lewistown	PA	17044-2516	82	34	10/8/2009 16:10
Cook	Nicola	West Chester	PA	19380-4355	156	19	10/8/2009 16:14
Deiss	Yves	Whitehall	PA	18052-6216	183	18	10/8/2009 16:37
Theodorou	Doris	Easton	PA	18045-2028	137	24	10/8/2009 16:41
Dilullo	David	Drexel Hill	PA	19026-4312	164	26	10/8/2009 16:45
Arnett	Melissa	Danville	PA	17821-1169	107	27	10/8/2009 16:46
Wilkins	Janice	Bellevue	PA	15202-3655	16	42	10/8/2009 16:59
Cataraso	Gale	Ephrata	PA	17522-1349	99	36	10/8/2009 17:01
Ferrara	Susan	Lancaster	PA	17602-2654	96	13	10/8/2009 17:37
Roeder	Cathy	Schuylkill Haven	PA	17972-1417	125	29	10/8/2009 18:00
CAPUANO	SIGRID	Aston	PA	19014-1601	160	9	10/8/2009 18:17
MACKEY	GINA	Hanover	PA	17331-1940	193	28	10/8/2009 18:41
Hartzell	James	Green Lane	PA	18054-2035	147	24	10/8/2009 19:04
rosanio	elaine	Broomall	PA	19008-2823	166	26	10/8/2009 19:18
Vize	Nancy	Temple	PA	19560-9719	126	11	10/8/2009 19:35
Lieberman	Andrea	Jenkintown	PA	19046-3126	154	4	10/8/2009 20:18
LaPine	Frances	Palmyra	PA	17078-8786			10/8/2009 20:42
Carnahan	Luann	Eighty Four	PA	15330-2539	39	46	10/8/2009 21:06
McFadden	Barb	Hanover	PA	17331-3418	193	28	10/8/2009 21:26
ARNONE	Chris	Wyoming	PA	18644-2137	120	14	10/8/2009 22:03
keller	karen	Tyrone	PA	16686-7210	80	30	10/8/2009 22:14
Ritsky	Marilyn	Brockway	PA	15824-1735			10/8/2009 23:12
Carpenter	Katherine	Exton	PA	19341-1926	155	19	10/8/2009 23:15

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Sheppick	Richard	Charleroi	PA	15022-1448	49	32	10/8/2009 23:23
Wanish	Carrie	Phoenixville	PA	19460-3806	157	19	10/8/2009 23:27
Bundy	Carmen	Watsontown	PA	17777-1404	108	27	10/8/2009 23:37
Weaver	Lonna	Carlisle	PA	17013-8106	199	31	10/8/2009 23:42
Irwin	Elizabeth	Tobyhanna	PA	18466-3663	176	22	10/9/2009 1:10
Cipolla	Debbie	Quakertown	PA	18951-2141	145	24	10/9/2009 4:52
Korb	Kathleen	Palmyra	PA	17078-9365	37	48	10/9/2009 6:00
Mains	Louise	Ephrata	PA	17522-2514	99	36	10/9/2009 6:21
Caster	Ernie	Pittsburgh	PA	15227-3553	36	42	10/9/2009 6:25
Epstein	Bonnie	Upper Holland	PA	19053-1523	178	6	10/9/2009 6:30
Vasicak	Karen	Swoyersville	PA	18704-2140	120	14	10/9/2009 6:36
SIVULICH	JANICE	Bainbridge	PA	17502-9493	98	48	10/9/2009 6:40
Ridgeway	William	Scranton	PA	18504-1545	113	22	10/9/2009 6:53
Carter	Rhonda	Hollidaysburg	PA	16648-1310	80	30	10/9/2009 7:04
DI MICCO	GLORIA	Newfoundland	PA	18445-0314	115	20	10/9/2009 7:04
Yorks	Susan	Richfield	PA	17086-9627	82	34	10/9/2009 7:06
Paccione	Monica	Hawley	PA	18428-9773	139	20	10/9/2009 7:13
Freyermuth	Marylinda	Mc Alisterville	PA	17049-8857	82	34	10/9/2009 7:16
Swartz	Paula	Punxsutawney	PA	15767-5741	66	41	10/9/2009 7:24
Yamrick	Kristie	Sykesville	PA	15865-1103	66	25	10/9/2009 7:24
Augustine	Deborah	Kunkletown	PA	18058-2607	122	29	10/9/2009 7:25
Swisher	Katherine	Lancaster	PA	17603-6432	43	13	10/9/2009 7:26
McGarvey	Jane	Philadelphia	PA	19147-1129	151	12	10/9/2009 7:37
Jenkins	Denise	Bellefonte	PA	16823-8455	76	34	10/9/2009 7:40
Cumpston	Cathy	Pittsburgh	PA	15205-1608	45	42	10/9/2009 7:43
Kimble	Kathleen	Newtown	PA	18940-0454	31	10	10/9/2009 7:43
CLARIDGE	JENNIFER	Fairview	PA	16415-1962	5	49	10/9/2009 7:50
Crowley	Joyce	Morton	PA	19070-1240	163	26	10/9/2009 7:51
McCullough	Randi	York	PA	17403-9502	93	28	10/9/2009 7:54
Blacksmith	Moira	Blue Bell	PA	19422-1341	61	44	10/9/2009 7:57
Kaplan	Stephanie	Broomall	PA	19008-3816	166	26	10/9/2009 7:58
Roach	Kathryn	West Chester	PA	19380-7308	156	19	10/9/2009 7:58
Dougherty	Stacie	Oreland	PA	19075-2420	154	7	10/9/2009 8:01
ALVAREZ VIRELLA	RAUL	Lancaster	PA	17602-3724	96	13	10/9/2009 8:03
Parola	Charron	Stroudsburg	PA	18360-9366	176	29	10/9/2009 8:04

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
STREET	SHEREE	West Chester	PA	19382-5442	156	19	10/9/2009 8:08
Janeba	Danielle	Glenmoore	PA	19343-1346	26	44	10/9/2009 8:11
WALTER	MICHELLE	Bernville	PA	19506-8108	129	48	10/9/2009 8:13
reindollar	angie	New Oxford	PA	17350-9353	193	33	10/9/2009 8:14
Link	Christina	Willow Street	PA	17584-9403	43	13	10/9/2009 8:18
Alamo	Jennifer	North Wales	PA	19454-4026	61	12	10/9/2009 8:18
McDermott	Anita	Westover	PA	16692-9309	74	41	10/9/2009 8:19
Mikalic	Donna	Philadelphia	PA	19115-3941	172	5	10/9/2009 8:20
McDermott	Warren	Westover	PA	16692-9309	74	41	10/9/2009 8:20
Blaker	Hilary	Wilkinsburg	PA	15221-3241	21	38	10/9/2009 8:25
Hacker	Babr	Elliottsburg	PA	17024-9274	86	34	10/9/2009 8:25
Longreen	Linda	Palmyra	PA	17078-8907	105	15	10/9/2009 8:25
Taylor	Amanda	Chicora	PA	16025-1919	11	41	10/9/2009 8:26
Pegg	Dara	Greensburg	PA	15601-8526	57	39	10/9/2009 8:27
Eckard	Rachel	Hanover	PA	17331-9369	193	28	10/9/2009 8:33
Scott	Heather	Pittsburgh	PA	15218-1309	34	43	10/9/2009 8:34
Novak & Family	Ange	Jessup	PA	18434-1717	115	22	10/9/2009 8:34
Mehosky	Kathleen	Harrisburg	PA	17102-1727	103	15	10/9/2009 8:36
Marcinko Sr & Family	Andy	Olyphant	PA	18447-1940	115	22	10/9/2009 8:36
Hornyak	Marie	Harleysville	PA	19438-1811	70	24	10/9/2009 8:37
Alamo	Doris	Lansdale	PA	19446-5109	70	24	10/9/2009 8:41
Watson	Rebecca	Souderton	PA	18964-2548	53	12	10/9/2009 8:41
Hewitt D'Angelo	Peg	Drexel Hill	PA	19026-5203	163	26	10/9/2009 8:46
Young	Anne	Plymouth Meeting	PA	19462-1637	61	17	10/9/2009 8:50
Snyder	Eileen	Reeders	PA	18352-0336	176	29	10/9/2009 8:51
martin	jill	Collegeville	PA	19426-1265	147	44	10/9/2009 8:52
Bowers	David	Erie	PA	16506-4324	3	49	10/9/2009 8:55
Carlin	Drew	King Of Prussia	PA	19406-1721	149	17	10/9/2009 9:00
Corsi	Matthew	Havertown	PA	19083-4236	166	17	10/9/2009 9:00
Bailey	Cindy	Waynesboro	PA	17268-8656	90	33	10/9/2009 9:04
Messersmith	Lynn	Dover	PA	17315-4409	196	33	10/9/2009 9:04
carr	joan	Philadelphia	PA	19128-4147	194	7	10/9/2009 9:08
Ospina	Claudia	Levittown	PA	19056-1553	140	6	10/9/2009 9:12
Prisco	Melanie	Pittsburgh	PA	15228-2452	42	37	10/9/2009 9:15
smith	kathleen	Emmaus	PA	18049-4847	134	24	10/9/2009 9:16

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
DeFazio	Nicole	Bellefonte	PA	16823-7957	171	34	10/9/2009 9:28
Allarde	Lisa	Green Lane	PA	18054-2265			10/9/2009 9:28
Bachant	Susan	York	PA	17403-1904	95	28	10/9/2009 9:28
Gaccione	Delores	Carbondale	PA	18407-3001	115	22	10/9/2009 9:33
Rodriguez	Christina	Dingmans Ferry	PA	18328-0691	189	20	10/9/2009 9:35
Serfass-Zellner	Jennifer	Macungie	PA	18062-8449	134	16	10/9/2009 9:44
Turney	Lori	Germansville	PA	18053-2034	187	29	10/9/2009 9:44
Lyons	Susan	Shippensburg	PA	17257-0008	89	31	10/9/2009 9:45
Wills	Kathy	Dallastown	PA	17313-9578	94	28	10/9/2009 9:47
Hellmann	Eric	Quakertown	PA	18951-1131	145	24	10/9/2009 9:50
Hoedemaker	Suzanne	Newburg	PA	17240-9133	199	31	10/9/2009 9:52
Bello	Andrew	Thompson	PA	18465-9558	111	20	10/9/2009 9:59
Maniatakes	Beverly	Oxford	PA	19363-1180	13	9	10/9/2009 9:59
Allen	Brooke	Philadelphia	PA	19147-1517	175	1	10/9/2009 10:03
Kelly	Madeleine	Ridley Park	PA	19078-1719	162	26	10/9/2009 10:09
Migliore	Matt	Phila	PA	19147-4001	175	1	10/9/2009 10:13
Keenan	Judith	Norwood	PA	19074-1316	162	8	10/9/2009 10:15
Greenawalt	Barbara	Osceola	PA	16942-9680	68	25	10/9/2009 10:16
Glassmoyer	Tina	Birdsboro	PA	19508-2416	130	11	10/9/2009 10:16
farnham	elaine	Greensburg	PA	15601-4810	57	39	10/9/2009 10:19
Taylor	Kathy	Pittsburgh	PA	15212-2704	20	38	10/9/2009 10:20
Hetrick	Cathy	Spring Mills	PA	16875-9011	171	34	10/9/2009 10:22
delancey	Abigale	Oakmont	PA	15139-1824	33	38	10/9/2009 10:23
leistner	dorothy	Delmont	PA	15626-1207	57	41	10/9/2009 10:24
Kelmelis	Jennifer	Mount Carmel	PA	17851-2469	107	27	10/9/2009 10:30
winchester	linda	Norristown	PA	19401-3234	70	17	10/9/2009 10:33
Winters	Michele	Farrell	PA	16121-1755	7	50	10/9/2009 10:41
Lepre	Jeffrey	Scranton	PA	18505-2622	112	22	10/9/2009 10:43
Napotnik	Carol	Pittsburgh	PA	15202-1001	44	37	10/9/2009 10:43
walters	laurie	driftwood	PA	15832	67	25	10/9/2009 11:05
McGroarty	Regine	Philadelphia	PA	19136-2002	169	5	10/9/2009 11:06
Montgomery	Robert	Lower Burrell	PA	15068-3851	24	38	10/9/2009 11:09
Scalio	Rebecca	Upper Chichester	PA	19061-2520	160	9	10/9/2009 11:09
Fischerkeller Jr	John M	Pittsburgh	PA	15216-2033	42	37	10/9/2009 11:09
Cavallo	Janet	Secane	PA	19018-2800	163	26	10/9/2009 11:10

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Perez	Tammy	Carlisle	PA	17015-7825	199	31	10/9/2009 11:12
Critchley	Jennifer	Scranton	PA	18508-2320	113	22	10/9/2009 11:13
Pendze	Irene	Philadelphia	PA	19134-1624	180	2	10/9/2009 11:16
Kelley	Lori	Ephrata	PA	17522-2655	99	36	10/9/2009 11:21
Wright	Wendi	Harrisburg	PA	17112-9239	104	15	10/9/2009 11:25
albence	ann	Doylestown	PA	18902-1892	29	10	10/9/2009 11:28
Scott	Karen	Bala Cynwyd	PA	19004-1105	194	17	10/9/2009 11:33
zang	rita	Dupont	PA	18641-2072	120	14	10/9/2009 11:37
Garnett	Bud	Pennsburg	PA	18073-2538	53	12	10/9/2009 11:42
Dougherty	Janet	West Chester	PA	19382-5348	156	19	10/9/2009 11:47
KERN	CHERYL	Aston	PA	19014-1240	160	9	10/9/2009 11:49
Satifka	Tricia	Washington	PA	15301-5240	48	46	10/9/2009 11:54
MATRISHION	RENE	Elysburg	PA	17824-7210	107	27	10/9/2009 11:55
Johnson	Kelsey	Macungie	PA	18062-8945	134	16	10/9/2009 12:01
Soffian	Arline	New Hope	PA	18938-9403	29	10	10/9/2009 12:14
Roush Shaver	Lorri	Hummelstown	PA	17036-9233	105	15	10/9/2009 12:18
Moran	Elaine	Harleysville	PA	19438-1816	70	24	10/9/2009 12:23
Schaeffer	Barbara	Erie	PA	16509-1735	3	49	10/9/2009 12:24
Grossett	Jeffrey	Fairview	PA	16415-2707	3	49	10/9/2009 12:36
Mammarella	Nicole	New Holland	PA	17557-1441	99	36	10/9/2009 12:46
Dickie	Linda	Indiana	PA	15701-7444	62	41	10/9/2009 12:50
Leavitt	Carolyn	Easton	PA	18040-7922	137	24	10/9/2009 13:16
Stough	Susette S	Red Lion	PA	17356-8586	94	13	10/9/2009 13:20
Cembruch	Kathy	Philadelphia	PA	19115-3002	172	5	10/9/2009 13:26
pojawis	joan	Newtown	PA	18940-3421	31	10	10/9/2009 13:32
French	Margaret	Upper Chichester	PA	19014-3525	159	9	10/9/2009 13:39
Frohlich	Pamela	Langhorne	PA	19047-1382	142	6	10/9/2009 13:40
Daub	Lynne	Marietta	PA	17547-1924	98	48	10/9/2009 13:56
abrams	tim	Luzerne	PA	18709-1000	118	14	10/9/2009 14:07
Rodrigues	Deb	Denver	PA	17517-8918	99	36	10/9/2009 14:08
Brooks	Frank	Indiana	PA	15701-3355	62	41	10/9/2009 14:14
Muehlhof	Charles	Danville	PA	17821-8586	107	27	10/9/2009 14:17
Rupert	Chelsea	Indiana	PA	15701-2404	62	41	10/9/2009 14:18
PISANI	RANDY	Elysburg	PA	17824-7210	107	27	10/9/2009 14:21
DeFazio	Denise	Dubois	PA	15801-3412	75	25	10/9/2009 14:21

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Tworkoski	Tina	Macungie	PA	18062-2019	187	11	10/9/2009 14:27
tennyson	kathleen	Coraopolis	PA	15108-3650	45	42	10/9/2009 14:34
McCluskey	Patti	Macungie	PA	18062-8757	134	24	10/9/2009 14:43
Needleman	Ingrid	Philadelphia	PA	19149-3438	179	2	10/9/2009 14:48
Hagy	Gary	Hamburg	PA	19526-8975	125	29	10/9/2009 15:00
Bonk	Marliese	Pittsburgh	PA	15218-1151	34	43	10/9/2009 15:03
Wagoner	Melissa	Bensalem	PA	19020-4436	18	6	10/9/2009 15:13
Prosseda	Tina	Pennsdale	PA	17756-6477	84	23	10/9/2009 15:20
Piotrowski	Robert	York	PA	17404-9185	47	28	10/9/2009 15:26
monzo	kim	Royersford	PA	19468-1384	146	44	10/9/2009 15:38
Warnagiris	Lori	Hazleton	PA	18201-6802	116	14	10/9/2009 15:43
Zelno III	Thomas	Olyphant	PA	18447-1985	115	22	10/9/2009 15:56
brown	sheila	Orefield	PA	18069-9117	183	16	10/9/2009 15:59
adams	cheryl	Lucernemines	PA	15754-0027	62	41	10/9/2009 16:05
Mace	Cindy	Williamstown	PA	17098-1416	104	27	10/9/2009 16:29
Kates	Barbara	Clifton Heights	PA	19018-1630	163	26	10/9/2009 16:34
Kravitz	Ann	North Wales	PA	19454-3735	61	12	10/9/2009 16:38
Albert	Candace	Warrington	PA	18976-2525	144	10	10/9/2009 17:46
brown	stacey	Lake City	PA	16423-1217	5	49	10/9/2009 17:49
schlosman	lisa	Media	PA	19063-2122	168	26	10/9/2009 17:49
Collins	Annette	Philadelphia	PA	19114-3754	169	5	10/9/2009 17:50
strohl	karen	Lehighton	PA	18235-9180	122	14	10/9/2009 18:22
Keogh	Sandra	Doylestown	PA	18901-4822	143	10	10/9/2009 18:23
POWALS	MELANIE	Philadelphia	PA	19115-4709	174	5	10/9/2009 18:27
Rapp	Jodie	Coatesville	PA	19320-1035	26	44	10/9/2009 18:48
CARSON	DEBBIE	Charleroi	PA	15022-3022	49	46	10/9/2009 18:56
DeOrio	Sheri	Pittsburgh	PA	15237-3747	30	40	10/9/2009 18:57
De Franco	Stephen	Nazareth	PA	18064-1740	137	18	10/9/2009 19:29
Steele	Patty	Easton	PA	18045-1960	137	24	10/9/2009 19:33
Harris	Christine	Philadelphia	PA	19115-1816	170	5	10/9/2009 19:44
campbell	sarah	Cogan Station	PA	17728-7607	83	23	10/9/2009 20:14
Kotrick	Sabrina	Northern Cambria	PA	15714-1462	73	35	10/9/2009 20:26
allen	darvi	Charleroi	PA	15022-1128	49	46	10/9/2009 20:30
Masishin	Mike	Aston	PA	19014-2278	161	9	10/9/2009 20:32
Kulkarni	Claudette	Pittsburgh	PA	15206-1625	24	38	10/9/2009 20:39

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Molchany	Stacy	Glenshaw	PA	15116-2500	30	40	10/9/2009 21:03
Molchany	Rick	Glenshaw	PA	15116-2500	30	40	10/9/2009 21:04
LaCroce	Karen	Altoona	PA	16601-4018	79	30	10/9/2009 21:05
Rothwell	Cheryl	Blue Bell	PA	19422-1384	61	44	10/9/2009 21:06
Westley	Stacey	Exton	PA	19341-2152	167	19	10/9/2009 21:26
bershady	suzanne	Philadelphia	PA	19118-3828	200	4	10/9/2009 21:35
Hermann	Marjorie	Warminster	PA	18974-3485	29	12	10/9/2009 21:46
Gibson	Linda	Strasburg	PA	17579-9729	100	13	10/9/2009 21:59
Murphy	Barbara	Philadelphia	PA	19111-5504	202	5	10/9/2009 22:18
Loucks	Ruth Ann	York	PA	17408-4147	196	28	10/9/2009 22:27
filippi	lisa	Moon Township	PA	15108-4249	44	37	10/9/2009 22:46
Verruni	Lauren	Mount Pleasant Mills	PA	17853-8579	82	27	10/9/2009 23:36
Freed	Ralph	Blairsville	PA	15717-5601	62	41	10/9/2009 23:40
pepper	lucinda	Conneautville	PA	16406-7065	5	50	10/9/2009 23:46
Baker	Janet	Hollidaysburg	PA	16648-9110	80	30	10/10/2009 0:09
Echternach	Sharon	Ephrata	PA	17522-8719	43	36	10/10/2009 1:09
Fisher	Keith	Allentown	PA	18109-2506	133	16	10/10/2009 4:17
KEINER	BERNICE	Wilkes Barre	PA	18702-5102	121	14	10/10/2009 5:50
Estrada	Linda	Bedford	PA	15522-1725	78	30	10/10/2009 6:34
Baldo Cosgrove	Magdalyn	Wilkes Barre	PA	18702-7334	118	14	10/10/2009 6:51
francart	aimee	Gibsonia	PA	15044-9280	28	40	10/10/2009 6:52
Penna	Lizzie	Wynnewood	PA	19096-2139	149	17	10/10/2009 7:02
Searfoss	Diane	Reading	PA	19604-1716	126	11	10/10/2009 7:10
Zeoli	Trisha	Philadelphia	PA	19154-4043	169	5	10/10/2009 7:12
Williams	Brooke	Philadelphia	PA	19131-2910	175	1	10/10/2009 8:06
Schaffer	Janice	Scranton	PA	18504-3523	113	22	10/10/2009 8:08
pension	keith	Newtown Square	PA	19073-1207	167	19	10/10/2009 8:43
Lantzy	Jody	York Haven	PA	17370-9751	92	15	10/10/2009 9:13
Merrell	Rose	Pittsburgh	PA	15216-3238	22	42	10/10/2009 9:14
McNeal	Whitney	E Fallowfield	PA	19320-3967	13	44	10/10/2009 9:26
Gleeson	Jill	Philipsburg	PA	16866-2324	77	35	10/10/2009 9:31
Wiggins	Claire	Philadelphia	PA	19111-1828	172	3	10/10/2009 9:34
Largen	William	Pittsburgh	PA	15224-2240	200	3	10/10/2009 9:35
Dinneen	Susan	Wynnewood	PA	19096-1203	149	17	10/10/2009 9:36
Fullem	Jen	Folcroft	PA	19032-1525	162	8	10/10/2009 9:36

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Kinney	Carol	Pittsburgh	PA	15205-1633	45	42	10/10/2009 10:13
imhoff	elaine	Gibsonia	PA	15044-9102	33	40	10/10/2009 10:40
Foster	Joseph	Mountain Top	PA	18707-9519	119	20	10/10/2009 10:54
Gresko	Michele	Moscow	PA	18444-0413	112	22	10/10/2009 10:55
Whited	Rob	Sinking Spring	PA	19608-2119	130	11	10/10/2009 10:56
Devine	Erin	Girard	PA	16417-8706	5	49	10/10/2009 11:09
Grasso	Diane	Sharon Hill	PA	19079-1912	162	8	10/10/2009 11:17
Lindquist	Donna	Harrisburg	PA	17112-9248	104	15	10/10/2009 11:19
Rogers	Sandra	Montrose	PA	18801-9429	111	23	10/10/2009 11:27
Martenson	Sarah	York Haven	PA	17370-9751	92	15	10/10/2009 11:33
Graham	Heather	Erie	PA	16505-2234	2	49	10/10/2009 11:45
Bedrick	Jeffrey	Newtown Square	PA	19073-2601	161	17	10/10/2009 12:07
Thompson	Susan	Philadelphia	PA	19128-3237	194	3	10/10/2009 12:24
orleski	sharon	Nanticoke	PA	18634-2928	119	14	10/10/2009 12:39
Bartos	Cindy	Allentown	PA	18102-1223	132	16	10/10/2009 13:01
Danner	Jennifer	Nazareth	PA	18064-9106	138	16	10/10/2009 13:13
Fritzinger	Kimberly	Germansville	PA	18053-2752	187	29	10/10/2009 13:15
Abshier	Rose	Pittsburgh	PA	15221-3918	34	43	10/10/2009 13:15
Troyano	Amy	Philadelphia	PA	19104-2485	195	7	10/10/2009 13:15
Mekinc	Chloe	Philadelphia	PA	19147-1025	182	1	10/10/2009 14:24
Harkins	Sandra	McKeesport	PA	15132-5103	38	45	10/10/2009 14:28
krape	birgit	jersey shore	PA	17740			10/10/2009 15:07
Walker	Kathy	Holtwood	PA	17532-9704	100	13	10/10/2009 15:10
Lanzillo	Nancy	York	PA	17404-1689	47	28	10/10/2009 15:28
Mrozowicz	Jean	Galeton	PA	16922-9493	67	25	10/10/2009 15:42
Kessler	Janice	Hanover	PA	17331-7730	91	33	10/10/2009 16:11
wtakins	penelope	Newtown Square	PA	19073-1203	167	19	10/10/2009 16:23
Franck	Peggy	Malvern	PA	19355-9760	157	19	10/10/2009 16:46
Wilson	Nancy	Ford City	PA	16226-5411	60	41	10/10/2009 16:46
Perks	Ashley	Boyertown	PA	19512-1024	130	11	10/10/2009 17:13
davidson	dolores	Zelienople	PA	16063-3026	8	40	10/10/2009 17:30
Shimp	Nicole	State College	PA	16803-2654	77	34	10/10/2009 17:53
Boyer	Tara	Sinking Spring	PA	19608-2119	129	48	10/10/2009 17:55
bascome	abigail	Philadelphia	PA	19147-4822	175	1	10/10/2009 17:58
Corrato	Elaina	Philadelphia	PA	19153-2218	185	8	10/10/2009 18:36

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Dougherty	Mark	West Chester	PA	19382-5348	156	19	10/10/2009 18:43
kohut	steve	Pittsburgh	PA	15227-3553	36	42	10/10/2009 19:24
Tuttle	Diane	Jeffersonville	PA	19403-3325	150	44	10/10/2009 19:41
Decker	Roger	Sellersville	PA	18960-1816	145	24	10/10/2009 19:44
Schulte	Jennifer	Collegeville	PA	19426-3845	150	19	10/10/2009 20:07
DiValerio	Shannon	Bethlehem	PA	18018-2584	135	18	10/10/2009 20:07
Schmidt	Elvamae	Phila	PA	19142-2518	185	8	10/10/2009 20:36
Haggerty	Renee DZ.	Allentown	PA	18103-4362	133	24	10/10/2009 20:47
Pena	Clarissa	Hegins	PA	17938-9183	125	29	10/10/2009 20:54
Metroke	Sally	Allentown	PA	18104-4031	132	16	10/10/2009 21:03
Rathgeber	Thelma	Doylestown	PA	18901-2349	143	10	10/10/2009 21:13
Marrone	Christine	Breinigsville	PA	18031-1175	134	16	10/10/2009 21:23
Bracken	Pamela	Clearfield	PA	16830-3122	74	25	10/11/2009 2:13
Brown	Stephanie	Birdsboro	PA	19508-9124	128	11	10/11/2009 6:50
Desert	Cara	West Chester	PA	19382-5442	156	19	10/11/2009 8:57
hinton	jeen	pa	PA	19114		5	10/11/2009 9:00
Shalitta	Mimi	Glenside	PA	19038-2906	154	4	10/11/2009 9:29
Kelley	Lori	Duncannon	PA	17020-1211	86	34	10/11/2009 9:36
Schwartz	Dina	Philadelphia	PA	19111-4129	202	2	10/11/2009 10:10
hawkins	william	Philadelphia	PA	19106-3727	175	1	10/11/2009 10:37
Pena	Jess	Hegins	PA	17938-9183	125	29	10/11/2009 10:40
Belusko	Mary Theresa	Bloomsburg	PA	17815-8535	109	27	10/11/2009 12:32
Polites	Lisa	Philadelphia	PA	19123-1565	175	1	10/11/2009 15:19
Byers	Denise	Monongahela	PA	15063-3526	49	46	10/11/2009 15:33
Karcher	Kristin	Chalfont	PA	18914-3927	144	10	10/11/2009 15:46
Levy	Joel	Hallstead	PA	18822-9329	111	23	10/11/2009 16:56
Lisotto	mary	Pittsburgh	PA	15235-2616	32	43	10/11/2009 17:11
smith	paul	Downingtown	PA	19335-4128	155	19	10/11/2009 17:58
smith	dawn	Chambersburg	PA	17202-9189	89	33	10/11/2009 18:00
Lauffer	Ann	Allport	PA	16821-9730	74	35	10/11/2009 19:02
Westenhoefer	Judith	Kutztown	PA	19530-8400	187	16	10/11/2009 19:04
Altman	Marjie	Philadelphia	PA	19106-3935	175	1	10/11/2009 19:13
Weinstein	Jennifer	Allentown	PA	18106-9527	187	16	10/11/2009 19:30
Chalson	Adriana	Wallingford	PA	19086-6959	168	9	10/11/2009 19:40
marsteller	stacey	Stewartstown	PA	17363-8096	94	28	10/11/2009 19:43

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Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Fetterman	Sarah	Pittsburgh	PA	15210-4007	36	42	10/11/2009 20:28
MacKenzie	Patricia	Philadelphia	PA	19130-2344	195	1	10/11/2009 20:32
Henry	Kathy	Lancaster	PA	17601-2980	97	13	10/11/2009 20:43
ferro	alison	Sayre	PA	18840-9321	110	23	10/11/2009 21:45
Dinsmore	Corey	Chambersburg	PA	17202-8783	89	33	10/11/2009 22:12
Hershey	Rebecca	Shippensburg	PA	17257-9419	89	31	10/11/2009 22:25
Hesser	Ashley	Sinking Spring	PA	19608-1007	129	48	10/11/2009 22:26
Scott	Leslie	Ambler	PA	19002-5508	151	12	10/11/2009 23:42
vanart	sharon	Wernersville	PA	19565-1802	129	48	10/12/2009 0:16
Tester	Phyllis	Oxford	PA	19363-1734	13	9	10/12/2009 4:45
Pasi	Debbie	Pittsburgh	PA	15202-3824	45	42	10/12/2009 5:46
Bernacki	Marianne	Philadelphia	PA	19154-2030	169	5	10/12/2009 6:31
Canonaco	Connie	Huntingdon Valley	PA	19006-1309	29	12	10/12/2009 7:12
Rafferty	Maryellen	Paupack	PA	18451-9704	17	7	10/12/2009 7:38
Weinkopff	Susan	Tullytown	PA	19007-6005	140	10	10/12/2009 7:57
Ely	Bernice	Waynesboro	PA	17268-9316	90	33	10/12/2009 8:01
Charnetski	Cynthia	Kingston	PA	18704-5306	120	20	10/12/2009 8:11
Baines	Gina	Norristown	PA	19401-1747	70	17	10/12/2009 8:13
Irey	Donna	Gilbertsville	PA	19525-9407	147	44	10/12/2009 8:18
Knight	Jean	Airville	PA	17302-9007	94	28	10/12/2009 8:23
Daniels	Amy	Pottstown	PA	19464-1125	147	24	10/12/2009 8:35
CURTIS	AMY	Honey Brook	PA	19344-9024	26	44	10/12/2009 8:45
Rolison	Barbara	West Chester	PA	19380-6501	167	19	10/12/2009 8:46
Heck	Carolyn	Conshohocken	PA	19428-1102	61	17	10/12/2009 8:48
Zahora	JUdyth	Pottstown	PA	19464-4326	146	44	10/12/2009 8:56
DiNatale	Linda	Downingtown	PA	19335-1831	155	44	10/12/2009 9:04
Davies	Matthew P.	Hummelstown	PA	17036-8907	106	15	10/12/2009 9:16
LOANE	TINA	Pottstown	PA	19465-7062	26	44	10/12/2009 9:22
Patricola	David	Philadelphia	PA	19123-1565	175	1	10/12/2009 9:46
Phillips	C L	Pittsburgh	PA	15212-2754	19	42	10/12/2009 9:47
Shoemaker	Susan	Philadelphia	PA	19115-4510	172	3	10/12/2009 10:15
Santini	Meg	Limerick	PA	19468-4343	146	44	10/12/2009 10:20
Eisner	Cynthia	Pittsburgh	PA	15235-5202	34	43	10/12/2009 10:21
linn	bridget	Oxford	PA	19363-2249	13	9	10/12/2009 10:39
Klima	joe	Erie	PA	16509-2221	2	49	10/12/2009 10:47

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
bowman	diane	Annville	PA	17003-8448	102	48	10/12/2009 10:55
Goodwin	Kayla	Perkasie	PA	18944-2426	41	16	10/12/2009 10:57
Davis	Peter	Berwyn	PA	19312-1442	157	19	10/12/2009 11:37
DeMuth	Nancy K.	Greensburg	PA	15601-8614	59	39	10/12/2009 11:59
lesher	diane	Lancaster	PA	17602-1909	96	13	10/12/2009 13:06
Lorah	Adrienne	Stevens	PA	17578-9482	37	36	10/12/2009 13:20
Dove	Jenna	Shenandoah	PA	17976-1821	123	29	10/12/2009 13:20
Travaglini	Alexia	Bryn Mawr	PA	19010-2612	149	17	10/12/2009 14:02
Wolfe	Cathy	Bernville	PA	19506-8931	129	48	10/12/2009 14:27
Lillie	Ben	Phoenixville	PA	19460-3527	157	19	10/12/2009 14:41
Duffield	Anna	Hatboro	PA	19040-2008	152	12	10/12/2009 15:06
Derr	Betty	Orrtanna	PA	17353-9632	91	33	10/12/2009 15:06
Morealli	Ryan	Johnstown	PA	15905-1155	72	35	10/12/2009 15:57
Morealli	Lori	St. Benedict	PA	15773	73	35	10/12/2009 15:59
Christner	Michele	Johnstown	PA	15905-1155	72	35	10/12/2009 16:02
Danks	Sharon	Reading	PA	19606-2115	126	11	10/12/2009 16:15
Lowery	Suzann	Flourtown	PA	19031-1201	154	7	10/12/2009 16:18
och	evelyn	Pittsburgh	PA	15232-2541	21	43	10/12/2009 16:21
Falchetti	Liana	McKeesport	PA	15132-7535	35	45	10/12/2009 16:29
Kolessar	Cathy	Exeter	PA	18643-1522	120	14	10/12/2009 16:44
Ross Knapp	Tina	Carlisle	PA	17015-9483	199	31	10/12/2009 17:01
SCANLON	DOROTHY	Philadelphia	PA	19153-1743	185	8	10/12/2009 17:03
krik	cici	Pittsburgh	PA	15212-0936	19	38	10/12/2009 17:13
Chura	Andrea	Sinking Spring	PA	19608-1359	129	48	10/12/2009 17:48
Marchock	Judith	Pittsburgh	PA	15216-1509	42	37	10/12/2009 17:59
Carvell	Kevin	Ephrata	PA	17522-2414	99	36	10/12/2009 18:00
Pabon	Cindy	Levittown	PA	19056-1812	142	6	10/12/2009 19:09
Ayers	Katie	Birdsboro	PA	19508-9612	128	44	10/12/2009 19:14
strawbridge	doris	Edgemont	PA	19028-0471	168	26	10/12/2009 19:26
Riley	Kelly	Mechanicsburg	PA	17055-6652	88	31	10/12/2009 20:10
Kanda	Sumiko	Philadelphia	PA	19114-1709	169	5	10/12/2009 20:46
Snyder	Gary L.	Wilkes Barre	PA	18702-5106	121	14	10/12/2009 23:52
Figueredo	Juan	Greencastle	PA	17225-8746	90	33	10/13/2009 6:36
Brewer	Christopher	Greencastle	PA	17225-8746	90	33	10/13/2009 6:37
Figueredo	Evila	Greencastle	PA	17225-8746	90	33	10/13/2009 6:37

ASPCA E MAIL COMMENTATOR LIST

Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Mahnke	Cynthia L	Indiana	PA	15701-3624	62	41	10/13/2009 6:45
Chavlick	Chris	Glenshaw	PA	15116-2718	30	40	10/13/2009 7:44
Paolini	Carolyn	Schwenksville	PA	19473-2807	147	44	10/13/2009 8:28
Seibert	Dianne	Pittsburgh	PA	15228-2614	27	42	10/13/2009 8:38
Preston	Barbara	Folsom	PA	19033-1705	161	26	10/13/2009 9:03
Randall	cathie	Wyndmoor	PA	19038-7427	154	7	10/13/2009 9:53
Shimp	Joseph	Denver	PA	17517-9519	37	36	10/13/2009 9:54
Orman	Jamie	Douglassville	PA	19518-9001	130	11	10/13/2009 10:41
Tribble	Abigail	Lancaster	PA	17602-2964	45	30	10/13/2009 11:00
Danks	Tom	Reading	PA	19606-3304	130	11	10/13/2009 11:55
Shirk	Cathi	Mifflinburg	PA	17844-1012	85	23	10/13/2009 12:59
oswald	Jennifer	Blandon	PA	19510-9598	124	29	10/13/2009 13:48
Stevenson	Tracy	Meadville	PA	16335-2134	6	50	10/13/2009 13:50
LaBrake	Susan	Havertown	PA	19083-5435	166	17	10/13/2009 13:51
Tripician	Lee	Wellsboro	PA	16901-8398	68	25	10/13/2009 14:14
Paulson	Diane	Munhall	PA	15120-3517	38	43	10/13/2009 14:57
Hull	Allison	Mc Kees Rocks	PA	15136-1634	45	42	10/13/2009 14:59
Plesnick	Mark	Pittsburgh	PA	15218-1453	34	43	10/13/2009 15:02
McClain	Janet	Huntingdon Valley	PA	19006-5623	152	12	10/13/2009 15:15
trexler	wendy	Telford	PA	18969-2611	53	12	10/13/2009 16:34
white	Mark E.	Pittsburgh	PA	15216-1725	22	42	10/13/2009 17:00
Oswald	Christopher	Blandon	PA	19510-9598	100	39	10/13/2009 17:15
Szymanski	Beverly	Allison Park	PA	15101-1714			10/13/2009 18:53
Bobot	Anita	Camp Hill	PA	17011-1600	87	31	10/13/2009 19:39
Ruckdeschel	Katy	Merion Station	PA	19066-1519	148	17	10/13/2009 20:18
Cotter	Christopher	Landenberg	PA	19350-9376	158	9	10/13/2009 20:26
Gecan	Erin	Mount Pleasant	PA	15666-3539			10/13/2009 20:26
Copka	Dorothy	Pittsburgh	PA	15216-3663	22	42	10/13/2009 21:17
houck	kathleen	Altoona	PA	16601-3476	79	30	10/14/2009 0:22
Wilt	B J	Newville	PA	17241-9400	199	31	10/14/2009 5:34
Ressler	Angela	Landisville	PA	17538-1603	41	36	10/14/2009 8:02
Gindlesperger	Suzanne	Johnstown	PA	15905-3019	72	35	10/14/2009 8:47
Long	Natalie	West Mifflin	PA	15122-3752	38	43	10/14/2009 8:49
Pisano	Laura	Norristown	PA	19401-3023	70	17	10/14/2009 9:38
Serianni	Jeff	Philadelphia	PA	19107-6718	182	1	10/14/2009 9:45

ASPCA E MAIL COMMENTATOR LIST

Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Madonna	Brandy	Gladwyne	PA	19035-1417	148	17	10/14/2009 9:46
Young	Sara	Altoona	PA	16602-2709	79	30	10/14/2009 9:53
Curtis	Jennifer	Royersford	PA	19468-2264	146	44	10/14/2009 10:10
Weigand	Julie	Pocono Pines	PA	18350-1074	118	14	10/14/2009 10:49
Bentley	Katherine	Quakertown	PA	18951-1644	145	24	10/14/2009 11:37
GALLOWAY	MARY	Bryn Mawr	PA	19010-2608	149	17	10/14/2009 11:42
Dombrowski	Alfred	Philadelphia	PA	19136-2600		5	10/14/2009 12:04
Gabryluk	Joseph	Lititz	PA	17543-8332	97	36	10/14/2009 12:31
Moffitt	Cynthia	Philadelphia	PA	19114-1232	169	5	10/14/2009 12:37
Badolato	j	Warminster	PA	18974-2816	29	12	10/14/2009 13:03
Peterson	Kathy	Palmyra	PA	17078-1608	101	48	10/14/2009 13:36
dubay	STEPH	Johnstown	PA	15904-1754	71	35	10/14/2009 13:53
Warneke	Erin	Gibsonia	PA	15044-8464	30	40	10/14/2009 14:37
Newlin	Virginia	West Chester	PA	19380-6823	156	19	10/14/2009 15:25
Tyrrell	Kathleen	Bensalem	PA	19020-2134	18	6	10/14/2009 15:43
Kehoe	Lottia	Shenandoah	PA	17976-1201	123	29	10/14/2009 16:57
Sansoni	Jen	Harrisburg	PA	17112-2655	105	15	10/14/2009 19:35
Stricker	Carrie	Narberth	PA	19072-1609	148	17	10/14/2009 21:18
szafraniec	connie	Meadow Lands	PA	15347-0108	46	46	10/14/2009 21:37
Papa	Jessica	Havertown	PA	19083-3619	166	17	10/14/2009 21:45
middleberg	barbara	Philadelphia	PA	19114-5328	173	5	10/14/2009 22:23
Lauper	Roy	Greensburg	PA	15601-6886	57	39	10/15/2009 1:30
McLain	Steven H.	Pequea	PA	17565-9004	100	13	10/15/2009 6:50
Pattie	Stacey	West Grove	PA	19390-9233	13	9	10/15/2009 7:52
Comero	Jane	Oxford	PA	19363-1023	13	9	10/15/2009 7:52
Sphar	Pat	Pittsburgh	PA	15241-2537	40	37	10/15/2009 7:53
Drayton	Christopher	West Grove	PA	19390-9233	36	9	10/15/2009 7:53
Clase	Linda	Philadelphia	PA	19137-2112	177	5	10/15/2009 7:54
Leonard	Therese	Wynnewood	PA	19096-2602	149	17	10/15/2009 8:13
Hartman	Louise	Bryn Mawr	PA	19010-2607	149	17	10/15/2009 8:49
Sanford	Rebecca	Glen Mills	PA	19342-1044	168	9	10/15/2009 10:17
Sussman	Elizabeth	Wayne	PA	19087-5430	157	19	10/15/2009 11:06
Ricci	Kathy	Newtown	PA	18940-1472	31	10	10/15/2009 12:15
Hughes	Heather	Fleetwood	PA	19522	130	11	10/15/2009 12:16
Applebaum	Ilene	Plymouth Meeting	PA	19462-1520	148	7	10/15/2009 13:29

ASPCA E MAIL COMMENTATOR LIST

Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Miller	Heidi	Tower City	PA	17980-1005	125	29	10/15/2009 16:15
Baker	Sherri	Carlisle	PA	17013-3404	199	31	10/15/2009 18:39
Smolyar	Kristina	Philadelphia	PA	19116-1308	170	5	10/15/2009 18:55
Winkle	Cheryl	Meadville	PA	16335-6444	17	50	10/15/2009 19:29
KNUDSEN	MICHELE	Cyclone	PA	16726-1423	67	25	10/15/2009 22:32
Yeakley	Judy	West Reading	PA	19611-1307	127	11	10/15/2009 23:12
Griffith	Shirley	Reading	PA	19605-1534	126	11	10/16/2009 8:00
Johns	Rachel	Ellwood City	PA	16117-7130	10	47	10/16/2009 8:26
McFerren	Michelle	Waynesboro	PA	17268-9314	90	33	10/16/2009 11:16
Petroski	Joan Ann	Morrisville	PA	19067-4805	140	10	10/16/2009 11:50
knudson	joan	Glenmoore	PA	19343-9509	155	44	10/16/2009 11:59
Matous	Diana	Cranberry Township	PA	16066-6779	12	40	10/16/2009 15:51
Stafford	Angela	Harrisburg	PA	17111-6989	105	15	10/16/2009 15:59
Waters	Michael	Bangor	PA	18013	137	18	10/16/2009 16:55
Waters	Donna	Bangor	PA	18013		18	10/16/2009 16:57
Hampton	Anitra	East Petersburg	PA	17520-0491	97	13	10/16/2009 17:09
lefever	kira	Ephrata	PA	17522-9541	43	36	10/16/2009 17:41
Lacy	Barbara	West Chester	PA	19380-1842	158	19	10/16/2009 18:23
Leonard	Sharon	Belle Vernon	PA	15012-1804	58	39	10/16/2009 20:31
Stambaugh	Alexandra	Jacobus	PA	17407-1253	93	28	10/16/2009 20:49
Merrell	Victoria	East Greenville	PA	18041-2004	145	24	10/17/2009 8:03
Bicking	Ruth	Lancaster	PA	17603-6212	41	13	10/17/2009 8:42
Inlow	Laura	Clearfield	PA	16830-3414	74	25	10/17/2009 10:03
Pietro	Suzanne	Cranberry Twp	PA	16066-3214	12	40	10/17/2009 11:18
Convry	Jennifer	West Reading	PA	19611-1324	127	11	10/17/2009 12:23
hyduke	sharon	Honey Brook	PA	19344-9759	26	36	10/17/2009 13:20
Beresford	Kirk	Pittsburgh	PA	15221-2929	24	38	10/17/2009 15:13
Hahn	Pam	Sinking Spring	PA	19608-9316	129	48	10/17/2009 17:17
Cronquist	Joanna	Philadelphia	PA	19146-1140	182	1	10/17/2009 17:29
goodwin	christopher	Meshoppen	PA	18630-0395	111	20	10/17/2009 18:48
Boulden	Stephanie	Radnor	PA	19087-3758	165	17	10/17/2009 21:21
Bednar	Becky	Peach Bottom	PA	17563-9666	100	13	10/17/2009 23:11
Bradley	Stacey	Hastings	PA	16646-5601	73	35	10/17/2009 23:59
Davis	Robin	West Chester	PA	19382-6320	156	19	10/18/2009 9:26
Johnson	Patricia	Philadelphia	PA	19124-4419	177	2	10/18/2009 9:58

ASPCA E MAIL COMMENTATOR LIST

Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Ding	Nancy	Upper Darby	PA	19082-3402	164	26	10/18/2009 10:16
Miller	Troy	Milroy	PA	17063-0289	171	34	10/18/2009 11:11
Romano	Maria	Pittsburgh	PA	15220-2044	42	42	10/18/2009 11:14
Morris	Cecily	Media	PA	19063-1138	161	26	10/18/2009 11:31
Stefano	Joanne	Carnegie	PA	15106-3228	45	42	10/18/2009 11:34
COVI	CAROL	Carnegie	PA	15106-3218	45	42	10/18/2009 11:41
Deck	Denise	Schuylkill Haven	PA	17972-9504	125	29	10/18/2009 17:39
chesny	debbie	Sunbury	PA	17801-1615	108	27	10/18/2009 18:05
miller	melissa	Erie	PA	16504-1923	1	49	10/18/2009 18:38
Bixler	Patrice	Middletown	PA	17057-2124	106	15	10/18/2009 21:09
SMITH	MIRANDA	Northern Cambria	PA	15714-1607	73	35	10/18/2009 21:22
Catalano	Kathy	Dover	PA	17315-3799	193	28	10/18/2009 23:01
Backus	Margaret	Sanatoga	PA	19464-3009	146	44	10/19/2009 6:24
Jankowiak	Tiffany	Bethel Park	PA	15102-2126	42	37	10/19/2009 9:00
Easley	Philomena	Fairless Hills	PA	19030-3819	141	6	10/19/2009 10:22
Eyrich	Jennifer	Honey Brook	PA	19344-9431	155	44	10/19/2009 10:44
Steinmetz	Karen	Mountain Top	PA	18707-1775	119	20	10/19/2009 12:38
Aguilar	Martha	Hummelstown	PA	17036-9024	106	15	10/19/2009 15:24
turner	joyce	Philadelphia	PA	19149-2307	174	2	10/19/2009 16:42
Lindsay	kathleen	Exton	PA	19341-3063	155	19	10/19/2009 17:06
crawford	bonnie	Natrona Heights	PA	15065-1324	33	38	10/19/2009 17:57
Zemka	Tawnya	Pittsburgh	PA	15216-2439	27	42	10/19/2009 20:23
Witmer	Michael	Cleona	PA	17042-2405	101	48	10/20/2009 2:17
Conroy	Barbara	Sellersville	PA	18960-2702	145	10	10/20/2009 9:15
giacca	pete	Warminster	PA	18974-3658	144	12	10/20/2009 9:35
Fincham	Gabriele	Altoona	PA	16601-1513	79	30	10/20/2009 9:56
Sterner	Patricia	Walnutport	PA	18088-1032	183	29	10/20/2009 13:47
Tancredi	Cindy	Shenandoah	PA	17976-1228	123	29	10/20/2009 13:48
shuey	elizabeth	Hummelstown	PA	17036-9018	106	15	10/20/2009 16:11
Ciraulo	Kimberly	Bernville	PA	19506-9032	129	11	10/20/2009 17:06
Fohl	Laura	Mechanicsburg	PA	17050-1944	87	31	10/20/2009 17:12
Yanich	Rachel	Harrisburg	PA	17113-2610	106	15	10/20/2009 17:46
Coder	Rene	Brockway	PA	15824-7419	66	25	10/20/2009 18:01
Hinckley	Julia	Port Matilda	PA	16870-7301	77	34	10/20/2009 18:04
Littell	Hadley	Bensalem	PA	19020-1245	18	6	10/20/2009 19:48

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Quigglw	Timothy	Erie	PA	16507-1645	2	49	10/20/2009 20:00
McGuire	Coleen	Shenandoah	PA	17976-1823	123	29	10/20/2009 22:06
Jandura	Annette	Phila	PA	19135-2201	173	2	10/21/2009 5:55
McKernan	Christine	Lansdale	PA	19446-2564	53	24	10/21/2009 7:40
Bochter	Robert	Pittsburgh	PA	15226-1920	22	42	10/21/2009 9:15
Detweiler	Crista	Camp Hill	PA	17011-5427	87	31	10/21/2009 9:45
benner	valerie	Sunbury	PA	17801-2222	108	27	10/21/2009 9:54
Settember	Cheryl	Wyndmoor	PA	19038-7901	154	7	10/21/2009 12:58
Dougherty	Eric	Perkiomenville	PA	18074-9458	53	12	10/21/2009 13:40
Roeser	Mary	Pittsburgh	PA	15229-1835	20	40	10/21/2009 18:44
Macconi	Melissa	Pittsburgh	PA	15219-4746	19	42	10/21/2009 21:20
Augello	Maria	White Haven	PA	18661-9424	118	14	10/22/2009 8:21
Pappas	Betty	Allentown	PA	18103-8437	131	24	10/22/2009 9:15
carannante beauregard	francesca	Pittston	PA	18640-3761	114	14	10/22/2009 9:51
Nolan	Theresa	Edinboro	PA	16412-1720	78	26	10/22/2009 10:26
Di Lillo	Pat	Spring Brook Township	PA	18444-6372	114	22	10/22/2009 10:52
Higgins	Patti	Pittsburgh	PA	15207-1654	23	43	10/22/2009 11:44
Kittell	Laura	Philadelphia	PA	19147-1257	182	1	10/22/2009 14:45
Hersey	Cynthia	Red Lion	PA	17356-1915	94	28	10/22/2009 15:03
Argenio	Donna	Mechanicsburg	PA	17050-7919	87	31	10/22/2009 15:08
Wild	Tracey	Tonawanda	PA	14150	140		10/22/2009 19:33
Benner	Marcy	Watsontown	PA	17777-8419	108	27	10/23/2009 10:01
Lamparella	Jill	Langhorne	PA	19047-2768	160	9	10/23/2009 15:43
Goeltsch	Debbi	Carlisle	PA	17015-9350	199	31	10/24/2009 9:21
Winters	Harriet	West Alexander	PA	15376-2241	49	46	10/24/2009 16:26
schmuck	erica	Felton	PA	17322-9096	94	28	10/24/2009 22:17
Leonhard	Amanda	Dillsburg	PA	17019-9639	196	31	10/24/2009 23:54
Hermely	Glenn	Levittown	PA	19057-3210	141	6	10/25/2009 7:34
Woolley	Jennifer	Easton	PA	18045-8103	138	18	10/25/2009 10:43
Sherwood	Rena	Clifton Heights	PA	19018-2319	163	26	10/25/2009 11:48
Williams	Matthew	Harrisburg	PA	17112-2128	105	15	10/25/2009 15:06
Venerick	Megan	Clearfield	PA	16830-2602	74	25	10/25/2009 17:23
Fresoli	Maria	Bethlehem	PA	18017-3203	135	18	10/25/2009 21:36
Youndt	Courtney	New Holland	PA	17557-8800	99	36	10/25/2009 23:40
Frey	Gerard	Scranton	PA	18509-2619	112	22	10/26/2009 8:32

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Addendum A

Last Name	First Name	City	State	ZIP	State House District	State Senate District	Response Date
Venturino	Lauren	Pittsburgh	PA	15211-2331	22	42	10/26/2009 9:39
Carbonetti	Jill	Lancaster	PA	17603-5043	96	13	10/26/2009 10:15
Mitchell	Carol	Pottstown	PA	19465-8113	26	19	10/26/2009 10:18
Ryczak	Joanne	Peckville	PA	18452-1125	115	22	10/26/2009 11:06
Benner	Jennifer	York	PA	17404-6410	47	28	10/26/2009 14:46
PAZSINT	CAROLYN	New Castle	PA	16107-8934	9	47	10/26/2009 14:48
Schwartz	Lisa	Philadelphia	PA	19128-3719	13	13	10/26/2009 18:55
Burrell	Michelle	Dunmore	PA	18509-2503	112	22	10/26/2009 19:53
Yablonsky	Charlene	Throop	PA	18512-1337	113	22	10/26/2009 19:55
Brosowski	Joerg	Berwyn	PA	19312-1950	167	26	10/26/2009 21:16
Updike	Kim	Berwyn	PA	19312-2125	167	26	10/26/2009 21:35
Rosenbaum	Leslie	Shavertown	PA	18708-9773	120	20	10/27/2009 8:21
De Luca	Leonora	Rockledge	PA	19046	170	4	10/27/2009 11:00
Deluca	Linda	Southampton	PA	18966-3911	178	12	10/27/2009 12:24
Hennessey	Lita	West Lawn	PA	19609-2003	128	48	10/27/2009 13:10
Paul	Judy	Exton	PA	19341-1467	155	19	10/27/2009 14:23
Baxter	Suzanne	Wallingford	PA	19086-6509	161	9	10/27/2009 14:44
Lower	Valerie	Sandy Lake	PA	16145-4713	17	50	10/27/2009 14:48
Smith	Cindy L	Indiana	PA	15701-2404	62	41	10/27/2009 14:56
Downham	Kathryn	West Chester	PA	19382-5441	156	19	10/27/2009 16:37
Benner	Ruth	York	PA	17404-6410	47	28	10/27/2009 17:08
Connelly	Elisa	Pittsburgh	PA	15235-2103	32	43	10/27/2009 19:15
solovey	heidi	Mountain Top	PA	18707-1016	119	20	10/27/2009 20:19
Engelmeier	Leslie	Wexford	PA	15090-7954	28	40	10/28/2009 9:29

ASPCA PAPER COMMENTATOR LIST

Addendum A

LAST NAME	FIRST NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP
FASSANO	DOLORES	105 BLACKTHORNE LANE		ASTON	PA	19014
COLEMAN	DAVID	150 ALDEN STREET		MEADVILLE	PA	16335
PARKER	ROBERT H	1035 N ORIANNA STREET		PHILADELPHIA	PA	19123
KUBINSKY	ANDREA	110 WILLOW DRIVE	P O BOX 216	OAKS	PA	19456
VASILY	KAREN	306 ROGERS ROAD		EAGLEVILLE	PA	19403
FASSANO	LISA R	1037 N ORIANNA STREET		PHILADELPHIA	PA	19123
LAWRENCE	GEORGE	10 SAXONY DRIVE		HARRISON CITY	PA	15636
BROWN	MARGARET & GERRY	1505 BRIER AVENUE		JOHNSTOWN	PA	15902
KUBINSKY	EDWARD S JR	110 WILLOW DRIVE	P O BOX 216	OAKS	PA	19456
FASSANO JR	PASQUALE J	105 BLACKTHORNE LANE		ASTON	PA	19014
MARCHIONY	DENA & BILL	137 BARRIE ROAD		ARDMORE	PA	19003
MCGOVERN	THOMAS G	416 MINOOKA AVENUE	2ND FLOOR	MOOSIC	PA	18507
BARTKO	JODY	509 LUTZ LANE		PORT MATILDA	PA	16870
COX	BRIAN	306 ROGERS ROAD		EAGLEVILLE	PA	19403
LAWRENCE	ASHLEIGH	20 S 6TH AVENUE	APARTMENT 3	CLARION	PA	16214
LAWRENCE	PAULA	10 SAXONY DRIVE		HARRISON CITY	PA	15636
MUELLER	KRISTIN	8115 DORCAS STREET		PHILADELPHIA	PA	19152
MUELLER	SUSAN	4956 GRUNDY WAY		DOYLESTOWN	PA	18902
HATHAZY	DAVID S	136 SCOTTSDALE DRIVE		MOON TOWNSHIP	PA	15108
KRUL	KAREN	189 DAVIS ROAD		VALENCIA	PA	16059
HENRY	GRAYSON	492 NEW GALENA ROAD		CHALFONT	PA	18914
DIGILIO	JOHN J	313 E LEAMY AVENUE		SPRINGFIELD	PA	19064
PAYNE	KIMBERLY					
PAYNE	SAMUEL					
GITTINS	SHERYL L	800 CHELSEA DRIVE		IMPERIAL	PA	15126
DIGIACOME	NICOLE	238 SEDGEWOOD ROAD		SPRINGFIELD	PA	19064
KOMLENIC	HELEN					
JOHNSON	ROBIN					
MORRIS	BARREN					
CARR	NANIE					
CARR	WESLEY					
PAYNE	KRISTI					
DIGILIO	HELEN	313 E LEAMY AVENUE		SPRINGFIELD	PA	19064
AUSTIN	VALERIE	146 W ABBOTTSFORD AVE		PHILADELPHIA	PA	19144
JENNINGS	CHRIS	1016 WILDE AVENUE		DREXEL HILL	PA	19026
HEWITSON	DR GILLIAN	928 FOREST ROAD		LANCASTER	PA	17601
MARTIN	VALERIE	510 BROWN STREET		SELINSGROVE	PA	17870
DREIBELBIS	NANCI LEE	8 GLENDALE DRIVE		MECHANICSBURG	PA	17055
OWARZANI	LINDA	1214B CROSSHILL COURT		LANSDALE	PA	19446
FERRANTE	SAMANTHA	416 LAKEVIEW DRIVE		RIDLEY PARK	PA	19078
KOSZAREK	LORENA	56 LOCUST LAKE VILLAGE		POCONO LAKE	PA	18347
BARBARA	JOHN SANTA	610 HOWARD ROAD		WEST CHESTER	PA	19380
LYNCH	KAREN	4114 SERENITY STREET		SCHWENKSVILLE	PA	19473
CLIPPINGER	AMY	610 HOWARD ROAD		WEST CHESTER	PA	19380
PERKO	MICHELLE M	104 WEYBRIDGE ROAD		GIBSONIA	PA	15044
CLIPPINGER	L	1554 PAOLI PIKE #307		WEST CHESTER	PA	19380
WERTELET	JUDITH	3371 CHURCHVIEW AVE		PITTSBURGH	PA	15227

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LAST NAME	FIRST NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP
BRINTON	JENNIFER	308 BROOK ROAD		ATGLEN	PA	19310
ORLANDO	STEPHANIE	304 CLUBVIEW DRIVE		MCMURRAY	PA	15317
SHILLEA	THOMAS	3314 MORAVIAN COURT		BETHLEHEM	PA	18020
BECKERDITE	SUSAN	801 ELLA STREET		PITTSBURGH	PA	15243
HELLYER	ERIN	1024 SHERMAN AVENUE		HUNTINGDON VALLEY	PA	19006
BROOKS	RONALD	1715 N BOUVIER STREET		PHILADELPHIA	PA	19121
FARINA JR	RAYMOND	125 BAINBRIDGE CIRCLE		SINKING SPRING	PA	19608
HARRIS	CARYN	1281 BOBARN DRIVE		PENN VALLEY	PA	19072
SHAFFER	MARK	P O BOX 98		BOILING SPRINGS	PA	17007
FISHER	SARANN	1214 HILLSDALE AVENUE		PITTSBURGH	PA	15216
PIETRZYKOWSKI	ANITA	1717 NEW HOPE STREET		NORRISTOWN	PA	19401
SAMPEDRO	DONNA	709 LAURA LANE		YORK	PA	17402
HARRIS	IAN	1281 BOBARN DRIVE		PENN VALLEY	PA	19072
GOODSTEIN	DAVID	10815 VALLEY FORGE CIRCLE		KING OF PRUSSIA	PA	19406
KLEIN	KEVIN J	RR 1 BOX 1668		KUNKLETOWN	PA	18058
SKRYPZAK	JAY	3703 HAZEL STREET		ERIE	PA	16508
LOWCHER	CLAUDINE	149 W ALBEMARLE AVENUE		LANSDOWNE	PA	19050
JONES	CAROLE E	2510 HALLOWELL ROAD		HUNTINGDON VALLEY	PA	19006
MINIHAN	PAULA I	564 CONSTITUTION ROAD		LANSDALE	PA	19446
MINIHAN	JOHN E	564 CONSTITUTION ROAD		LANSDALE	PA	19446
URBAN	JEANNINE	170 BORTONDALE ROAD		MEDIA	PA	19063
MCCAFFREY	LYNN M	150 W BRENTRIDGE AVENUE		PITTSBURGH	PA	15227
HOEBECK	PAMELA					
KAICHEL	BILL					
UCHIN	SUMMER	610 BUTTONWOOD STREET		NORRISTOWN	PA	19401
MILLER	CLAUDIA	658 COLEMAN AVENUE		JOHNSTOWN	PA	15902
SPERDUTO	THERESA B	1716 DANFORTH STREET		PHILADELPHIA	PA	19152
VASSAR	DELORES	1403 GILMAR ROAD		APOLLO	PA	15613
FRANKS	SHEILA L	168 S MOUNTAIN BOULEVARD		MOUNTAIN TOP	PA	18707
HESSLER	MARY	44 TANGLEWOOD DRIVE		LANGHORNE	PA	19047
GOOD	VICKI	308 E BLAIR AVENUE		ALTOONA	PA	16602
WILDSTEIN ESQ	LISA PAM	233 S 6TH ST INDEPENDENCE I PLACE TWO #706		PHILADELPHIA	PA	19106
ELIAS	SANDRA	625 PENN ESTATES		EAST STROUDSBURG	PA	18301
ROMANO	GABRIELA	4240 FAIRVIEW AVENUE		NEWTOWN SQUARE	PA	19073
AUSTIN	ORLO B	11435 DONATION ROAD		WATERFORD	PA	16441
JOHNSTEN	JESSICA	25027 PLANK ROAD		MEADVILLE	PA	16335
MOORE	SARAH E	4520 MAIN STREET		ADAMSVILLE	PA	16110
ZUTZ	LEEANN	231 BEECH STREET		EDINBORO	PA	16412
MILBURN	SANDY	600 STONE QUARRY ROAD		UNION CITY	PA	16438
HORNE	SUSAN A	8922 RIDGE AVENUE		PHILADELPHIA	PA	19128
EVANS	DOLORES	2669 ARAMINGO AVENUE		PHILADELPHIA	PA	19125
HORNE	GREGORY E	8922 RIDGE AVENUE		PHILADELPHIA	PA	19128
HUFFNAGLE	SYLVIA					
MADDICK	SHERRI	P O BOX 82		NEW BEDFORD	PA	16140
KLINGER	SHIRLENE K	2134 DERRY STREET		HARRISBURG	PA	17104
HEUYARD	STACIE	793 CLOVERLEAF RD APT 2		ELIZABETHTOWN	PA	17022
KUPFERSCHMID	MARY S	401 FIRST AVENUE		BETHLEHEM	PA	18018
SEIWELL	BURTON	945 WESTON ROAD		NUREMBERG	PA	18241
BROWN	ANDREA	10417 OLD 22		KUTZTOWN	PA	19530

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LAST NAME	FIRST NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP	
FRANKS	KENNETH	168 S MOUNTAIN BOULEVARD		MOUNTAIN TOP	PA	18707	
HAINES	DAPHENE	4020 N SHERMAN ST EXT		MT WOLF	PA	17347	
ENGLAND	LISA	2083 HOLLOWAY ROAD		NORRISTOWN	PA	19403	
BRUNO	MARY C	710 COLLEGEVILLE ROAD		COLLEGEVILLE	PA	19426	
KREIDER	SHARYN J	57 WEAVER AVENUE		EPHRATA	PA	17522	
WEISS	DEBORAH	316 W BARNARD STREET		WEST CHESTER	PA	19382	
PENNYPACKER	JAMES S	316 W BARNARD STREET		WEST CHESTER	PA	19382	
LUTZ	MERCEDI	25 RYAN COURT		TELFORD	PA	18969	
HARMON	LYNDA R	109 NORTHWOOD DRIVE		COATESVILLE	PA	19320	
VACCA	JOAN	10815 VALLEY FORGE CIRCLE		KING OF PRUSSIA	PA	19406	
SMITH	DONNA	1367 HARRINGTON ROAD		HAVERTOWN	PA	19083	
CHAPUT	RACHEL	246 HUNTERS LANE		DINGMANS FERRY	PA	18328	
POWELL	ANGELA	704 SANTIAGO ROAD		IMPERIAL	PA	15126	
ETTLINGER	LESLIE E	1212 WARD DRIVE		YARDLEY	PA	19067	
BAILEY	STACEY	1847 MARKHAM DRIVE		BETHLEHEM	PA	18017	
INGALLS	CYNTHIA A	P O BOX 245		NEW CASTLE	PA	16103	
ESPERANZA ACADEMY CHARTER H S ANIMAL	KATHRYN NAGY						
AWARENESS CLUB	CLUB ADVISOR	4308 MCMENAMY STREET		PHILADELPHIA	PA	19136	SIGNED BY 15 STUDENTS
COLLINS	LOIS M	601 GREEN STREET C2		PARKESBURG	PA	19365	
BENNETT	KEVIN	25 RYAN COURT		TELFORD	PA	18969	
PARKIN	PAULINE	1525 BEVAN ROAD		PITTSBURGH	PA	15227	
LINDSAY	BROOKE	3201 CONSTITUTION DRIVE	P O BOX 295	CLARIDGE	PA	15623	
PHILLIPS	JODI	356 PATTEN CIRCLE		ALBRIGHTSVILLE	PA	18210	
ZAREFOSS	MARY ANNE	50 MAPLE AVENUE		HERSHEY	PA	17033	
ROBINSON	LINDA & SAM	8272 E VAN BUREN DRIVE		PITTSBURGH	PA	15237	
RAIOLA	BETH	1125 BEECH ROAD		WHITE HAVEN	PA	18661	
MILLER JR MD	STANLEY	37 STONEHENGE LANE		MALVERN	PA	19355	
WITTIG	DEBORAH	301 OVERLOOK ROAD		NESCOPECK	PA	18635	
GORMAN MD	ROBERT C	734 MEADOWCREEK CIRCLE		LOWER GWYNEDD	PA	19002	
GRAZIANO	MARISA A	734 MEADOWCREEK CIRCLE		LOWER GWYNEDD	PA	19002	
WITTIG JR	DAVID F	301 OVERLOOK ROAD		NESCOPECK	PA	18635	
FRANKS	TINA L	168 S MOUNTAIN BOULEVARD		MOUNTAIN TOP	PA	18707	
D'AMICO	MARY ANN C	302 JACQUELINE DRIVE		DOWNINGTOWN	PA	19335	
DEE	KELLY	1121 HIGHVIEW DRIVE		DRAVOSBURG	PA	15034	
KISTLER	SHARON	47 SUNSET DRIVE		BOYERTOWN	PA	19512	
GILBERT	SHANDEL	5600 MUNHALL ROAD		PITTSBURGH	PA	15217	
THOMAS	LORI	815 BRAWLEY AVENUE		MEADVILLE	PA	16335	
JOHNSTON	SHELLEY	20273 SHERMANSVILLE ROAD		CONNEAUTVILLE	PA	16406	
NOBLES	NANCY	9796 FRANKLIN PIKE		MEADVILLE	PA	16335	
SAULSBERY	SUSAN M	1065 ST HWY 285		CONNEAUT LAKE	PA	16316	
OZA	DANIELLE	1181 WATER STREET		MEADVILLE	PA	16335	
DAUBE	BARBARA	12024 SHADY AVENUE		CONNEAUT LAKE	PA	16316	
KERR	DAVID	275 JEDHART WAY		ELLWOOD CITY	PA	16117	
KOSAREK	KATHY	12872 RAYMOND DRIVE	APT 1A	MEADVILLE	PA	16335	
KULA	KALLE	24812 PLANK ROAD		CAMBRIDGE SPRINGS	PA	16403	
GREGG	DEBORAH	10824 KONNEYAUT CIRCLE		CONNEAUT LAKE	PA	16316	
YOUNG JR	THOMAS J	537 PINE STREET		MEADVILLE	PA	16335	
PATTERSON	LORI	10940 LIBERTY STREET	APARTMENT 48	MEADVILLE	PA	16335	

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LAST NAME	FIRST NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP
PALASKI	JENNIFER	1424 RICHMOND HOUSE		MEADVILLE	PA	16335
HINKLE	JAMIE	16544 BAILEY ROAD		MEADVILLE	PA	16335
GODDARD	TAMI	308 RIDGE ROAD		MCDONALD	PA	15057
DANNUNZIO	CHRIS	3307 NORTH WALES ROAD		NORRISTOWN	PA	19403
MARTIN	HEATHER	127 NORTH 9TH STREET		QUAKERTOWN	PA	18951
STABILE	GIACOMO	1500 ASTOR STREET		NORRISTOWN	PA	19401
D'ANNUNZIO	DANIELLE	3307 N WALES ROAD		NORRISTOWN	PA	19403
D'ANNUNZIO	JENNA	3307 NORTH WALES ROAD		NORRISTOWN	PA	19403
KELLY	EMILY	8549 OAK HOLLOW LANE		MACUNGIE	PA	18062
HUANG	ARTHUR					
HANCHARIK	TRACY	720 ELM DRIVE		VERONA	PA	15147
MCGINNIS	JENNIFER	408 CLAIRVAUX COMMONS		INDIANA	PA	15701
WASSERMAN	REBECCA S	3015 GUINEVERES DRIVE	APARTMENT B3	HARRISBURG	PA	17110
SOMAN	MITCHELL	122 WILLOW STREET		FAIR OAKS	PA	15003
SOMAN JR	CHARLES J	122 WILLOW STREET		FAIR OAKS	PA	15003
SOMAN	LAURA J	122 WILLOW STREET		FAIR OAKS	PA	15003
JOHNSTON KEANE	KATHY	1551 OLD BEULAH ROAD		PITTSBURGH	PA	15235
FANUKA	JANE	847 TRESTLE COURT		PINE GROVE	PA	17963
MCSHANE	KIMBERLY	2004 LAURA LANE		HARRISBURG	PA	17110
GREENE	DIANNE	12 HOPE TERRACE		CARLISLE	PA	17013
MOYER	SAVOY	3186 ALDAN ROAD		PLYMOUTH MEETING	PA	19462
MURPHY	ALISA	224 ROOF GARDEN WAY		SOMERSET	PA	15501
BATEMAN JR	JAMES R	1822 CHESTNUT STREET 4F		PHILADELPHIA	PA	19103
MILLER	JENNIFER	2014 WALNUT STREET	APARTMENT 401	PHILADELPHIA	PA	19103
SHORT	JOANNE	212 HANKEY FARMS DRIVE		OAKDALE	PA	15071
ZULKA	RITA	118 WYNOKA STREET		PITTSBURGH	PA	15210
VERNON	LAURA L	305 CHESTNUT DRIVE		BUTLER	PA	16601
SIANCO	ANTHONY					
ARBUCKLE	JOSEPH	619 OLDE FARM ROAD		MEDIA	PA	19063
COOK	EDWARD	624 BOB WHITE ROAD		WAYNE	PA	19087
COOK	HELEN	624 BOB WHITE ROAD		WAYNE	PA	19087
JAVIC	DELORES	491 PHILADELPHIA AVENUE		KING OF PRUSSIA	PA	19406
COOK	MICHAEL	48 OVERLOOK DRIVE		NORRISTOWN	PA	19403
BAROZZI	ALVA C	2523 NAUDAIN STREET		PHILADELPHIA	PA	19146
ANTONELLI	ANGEL	2615 E VENANGO STREET		PHILADELPHIA	PA	19134
ANTONELLI	EDWARD	3634 EDGEMONT STREET		PHILADELPHIA	PA	19134
FOLEY	TIMOTHY W	404 NORFOLK ROAD		FLOURTOWN	PA	19031
ANTONELLI	KERENSA	3537 E THOMPSON STREET		PHILADELPHIA	PA	19137
D'ANNUNZIO	RONALD	3307 N WALES ROAD		NORRISTOWN	PA	19403
SCHMIDT	DIANNA L	941 WESTERN ROAD		PHOENIXVILLE	PA	19460
STABILE	NICOLE	411 WHITPAIN HILLS		BLUE BELL	PA	19422
RAMBO	KATHY G	3538 WINDING ROAD		KINTNERSVILLE	PA	18930
HOOK	BRENDA	617 GREEN AVENUE		WEST CHESTER	PA	19380
CRATE	HEATHER	89 CRATE LANE		SIGEL	PA	15860
MIKALIC	DONNA F	2025 MURRAY STREET		PHILADELPHIA	PA	19115
CASKER	DAVID E	195 DERBY STREET		JOHNSTOWN	PA	15905
MARCHESE	MARIAN V	924 BRYN MAWR AVENUE		PENN VALLEY	PA	19072
RYMKIEWICZ	STACEY A	400 HILLSIDE AVENUE		EAGLEVILLE	PA	19403
DIORKA	MELISSA	2651 FAWN LANE		WARRINGTON	PA	18976

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LAST NAME	FIRST NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP
SCHULBERGER	ROSE G	1065 QUARRY HALL ROAD		NORRISTOWN	PA	19403
TERCHA	LISA A	5778 WHITEMARSH DRIVE		MACUNGIE	PA	18062
DIPRETORE	MELISSA & LOU	902 CABLE HILL DRIVE		SPRINGFIELD	PA	19064
MAURIZIO	LINDA	1320 GREEN STREET		PERKASIE	PA	18944
JANOSOV	TEDDI	425 OLD NEWPORT STREET		NANTICOKE	PA	18634
PROIETTA	ALBERTA	365 PEACH TREE DRIVE		JENKINTOWN	PA	19046
TERMINE	CAROLE E	5748 CORSAIR COURT		BENSALEM	PA	19020
FERGUSSON	LYNN M	18 RICHIE LANE		YARDLEY	PA	19067
RIELING	CHRISTINA	48 OVERLOOK DRIVE		NORRISTOWN	PA	19403
WERNER	DORIS M	5831 SYLVESTER STREET		PHILADELPHIA	PA	19149
VAN OSTEN	JULIANA M	27 HEARTH ROAD		LEVITTOWN	PA	19056
KELBERG	SANDRA	10815 HAWLEY ROAD		PHILADELPHIA	PA	19154
RILEY	LINDA E	70 ICE POND ROAD		LEVITTOWN	PA	19057
DETTERY	ROBERT	2701 VALLEY WOODS ROAD		HATFIELD	PA	19446
STEWART	TRICIA	21 SUNBURY ESTATES		BUTLER	PA	16001
MAIORANO	KIMBERLY	712 HIGHVIEW ROAD		PITTSBURGH	PA	15234
DELGADO	DRU ANN	220 LEA STREET		MUNHALL	PA	15120
BURSTYNOWICZ	VICTORIA	9326 N FLORENCE ROAD		PITTSBURGH	PA	15237
HUBERT	PATTI	1278 CHESTNUT STREET		MONACA	PA	15061
WEBSTER	JODY	432 WILLOW WAY		WEST CHESTER	PA	19380
RAMBO	MELISSA	1922 JUNIATA ROAD		NORRISTOWN	PA	19403
SKLOFF	VICTORIA	126 BAY HILL DRIVE		BLUE BELL	PA	19422
ATKINSON	BRIDGET	309 LYSTER ROAD		ORELAND	PA	19075
ABEL	ROBERT	840 HEMLOCK TRAIL		LEHIGHTON	PA	18235
FRENCH	STEPHANIE	16 MILE BROOK TERRACE		WAYMART	PA	18472
MCDONALD	NANCY	117 SHOEMAKER STREET		DUNMORE	PA	18512
OPSHINSKY	CHARLENE	811 LINCOLN AVENUE		BLAKELY	PA	18447
MCCANDLESS	HANNAH	411 AMBRIDGE AVENUE		FAIR OAKS	PA	15003
MCCANDLESS	ROBERT K	411 AMBRIDGE AVENUE		FAIR OAKS	PA	15003
HARTZOG	DEBORAH	364 PARK STREET		CARBONDALE	PA	18407
ABRAMS	ROSE	19019 BENNETT PLACE		HOLLAND	PA	18966
GOUERT	JILL	2740 MANOR ROAD		COATESVILLE	PA	19320
BRECHT	JOEL	539 W 9TH STREET		ERIE	PA	16502
GRUPP	ASHLEY	425 WELDON DRIVE		YORK	PA	17404
MIZIORKO	VERONICA	586 FAIRWAY TERRACE		PHILADELPHIA	PA	19128
D'AMORE	MARIE ANTOINETTE	530 FOX DEN COURT		GLEN MILLS	PA	19342
HAZAN	MARTIN	37 MONTCLAIR AVENUE		COATESVILLE	PA	19320
BLACKMAN	BARBARA	30 S 17TH STREET	SUITE 1510	PHILADELPHIA	PA	19103
BEHEL	SCOTT & DEBRA	9380 OLD ERIE PIKE		CLEARFIELD	PA	16830
MCCORRY	JOYCE	104 ADAM COURT		SHOHOLA	PA	18458
KRAVITZ	BARBRA	1500 LOCUST STREET	APARTMENT 2905	PHILADELPHIA	PA	19102
FELDMAN	STUART					
LONG	BARBARA	6518 HOLLOW DRIVE		EAST PETERSBURG	PA	17520
BOITO	TONY	2811 HAMPTON LANE		SINKING SPRING	PA	19608
JOHNSON	ANN	1580 RIDGEVIEW AVENUE		LANCASTER	PA	17603
BIVENS	ANTHONY	6831 DIAIUTO DRIVE		HARRISBURG	PA	17111
GIBSON	DENISE	6146 DIVISION HIGHWAY		NARVON	PA	17555
GRUEN	NANCY	2204 MOUNT HOPE		FAIRFIELD	PA	17320
SHAFFER	BARBARA	1380 BOILING SPRINGS ROAD	P O BOX 98	BOILING SPRINGS	PA	17007

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LAST NAME	FIRST NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP
WICKS	JUDITH	3422 SANSOM STREET		PHILADELPHIA	PA	19104
DIAZ	LINDA	325 BEAVER CREEK ROAD		DILLSBURG	PA	17019
FORD	NANCY	547 ESHELMAN STREET		HIGHSPIRE	PA	17034
KAUFMANN	JUDITH	235 KLEIN ROAD		GLENSHAW	PA	15116
LAMANNA	JOHN	188 CHILTON ROAD		LANGHORNE	PA	19044
CILIBERTI	MARIAN	200 ROCHELLE AVENUE		PHILADELPHIA	PA	19128
CARDAMONE III	VICTOR J	657 TANGLEWOOD COURT		POTTSTOWN	PA	19464
DAVIS	PAT K	118 DAVENPORT ROAD		KENNETT SQUARE	PA	19349
BEKOFF	AMY R	26 SUMMIT ROAD		MALVERN	PA	19355
HARDING	RUTH A	15 WALNUT LANE		DOYLESTOWN	PA	18901
DEMAR	HEATHER	14304 DELAIRE LANDING RD		PHILADELPHIA	PA	19114
WOLK	H MICKEY	460 COLFAX ROAD		HAVERTOWN	PA	19083
ALISIO	AGNES	1224 JOHNSTON STREET		PHILADELPHIA	PA	19148
ROLLER	RONI	1014 MULBERRY STREET		BROOKHAVEN	PA	19015
ROBBINS	DEBORAH	1850 STONE RIDGE LANE		VILLANOVA	PA	19085
HUEBNER	LYNN M	39 PENNYPACKER DRIVE		SCHWENKSVILLE	PA	19473
KYLEN	LORAH	1224 BENT CREEK BLVD		MECHANICSBURG	PA	17050
HOWARD	LORINE	3761 BLUE HILL ROAD		HANOVER	PA	17331
CONRAD	KIRSTEN	142 CROSSTIE DRIVE		STEWARTSTOWN	PA	17363
DAVIS	CHRISTINA	411 CHERRY STREET		CLIFTON HEIGHTS	PA	19018
RIOS GITTENS	RENEE	9 N SAVANNA DRIVE		POTTSTOWN	PA	19464
BRENMAN	CAREN	1246 N LAWRENCE STREET		PHILADELPHIA	PA	19122
TOLL	MICKIE	7400 ROOSEVELT BLVD	APARTMENT D102	PHILADELPHIA	PA	19152
MAYLIE	MICHAEL	900 EDGEWOOD DRIVE		SPRINGFIELD	PA	19064
BATLEY	KRIS	20 COUNTY LANE		GLEN MILLS	PA	19342
KITTNER	LORRAINE	8 FRANKLIN AVENUE		FEASTERVILLE	PA	19053
MARINO	CAROLANN	75 DUNCAN STREET		LANCASTER	PA	17602
SCIOCCHETTI	M	67 CEDAR BROOK DRIVE		CHURCHVILLE	PA	18966
EATON	CHRISTINE	103 ELMWOOD BLVD		YORK	PA	17403
WITTMAN	MELANIE	4 SELDON STREET		PITTSBURGH	PA	15234
KYLEN	BRENDA	1224 BENT CREEK BLVD		MECHANICSBURG	PA	17050
COWAN	JAMES	54 E WALL STREET		BETHLEHEM	PA	18018
NOGY	KATHERINE	P O BOX 167		STOCKDALE	PA	15483
STOJAKOVICH	DONALD	3301 JACKS RUN ROAD	BOX 11 LOT 12	WHITE OAK	PA	15131
AUSTIN	LINDA					
BREAKIRON	MARY	4223 PLAZA DRIVE		ERIE	PA	16506
FROLLINI	NICK	544 LORETTO ROAD		PITTSBURGH	PA	15217
IBBOTSON	G	866 CAMP MEETING ROAD		SEWICKLEY	PA	15143
SHEARER	TRACY	614 WARWICK LANE		CRANBERRY TWP	PA	16066
PUZ	CECELIA	1007 EAST BRADY STREET		BUTLER	PA	16001
COLE	SCOTT	1552 RIDGE AVENUE		SHARPSVILLE	PA	16150
RUHNKE	LAUREN	108 WASHINGTON AVENUE		BROOKHAVEN	PA	19015
WATT	LUCIA	1671 YARDLEY DRIVE		WEST CHESTER	PA	19380
KUTBAY	BONNIE	6 GARSIDE STREET		MANSFIELD	PA	16933
VERMEULEN	DWAYNE	10066 MANSION DRIVE		GIBSONIA	PA	15044
WALKER	DEBORAH	417 MERIDIAN DRIVE		PITTSBURGH	PA	15228
WILSON	ARLIN	1213 MAYAPPLE LANE		WEST CHESTER	PA	19380
FISHER	JUDITH	291 PINE VIEW DRIVE		ELIZABETH	PA	15037
GOOD	BARBARA	609 VIRGINIA AVE EXT		PITTSBURGH	PA	15215

ASPCA PAPER COMMENTATOR LIST

Addendum A

LAST NAME	FIRST NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP
GREWE	ERIN	74 INDIAN DRIVE		LAKE ARIEL	PA	18436
RILEY	RON	70 ICE POND ROAD		LEVITTOWN	PA	19057
HANSON CONNORS	NATALIE	322 MARSHALL HEIGHTS DR		WEXFORD	PA	15090
SAMEK	MEGAN	203 COLVIN ROAD		GREENSBORO	PA	15338
MIHALCIK	REBECCA	6530 QUAKER DRIVE		PITTSBURGH	PA	15236
DIAZ	ISMAEL	325 BEAVER CREEK ROAD		DILLSBURG	PA	17019
HATT	MARGARETANN	218 E MAIN STREET		NEWMANSTOWN	PA	17073
GIULIANO	DIENNE	21 WEST TURNBULL AVENUE		HAVERTOWN	PA	19083
TRAUTENBERG	JACK	2305 LILAC COURT		LANSDALE	PA	19446
SLENKER	BECKY	60 VICKILEE DRIVE		WRIGHTSVILLE	PA	17368
MENTZER	KIMBERLY	132 N PITT STREET		CARLISLE	PA	17013
POND	LESA	1006 S 18TH STREET		HARRISBURG	PA	17104
VAUGHAN	LISA	353 FRENCHCREEK ROAD		UTICA	PA	16362
SMITH	MARIE	1900 REDWOOD AVENUE		WYOMISSING	PA	19610
HATT	KELLY	338 DOGWOOD LANE		WOMELSDORF	PA	19567
WELSH	JERYL	121 EAST PENN AVENUE		ROBESONIA	PA	19551
SILVER	DR STACY	1237 OAK RIDGE AVENUE		STATE COLLEGE	PA	16801
HOOPER	MARY LOUISE	124 22ND AVENUE		ALTOONA	PA	16601
MUCHA	SUSAN	269 CLEARVIEW AVENUE		CRAFTON	PA	15205
GARDNER	CHERYL	RR 1 BOX 316B		EFFORT	PA	18330
ROSENBERGER	KARIN	141 E 4TH AVENUE	APARTMENT C3	CONSHOHOCKEN	PA	19428
LIEKIKE	CHUCK	1154 CARDINAL DRIVE		WEST CHESTER	PA	19382
PEEK	SOLANDA	6609 STANTON AVENUE		PITTSBURGH	PA	15206

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/11/2009 13:08	sandy & allen	shoop	shooptuss@aol.com	boiling springs	PA
10/7/2009 15:46	Kay	Geisel	tgeisel@comcast.net	Chambersburg	PA
10/7/2009 10:30	Brian	Donlen	bdonlen@gmail.com	Philadelphia	PA
10/7/2009 22:25	Susan	Burke	williamburkegolf@comcast.net	Chambersburg	PA
10/7/2009 11:38	Penny	Schur	ccschur@hotmail.com	Fayetteville	PA
10/7/2009 10:53	Judith	Hartman	djhartman@embarqmail.com	Chambersburg	PA
10/22/2009 6:00	Sara	McNally	saramonster77@Yahoo.com	Elkins Park	PA
10/7/2009 10:39	Jaclyn	Almeida	jaclyn.almeida@gmail.com	Philadelphia	PA
10/7/2009 14:11	Jen	Wellman	gibnad@gmail.com	chambersburg	PA
10/7/2009 10:39	Giacomo	DeAnnuntis	gdeannuntis@aim.com	Philadelphia	PA
10/7/2009 16:27	Diane	Grindle	labrasaurus@gmail.com	new bloomfield	PA
10/7/2009 10:43	Kristin	Brown	kristinbrown@westat.com	Chambersburg	PA
10/7/2009 13:40	mary	kiernan	marybkiernan@comcast.net	plymouth meeting	PA
10/7/2009 10:41	SHEILA	AHERN-MOORER	SAHERNMOORER@PHILLYNEWS.COM	WOODBURY	NJ
10/7/2009 12:42	Maria	Tartaglia	maria5578@yahoo.com	Brookhaven	PA
10/7/2009 12:00	melissa	dalessandro	melissa@usw286.com	philadelphia	PA
10/7/2009 20:14	Melissa	LoRusso	jmlorusso@msn.com	Harleysville	PA
10/8/2009 11:38	Catherine	Hawke	countheclouds@yahoo.com	elverson	PA
10/7/2009 11:05	Cindy	Wasserman	cwdvm1@optonline.net	Fort Pierce	FL
10/12/2009 10:05	stephanie	vargas	SHOPAHOLICSTEPH@AOL.COM	PHILA	PA
10/8/2009 6:08	Melanie	Christian	melaniecb81@gmail.com	Philadelphia	PA
10/7/2009 11:08	Lorraine	Bellano	zingbell@yahoo.com	Springfield	PA
10/7/2009 15:43	Coleen	williams	coleendwilliams@comcast.net	Philadelphia	PA
10/7/2009 13:13	Pat	Richmond	patrichmond2@gmail.com	Philadelphia	PA
10/7/2009 12:20	Michele	Gallagher	mleb22@yahoo.com	Flourtown	PA
10/7/2009 14:12	Donna	Langel	dlangel@serviceselectsigns.com	Yardley	PA
10/7/2009 10:53	Elizabeth	Ford	doughertye@email.chop.edu	Philadelphia	PA
10/7/2009 16:14	Sandra	Laws	slaws56193@hotmail.com	Philadelphia	PA
10/7/2009 11:51	Thomas	Klinger	t.klingersr71@yahoo.com	Ardmore	PA
10/7/2009 17:10	cindy	greiner	cindygreiner1@msn.com	pittsburgh	PA
10/7/2009 12:40	Kim	Moylan	kimmshell@yahoo.com	Newtown Square	PA
10/11/2009 15:20	Hetti	Brown	hetti13@yahoo.com	Wilmington	DE
10/8/2009 1:57	Jeff	Maile	jeffmaile@yahoo.com	north wales	PA
10/7/2009 22:06	Ruth	Casler	rcasler@optonline.net	Ringwood	NJ
10/8/2009 8:51	greta	yanos	grtsgldn@ptd.net	birdsboro	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 12:33	Dorothy	Wileman	taffi@toast.net	York Springs	PA
10/7/2009 12:26	d	nach	dtnach@yahoo.com	highlands ranch	CO
10/18/2009 17:23	Tina	Herzog	herzog_tina@hotmail.com	Slatington	PA
10/7/2009 11:13	Gina	Lasky	ginalasky@yahoo.com	Gilbertsville	PA
10/7/2009 11:16	david	saxon	zgubber@comcast.net	wayne	PA
10/7/2009 19:45	Laura M	Arnao	lmarnao@verizon.net	Fairless Hills	PA
10/8/2009 6:47	mary	gallagher	mrsjunebabies@optonline.net	hewitt	NJ
10/7/2009 19:12	Barbara	Longenecker	jtbuildersllc@dejazzd.com	Manheim	PA
10/7/2009 15:39	Barbara	Lombardo	barblombar@aol.com	REd Lion	PA
10/19/2009 21:20	Tawnya	Zemka	twny522@hotmail.com	Pittsburgh	PA
10/7/2009 10:42	Holly	Russel	hrussel@gmail.com	Philadelphia	PA
10/7/2009 11:42	Kathleen	Hume	khume@comcast.net	Pottstown	PA
10/10/2009 9:19	Kristen	Furtak	taigryss7@yahoo.com	Sanatoga	PA
10/7/2009 19:17	Michele	Gresh	Mugsabugs@comcast.net	Fort Washington	PA
10/7/2009 10:58	Kim	Bell	kimb@ritterim.com	Marysville	PA
10/7/2009 11:49	Renee	Shaw	renee_shaw1@yahoo.com	Philadelphia	PA
10/8/2009 10:22	Linda	Ardito	Captmike55@aol.com	Ringwood	NJ
10/7/2009 11:03	Keisha	Wright	msright425@yahoo.com	Harrisburg	PA
10/7/2009 10:51	Kara	Magaro-Landis	KLandis@lawpga.com	Enola	PA
10/7/2009 10:47	Carol	Lenker	lenkers@comcast.net	Williamstown	PA
10/8/2009 9:02	Deborah	Broyles	dbroy340@aol.com	Uwchland	PA
10/7/2009 10:38	Amanda	Prostack	amanda.prostack@gmail.com	Bridegport	PA
10/7/2009 10:53	Sharon	Poole	duddymoo@hotmail.com	Modena	PA
10/7/2009 11:01	Lydia	Cohn	lydia6577@aol.com	Plymouth Meeting	PA
10/7/2009 10:41	RALPH	SANTORA	SANTORAR@SEPHARDICHOME.ORG	STATEN ISLAND	NY
10/7/2009 10:49	Linda	Hoffecker	boatinbabe@comcast.net	Lancaster	PA
10/7/2009 14:35	Curtis	Musta	curtismusta@hotmail.com	Pittsburgh	PA
10/7/2009 11:57	Chrystyne	Haggerty	chaggerty@nfsrv.com	Holmes	PA
10/8/2009 12:33	Meghan	Rainone	MRainone@aol.com	Philadelphia	PA
10/7/2009 21:27	Charlotte	Mosley	angel_char21@hotmail.com	South Australia	ot
10/7/2009 22:16	Nadine	Gaudelli	Nblondie26@aol.com	pittsburgh	PA
10/7/2009 23:37	jill	martin	jillcimo@yahoo.com	Collegeville	PA
10/7/2009 11:23	Jackie	Gallo	jackie.k.gallo@gmail.com	Charlotte	NC
10/8/2009 16:07	Ann K	Brady	yarrow48@hotmail.com	St Paul	MN
10/7/2009 10:41	Karen	Rudy	mikeandkippy@comcast.net	Boiling Springs	PA
10/7/2009 17:51	candace	weller	wellercl@aol.com	CARLISLE	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 21:18	Kathleen	Reese	Effiedec@aol.com	Marmora	NJ
10/7/2009 17:04	Sonia	Trimboli	kirasofia@hotmail.com	Catania (Italy)	ot
10/7/2009 14:45	Linda	LOCKE	Linda.M.Locke@embarq.com	Carlisle	PA
10/7/2009 10:47	mary	gottfried	weidmama@etown.edu	elizabethtown	PA
10/7/2009 10:51	CHRISTINA	ALLEN	WETNOSES@COMCAST.NET	RED LION	PA
10/7/2009 15:21	Colleen	Hampton	colliz84@gmail.com	Sassamansville	PA
10/7/2009 10:39	Lisa	Nuzzaci	lr4761@att.com	king of prussia	PA
10/7/2009 10:39	Sarah	Stack	ses726@gmail.com	Orlando	FL
10/7/2009 10:52	mary anne	anderson	maanderson8@gmail.com	media	PA
10/8/2009 8:28	Joan	Fitzhenry	patricia.fitzhenry@relianceinsurance.com	PHILADELPHIA	PA
10/8/2009 10:03	Antonia	Inglese	MSAMIIVRN@MSN.COM	Aston	PA
10/7/2009 10:39	Crista	Detweiler	detweile@lvc.edu	Camp Hill	PA
10/7/2009 11:17	Barry	Franco	btfknolls@comcast.net	Doylestown	PA
10/7/2009 10:50	Gary	Jones	gvjones@hotmail.com	Gettysburg	PA
10/7/2009 10:55	susan	smith	smithsd@etown.edu	marietta	PA
10/7/2009 12:40	Debbie	Kuch	debbieyeomans@yahoo.com	Wayne	PA
10/7/2009 11:36	Ruth	Yeomans	ryeomans@sovereignbank.com	Devon	PA
10/7/2009 12:32	tiffany	weaver	tmweaver@elagroup.com	stewartstown	PA
10/7/2009 10:58	Teri	Christy	christy@dallys.com	Perkasie	PA
10/7/2009 17:25	Doris	Jacoby	doriscoby@enter.net	Norristown	PA
10/7/2009 11:49	Laura	Thompson	lauraly@enter.net	Coopersburg	PA
10/7/2009 17:05	Jessica	Mercaldi	Jmerc010@ODU.EDU	norfolk	VA
10/7/2009 16:24	Melissa	Gargiulo	Joegcakes@aol.com	Naperville	IL
10/7/2009 10:49	Patricia	Fellenbaum	fellenbp@pepperlaw.com	Broomall	PA
10/7/2009 10:42	Jody	Washington	jodytw@gmail.com	Richmond	VA
10/7/2009 10:48	Diane	Stanton	dstanton@barclayinsurance.com	Pine Hill	NJ
10/7/2009 10:45	Chris	Slawecki	chris.slawecki@diahome.org	Phoenixville	PA
10/7/2009 11:18	Michelle	Broskey	MBroskey@aol.com	Trevose	PA
10/9/2009 10:39	judy	scheib	msmarnerae@comcast.net	lancaster	PA
10/9/2009 10:38	Robert	Hill	robhillnumax@comcast.net	Lancaster	PA
10/7/2009 19:17	mary	gallo	mdgallo1@verizon.net	prospect park	PA
10/7/2009 10:54	Anthony	Frisby	ajfrisby@hotmail.com	Glenside	PA
10/7/2009 19:51	Barbara	Brooks	brooksbbarb@aol.com	Blue Bell	PA
10/7/2009 17:53	diane	dibernardo	dtdib@aol.com	oyster bay	NY
10/7/2009 11:01	Lisa	Nagle	lkc102@yahoo.com	Havertown	PA
10/8/2009 17:41	Dani	Posner	DPosner464@hotmail.com	Stowe	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 11:48	Julie	Tighe	julietighe@comcast.net	Collegeville	PA
10/7/2009 13:15	ReShelle	Barrett	reshelle_barrett@yahoo.com	Pittsburgh	PA
10/27/2009 21:26	Diana	Morales-Suarez	dianasm0127@aol.com	North Bergen	NJ
10/7/2009 10:55	Margaret	Tyska	met5656@hotmail.com	Perkasie	PA
10/14/2009 11:02	Donna	von Lipsey	vonlipsey0671@comcast.net	New Britain	PA
10/7/2009 16:12	Deb	Welter	raccoonmom@diamondrockwildlife.org	Malvern	PA
10/7/2009 15:06	Tina	Schaeffer	tschaeffer2@psu.edu	Williamstown	PA
10/7/2009 17:33	Deborah	Adair	tdadair@comcast.net	Mount Joy	PA
10/12/2009 18:03	ANNE	MILLIGAN	ANNIELCASEY@AOL.COM	ROSEMONT	PA
10/9/2009 9:26	Katie	Kelly	specialk19335@yahoo.com	Downingtown	PA
10/7/2009 15:08	linda	burns	pooches52642@yahoo.com	croydon	PA
10/7/2009 21:06	Evalyn F.	Segal	evesegal@mac.com	Philadelphia	PA
10/17/2009 18:01	Christine	Costello	clstella3@verizon.net	Philadelphia	PA
10/7/2009 19:22	melissa	haughey	paigep1173@aol.com	drexel hill	PA
10/8/2009 12:40	Jamie	Hernandez	jamiep27@yahoo.com	Blue Bell	PA
10/9/2009 15:51	Steven	DiMeglio	dimeglio7@comcast.net	Newtown	PA
10/14/2009 16:46	Gina	Cmino	gina.cimino@dla.mil	Philadelphia	PA
10/8/2009 19:27	Bethany	Dalkiewicz	bnd1282@yahoo.com	Harrisburg	PA
10/7/2009 11:12	Marjorie	Rathbone	rathbone@sju.edu	Bryn Mawr	PA
10/7/2009 21:16	patty	giroult	pguru@comcast.net	coatesville	PA
10/12/2009 16:16	Roseann	Murray	roseann.murray@gmail.com	Paoli	PA
10/7/2009 12:50	Michelle	Cortacans	fubarmichy@gmail.com	Henderson	CO
10/9/2009 13:20	Jeanne	Aldworth	Jeanne.Aldworth@dla.mil	Philadelphia	PA
10/7/2009 15:21	donna	unger	tallyho392@aol.com	trappe	PA
10/7/2009 18:38	Joan	Trojan	Joantroj@aol.com	Haddonfield	NJ
10/8/2009 19:14	Karen	Wright	wrightones1@yahoo.com	Coatesville	PA
10/7/2009 21:25	Katy	Kaiser	katymk@ptd.net	Pottstown	PA
10/7/2009 12:27	J	Ebersole	jgeprman@aol.com	Lancaster	PA
10/7/2009 11:02	JoAnne	Dickinson	joanneglenside@aol.com	Glenside	PA
10/9/2009 15:33	Melissa	Welch	kennymel1@verizon.net	Collegeville	PA
10/7/2009 10:40	Cassandra	Bonitz	cbonitz@gmail.com	Fairfax	VA
10/28/2009 7:49	Richard W.	Firth	richardwfirth@yahoo.com	Mechanicsville	VA
10/7/2009 12:31	Patricia	Culbertson	cpatricia@pa.net	Orrstown	PA
10/8/2009 20:15	Linda	Asper	stormyii@comcast.net	Shippensburg	PA
10/7/2009 16:49	Sara	Berdiner	SaBer2502@yahoo.com	Millersville	PA
10/8/2009 7:34	Marti	Dietrich	martidietrich@hotmail.com	Fayetteville	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/8/2009 8:04	Nancy	Putt	spoiledcajun@hotmail.com	Shippensburg	PA
10/7/2009 11:14	Marjorie	Hamsher	hamsherms@hotmail.com	Chambersburg	PA
10/24/2009 5:25	Michael	Davin	wagsrescue@earthlink.net	Irwin	PA
10/7/2009 17:06	Judy	Anton	niss434@yahoo.com	North Wales	PA
10/8/2009 8:42	Patricia	Beato	patpaul@comcast.net	Feasterville	PA
10/7/2009 10:41	Lori	McGowan	lmcgowan27@hotmail.com	Landisville	PA
10/8/2009 5:48	Anthony	Buonocore	abuono2@yahoo.com	Lansdale	PA
10/18/2009 11:25	kendra	daniel	kendraart@mac.com	park ridge	NJ
10/7/2009 11:46	Barbara	Seymour	seymour-13@comcast.net	Six Mile Run	PA
10/7/2009 15:39	Valerie	Mastandrea	vspaniel@yahoo.com	Clifton	NJ
10/7/2009 11:49	YVONNE	WALKER	momma_may@hotmail.com	HARRISBURG	PA
10/7/2009 13:42	Sharon	Hirth	shirth@pennlighting.com	Philadelphia	PA
10/7/2009 10:52	Doris	O'Donnell	dodonne2@csc.com	Chambersurg	PA
10/7/2009 11:35	Sharon	Zerkle	zerkles@comcast.net	Coatesville	PA
10/7/2009 11:55	Ragena	Greiner	ragena@optonline.net	Hauppauge	NY
10/7/2009 10:42	Jeff	Wine	jwine@mlbroadcasting.net	Chambersburg	PA
10/7/2009 10:47	Harry	Harrison	hjh9@columbia.edu	Penn Valley	PA
10/7/2009 11:00	Sharon	Cappuccio	scpetkids@yahoo.com	Hammonton	NJ
10/7/2009 10:39	kellijo	bailey	kellijo.bailey@healthsouth.com	Carlisle	PA
10/7/2009 11:54	Mary	Duff	maryduff@comcast.net	Elkins Pk	PA
10/7/2009 12:32	Patricia	Mulligan	pjmulligan@mac.com	Bayonne	NJ
10/7/2009 13:39	Deborah and Neil	Cline	neilcline@comcast.net	Chambersburg	PA
10/7/2009 12:28	Nicole	Seifert	nicoleseifert@comcast.net	carlisle	PA
10/7/2009 11:25	Todd	Kreider	exjay13@msn.com	Harrisburg	PA
10/7/2009 10:39	Tracy	Schwartz	tmd36locust@hotmail.com	pine grove	PA
10/7/2009 10:44	kathleen	carfagno	cricksnap@aol.com	longpnd	PA
10/8/2009 9:12	Lisa	Tomosky	lisatomosky@hotmail.com	Finleyville	PA
10/12/2009 7:32	Lisa	Sidorsky	lsidorsk@cephalon.com	West Chester	PA
10/7/2009 11:44	Sara A	Shaneor	shaneosa@etown.edu	Elizabethtown	PA
10/7/2009 10:54	Randall	Light	w3dsx@comcast.net	Hamburg	PA
10/7/2009 12:25	Elizabeth	Dahmus	dahmuse@etown.edu	Hummelstown	PA
10/7/2009 12:00	Carol	Pudlak	caroldes@ptd.net	Saylorsburg	PA
10/7/2009 12:27	Heidi	Hade	roonusg@yahoo.com	Greencastle	PA
10/7/2009 11:07	paula	conrad	wolfhowl2002@hotmail.com	pinegrove	PA
10/7/2009 12:21	Melissa	Troy	missy0120@verizon.net	Middleport	PA
10/9/2009 12:16	Michelle	Krieger	MMK@Commspeed.net	Prescott	AZ

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 16:46	Stan	Pudlak	standman@ptd.net	Saylorsburg	PA
10/7/2009 11:10	Susan	Finkenberg	sugarsma@comcast.net	Tucson	AZ
10/15/2009 9:35	Darcy	Nopper	Darcydecart@aol.com	Chester Springs	PA
10/7/2009 11:46	Kristi	Shupp-George	klshupp@yahoo.com	Chambersburg	PA
10/12/2009 13:47	caroline	vogt	caroline5010@aol.com	glenside	PA
10/7/2009 18:46	Dan	Capozzelli	dancap99@verizon.net	West Brandywine	PA
10/7/2009 12:52	Leslie	Taylor	chimama@comcast.net	Allison Park	PA
10/7/2009 15:05	Karen	Kirchdoerfer	klkirch@verizon.net	Whitehall	PA
10/7/2009 20:27	kim	thompson	hellokim@ptd.net	manheim	PA
10/7/2009 10:59	Antonette	Maldonato	amaldonato@optonline.net	Yonkers	NY
10/7/2009 11:00	Joanne	Wiley	jhkwiley@verizon.net	enola	PA
10/7/2009 11:03	Rebecca	Williams	Rebecca.Williams@fcc.gov	Gettysburg	PA
10/13/2009 14:09	maxine	manges	maxine@mkmfineart.com	Glen Mills	PA
10/7/2009 12:48	Joanne	Kemper	anmlmgnt@yahoo.com	Chadds Ford	PA
10/7/2009 15:13	kathy	hanigan	kathyhanigan@yahoo.com	huntingdon valley	PA
10/7/2009 10:44	Kathy	Landrigan	BOSSLADY1313@aol.com	Gettysburg	PA
10/7/2009 10:47	Amy	Koegler	akoegler@hotmail.com	Berwyn	PA
10/21/2009 8:59	Heather	Champion	heatherechampion@yahoo.com	Carlisle	PA
10/7/2009 13:06	Rebecca	seefeld	rlynns66@AOL.com	whittier	CA
10/7/2009 13:30	tracy	brenner	wsbtrav@atlanticbb.net	Hollidaysburg	PA
10/8/2009 9:39	Susan	Winters-Griste	swgriste@yahoo.com	Pottstown	PA
10/7/2009 10:44	Wayne	Bartholow	wbartholow@hotmail.com	Waynesboro	PA
10/7/2009 10:50	Kathy	Pennypacker	kathleec@mail.med.upenn.edu	Paoli	PA
10/7/2009 10:44	Annette	Meertz	annette.meertz@cslbehring.com	Wynnewood	PA
10/7/2009 15:17	Teresa	McGowan	tch4@psu.edu	PA Furnace	PA
10/8/2009 8:33	Robin	Karman	Karman@karmandevelopment.com	Philadelphia	PA
10/7/2009 11:15	Amy	Andrews	aandrews610@gmail.com	Vestal	NY
10/7/2009 11:46	Barb	Hacker	bahacker@tre.state.pa.us	elliottsburg	PA
10/7/2009 10:40	Denise	Overturf	nisi711@hotmail.com	Albuquerque	NM
10/7/2009 10:53	Kathleen	Peters	kpeters@astm.org	Philadelphia	PA
10/8/2009 11:22	Cynthia	Reyes-ballew	crbtlb@suddenlink.net	Bryan	TX
10/7/2009 10:44	Anitra	Hampton	afhampton@pplweb.com	East Petersburg	PA
10/7/2009 14:17	Judith	Benz	judith.benz@gmail.com	Haverford	PA
10/7/2009 10:49	Lindsay	Kershner	lindsay.kershner@gmail.com	Parkesburg	PA
10/7/2009 10:50	kathleen	wissenz	sugarbear072@comcast.net	warminster	PA
10/7/2009 11:33	Odette	Rossi	orossi@colorcon.com	Doylestown	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/8/2009 8:18	Spencer	Purple	purples03@gmail.com	Fort Loudon	PA
10/7/2009 10:56	April	Johnson	cupcake292975@yahoo.com	Philadelphia	PA
10/7/2009 10:45	Joan	Phillips	joanie183@gmail.com	Ambler	PA
10/7/2009 11:00	Howard	Haber	hshaber@yahoo.com	Lansdale	PA
10/7/2009 19:51	Crystal	Groves	crystalg61@aol.com	Drexel Hill	PA
10/8/2009 11:36	Beth	Kerstetter	kerstetter15@aol.com	Selinsgrove	PA
10/7/2009 10:59	donna	brosko	donna@allenmyland.com	broomall	PA
10/7/2009 16:36	joanne	koegler	joanne.koegler@prufoxroach.com	Radnor	PA
10/7/2009 11:13	Valerie	Weitz	valweitz@comcast.net	Philadelphia	PA
10/8/2009 15:19	Paula	Brown	pbrown3@vet.upenn.edu	Prospect Park	PA
10/7/2009 11:05	Dina	Kilpatrick	kilpa33@yahoo.com	Horsham	PA
10/7/2009 10:44	Kira	McKiernan	irishblnde@verizon.net	Deptford	NJ
10/7/2009 11:28	Jean	Goerlach	jgoerlach@msn.com	Essington	PA
10/18/2009 19:46	Heather	Tringo	Laume2112@aol.com	Milford	PA
10/17/2009 12:58	Andrea	Petch	Avepet@aol.com	Paxinos	PA
10/7/2009 21:44	Jennifer	McDonald	jennlmcd@yahoo.com	New Castle	PA
10/7/2009 19:47	beth	quashnie	beth1958@comcast.net	greencastle	PA
10/7/2009 15:02	Karen	Royer	ducky_buck@yahoo.com	Willow street	PA
10/7/2009 11:21	Donna	Mikalic	wjmdfm@aol.com	Philadelphia	PA
10/28/2009 5:25	marcy	becker	myxavier222@yahoo.com	philadelphia	PA
10/7/2009 12:30	Karen	Strelchun	strelchun@verizon.net	Orefield	PA
10/11/2009 22:46	jen	turner	jenjturner416@comcast.net	bryn mawr	PA
10/7/2009 11:15	Jann	Murray	jannm81@yahoo.com	Tower City	PA
10/7/2009 11:09	Sue	Burnette	sburnette731@yahoo.com	Limerick	PA
10/7/2009 11:28	Barbara	Nullet	barbara.nullet@ambitfunding.com	Wapwallopen	PA
10/7/2009 18:40	denise	pona	brandi7002@aim.com	bayonne	NJ
10/7/2009 20:45	Kristin	Billich	s0725351@monmouth.edu	South Plainfield	NJ
10/7/2009 16:25	Fran	Tessier	ftessier@ballinger-ae.com	Philadelphia	PA
10/7/2009 10:50	Joe	Hirsch	joe@joehirsch.com	Pittsburgh	PA
10/7/2009 19:57	Lisa	Sheaffer	lisaloco1@comcast.net	Mechanicsburg	PA
10/7/2009 11:03	Lisa	Hade	mhade1@comcast.net	Downingtown	PA
10/7/2009 20:18	Ellen	Clinton	Ellieel13@aol.com	Bensalem	PA
10/8/2009 22:24	James	mac donald	jmd_690@yahoo.com	philadelphia	PA
10/7/2009 14:34	Esther	Williams	esther3647@cox.net	Norfolk	VA
10/8/2009 19:22	Kathleen	McNally	ThePuppySchool@aol.com	Bernville	PA
10/7/2009 13:34	Debra	Snyder	jdbams@aol.com	Warminster	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 11:22	Barbara	Bonney	bbonney@ptd.net	Dingmans Ferry	PA
10/7/2009 13:18	Kris	Brinsky	kcolerich@yahoo.com	Bethel Park	PA
10/7/2009 11:23	James	Snowdon	cutter@nase.org	Chambersburg	PA
10/7/2009 10:40	Rochelle	Angelo	teachdk1@hotmail.com	Minersville	PA
10/7/2009 12:27	Sandra	OHara	nikicj5@aol.com	Wall	PA
10/7/2009 10:44	yasmin	villuendas	syv1@psu.edu	State College	PA
10/7/2009 16:10	Robyn	Kern	robynk16@gmail.com	Ambler	PA
10/7/2009 20:55	Frederica	Hughes	fhughes007@comcast.net	Coatesville	PA
10/7/2009 18:45	Mae	Marie	maemaree@msn.com	Downingtown	PA
10/10/2009 10:52	louise	herring	lmhpaint@verizon.net	narberth	PA
10/7/2009 18:39	Tracy	Land	hland@comcast.net	Fayetteville	PA
10/7/2009 11:45	Maryellen	Lannon	melannon@comcast.net	Broomall	PA
10/7/2009 11:03	Ann	Langlois	annlanglois@hotmail.com	Phoenix	AZ
10/12/2009 8:55	Sandra	Bazar Kologowski	sbazar25@yahoo.com	Southampton	NJ
10/7/2009 15:38	Paula	Lamb	pgl_222@hotmail.com	Philadelphia	PA
10/7/2009 23:07	Allison	Grimes	a_verdelli@yahoo.com	Lyons	CO
10/10/2009 17:19	Sabrina	appell	sabgraz@optonline.net	tinton falls	NJ
10/7/2009 23:26	Joyce	Brunner	wcb604jlb@aol.com	Spring City	PA
10/7/2009 19:11	Carol	Fox	catlady@pa.net	Fayetteville	PA
10/10/2009 10:21	janet	testa	jtprek@yahoo.com	phila	PA
10/7/2009 21:21	MArcie	Behanna	marcie1129@aol.com	Philadelphia	PA
10/10/2009 21:36	terri	rossman	tr3n88@comcast.net	howard	PA
10/7/2009 10:52	Lee	Benson	bensonl@upperdublin.net	FORT WASHINGTON	PA
10/7/2009 22:07	Catherine	Rivera	kattatudes@comcast.net	New Castle	DE
10/7/2009 15:11	Kimberly	Lindenmeyer	r1gg2@aol.com	Phoenix	AZ
10/8/2009 1:24	RONI	FEIERSTEIN	ronilf44@comcast.net	Merion Station	PA
10/7/2009 11:25	DeAnn	Barnhart	dbarnhar@syr.edu	Syracuse	NY
10/7/2009 11:42	Leigh Ann	Bishop	lbishop579@yahoo.com	Lewistown	PA
10/7/2009 21:59	Lynn	Marshall	LD2525M@aol.com	West Lawn	PA
10/7/2009 18:15	Marilyn	Sergent	mjsergent@comcast.net	Vienna	NJ
10/7/2009 18:36	lisa	turner	tpoms@comcast.net	carlisle	PA
10/7/2009 12:50	fred	kistler	f_kistler@yahoo.com	allentown	PA
10/7/2009 12:52	Noga	Nir-Kistler	noganir1@yahoo.com	allentown	PA
10/7/2009 13:28	JILL	HALL	jillhall11@hotmail.com	Allentown	PA
10/7/2009 12:54	Insook	Wang	insookwang@yahoo.com	Allentown	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 10:44	David	Laforest	dfl1076@hotmail.com	bangor	PA
10/7/2009 13:18	TONI	Bernstein	alvattc@gmail.com	Allentown	PA
10/7/2009 13:13	craig	knauss	craig.knauss@gmail.com	Allentown	PA
10/7/2009 13:15	Phil	Boger	philboger@gmail.com	Allentown	PA
10/7/2009 12:56	Thomas	Paolini	lvattc@yahoo.com	Allentown	PA
10/7/2009 13:16	Connie	Braden	conniecpa@yahoo.com	Penn Valley	PA
10/8/2009 1:58	kim	Kaufman	affrescue@aol.com	phila	PA
10/7/2009 11:01	Jennifer	Schaeffer	schaefferpj@aol.com	Palmyra	PA
10/7/2009 21:11	Amanda	Gulick	amandagulick@gmail.com	Furlong	PA
10/7/2009 18:07	Carole	Obley	cj_obley@hotmail.com	Irwin	PA
10/7/2009 10:42	Brian	Durkin	bndurkin@hotmail.com	Raleigh	NC
10/7/2009 12:37	Marie	Whalen	delisiokathy@aol.com	N.Irwin	PA
10/8/2009 4:11	SUSAN	ZAPOLSKI	Zapswoman@aol.com	ERIE	PA
10/9/2009 1:56	Barbara	Ciaverelli	barbciv@comcast.net	Cheltenham	PA
10/7/2009 18:30	Janet	Formica	djd03@ptd.net	West Hazleton	PA
10/7/2009 11:11	Lorie	Brinck	lorie.brinck@duke-energy.com	Oxford	OH
10/7/2009 12:47	Jennifer	setlak	jlsetlak@aol.com	mechanicsburg	PA
10/7/2009 10:39	Lesa	Tolbert	lesa.tolbert@delta.com	Jonesboro	GA
10/9/2009 21:35	Sharon	DelOrefice	jesjohn214@msn.com	Oaks	PA
10/7/2009 14:53	Wendy	Miller	millerw2@michigan.gov	Allegan	MI
10/7/2009 10:40	Courtney	McGee	Courtney.mcgee@ibx.com	Malvern	PA
10/7/2009 10:59	jerry	young	youngg@wyeth.com	media	PA
10/8/2009 0:12	William	Danson	wdanson@comcast.net	Philadelphia	PA
10/7/2009 10:46	Kim	Smith	kms1@psu.edu	Howard	PA
10/7/2009 11:28	Barry	Martin	barry.martin@teleflexmedical.com	Kutztown	PA
10/7/2009 11:56	Shelley	Price Jennings	hbtruckle@verizon.net	Phoenixville	PA
10/7/2009 11:54	Amanda	Barson	mandalynne216@hotmail.com	Oxford	PA
10/11/2009 19:02	Nancy	Machusick	Nancy_machusick@yahoo.com	West Lawn	PA
10/8/2009 7:40	Kelly	Gilham	kjc2@psu.edu	Bellefonte	PA
10/7/2009 10:43	Linda	McVey	lmcvey@surspc.com	Exton	PA
10/7/2009 14:39	Cynthia	White	CLWhite12@Yahoo.Com	Dillsburg	PA
10/7/2009 10:42	Barb	Sen	bsen@buffalo.edu	Buffalo	NY
10/7/2009 10:48	Penny	Magnin	penelope.magnin@savannahnow.com	Savabbag	GA
10/7/2009 10:41	Rosa	McDonald	ulcrm@buffalo.edu	Gasport	NY
10/7/2009 10:43	Sharon	Demeola	ILMDUCK2@AOL.COM	CLIFTON	NJ
10/7/2009 19:19	Marilyn	Ryan	marilynryn@yahoo.com	Media	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 20:41	Kristina	Venezia	kuv87@hotmail.com	Norristown	PA
10/7/2009 11:15	linda	mink	lindasmink@aol.com	harvey cedars	NJ
10/7/2009 13:29	Kelli	Frable	ktfrable@comcast.net	Coopersburg	PA
10/7/2009 12:56	Debra	Ashton	debra_ashton@hotmail.com	Hoboken	NJ
10/9/2009 12:44	Gloria	Fischer	iamaglo@gmail.com	Philadelphia	PA
10/7/2009 13:06	philip	hartranft	japhart@ptd.net	zionsville	PA
10/8/2009 9:43	Kathy	Jordan	greenstctl@aol.com	Philadelphia	PA
10/7/2009 11:59	Patrick	Borden	pborden@montcopa.org	Eagleville	PA
10/8/2009 0:39	Karolyn	Jepson	karoled@aol.com	Knoxville	TN
10/7/2009 16:32	Geraldine	Petty	sammy5@ptd.net	Saylorsburg	PA
10/7/2009 13:23	Kimberly	Seger	kimmiland@hotmail.com	Kittanning	PA
10/7/2009 10:41	Linda	Conway	linda_conway@tigerwires.com	Hollidaysburg	PA
10/7/2009 11:33	Ronald	Johnson	rleejohns@comcast.net	State College	PA
10/7/2009 10:51	susan	hall	sueallie@hotmail.com	lockport	NY
10/7/2009 11:37	Dawn	Harrod	dtebrugge@hotmail.com	st louis	MO
10/7/2009 11:07	Lisa	Gambaro	lisamarie56@yahoo.com	Philadelphia	PA
10/10/2009 17:10	Elizabeth	Enck	enck26@hotmail.com	Loysville	PA
10/7/2009 10:43	Lisa	Allarde	toothlessinpa@hotmail.com	Green Lane	PA
10/24/2009 6:04	Elke	Kraus	elkekrausmail@yahoo.com	NY	NY
10/13/2009 21:55	Dana	Schultz	gwsdrs@verizon.net	Coraopolis	PA
10/8/2009 21:53	wivi	davis	gyld38@verizon.net	phila	PA
10/7/2009 14:22	Lynette	Luke	Lynette_Luke@tigerwires.com	Altoona	PA
10/7/2009 11:53	DAWn	Lutz	dlutz@cvty.com	Mechanicsburg	PA
10/10/2009 7:09	Anita	McDemrott	varnpaa@yahoo.com	Westover	PA
10/7/2009 11:46	Elizabeth	Fisher	ekfisher@cvty.com	Harrisburg	PA
10/7/2009 10:59	April	Marker-McClurg	asmarker@yahoo.com	Huntertown	IN
10/8/2009 20:17	Tamyra	Desris	Tamyradesris@comcast.net	phoenixville	PA
10/7/2009 10:47	Sandy	Cusick	r.cusick@comcast.net	Phoenixville	PA
10/7/2009 18:48	Linda	Gewiss	billinus@yahoo.com	Wrightsville	PA
10/13/2009 19:13	Andrea	Kalup	andrea0677@aol.com	Newtoqn	PA
10/7/2009 11:03	Sandra	Marron	marron339@comcast.net	Exton	PA
10/9/2009 17:48	Carol	Clonen	hugyourpet@gmail.com	Mt Joy	PA
10/7/2009 13:34	Laurits	Schless	lhschless@hotmail.com	Philadelphia	PA
10/9/2009 21:27	Barbara	Rex	jb0091@hotmail.com	Hummelstown	PA
10/7/2009 11:17	chris	Bruckner	bruckner@comcast.net	Haverford	PA
10/7/2009 17:06	Cindie	Conley	cconley@flc.org	Tucson	AZ

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 17:11	John	Armstrong	jradrum@msn.com	Muskegon	MI
10/8/2009 10:55	Kim	Bibza	kimberlya_b@yahoo.com	Natrona Heights	PA
10/8/2009 7:59	Annette	Martz	pearlegirl1@comcast.net	lebanon	PA
10/7/2009 16:38	JENNIFER	DOVAN	FLEFFY1@YAHOO.COM	HORSHAM	PA
10/7/2009 17:57	AImee	Deibler	aimeedeibler@gmail.com	Lewisburg	PA
10/8/2009 23:27	Beth	Kleinstuber	emtgal33@gmail.com	Milford	PA
10/7/2009 12:07	Brittany	Fincham	cow_girl4ever@yahoo.com	Emeryville	CA
10/28/2009 7:08	Beth	Blakeman	renee_blake@yahoo.com	Albuquerque	NM
10/7/2009 11:37	sean	douglass	brine2003@yahoo.com	Westminster	MD
10/7/2009 11:28	Jennifer	Malloy	jmmalloy@yahoo.com	Lewisburg	PA
10/7/2009 13:19	ANNETTE	NOVELLI	anovelli@jepmanagement.com	CLIFTON HEIGHTS	PA
10/7/2009 19:02	Bob	Thunberg	bjorn@ducom.tv	DuBois	PA
10/7/2009 13:46	Barb	Walsh	walshbarb@comcast.net	Langhorne	PA
10/23/2009 5:26	Marcia	Piccione	piccione99@yahoo.com	Philadelphia	PA
10/12/2009 19:37	Jennifer	Ainscough	babetx@gmail.com	Enola	PA
10/8/2009 21:07	julie	day	Nima_Vered@yahoo.com	warren	OH
10/9/2009 9:36	Maryagnes	Marek	maryagnesfields@aol.com	Erial	NJ
10/7/2009 16:51	stacey	gavrilovic	stacey1030@aol.com	munster	IN
10/7/2009 11:07	Melissa	Imes	mimes@wilson.edu	Fayetteville	PA
10/12/2009 14:16	Annie	McGregor	humph611717@yahoo.com	Lewistown	PA
10/7/2009 10:41	Jan	Zarick	janzarick@hotmail.com	Harrisburg	PA
10/8/2009 18:38	Georgi	Mortensen	gmmstng@gmail.com	West Jordan	UT
10/7/2009 23:12	Janet	Baker	Jan8fxfire@aol.com	Hollidaysburg	PA
10/7/2009 19:51	agnes	michalek	agnes.michalek@gmail.com	bridgewater	NJ
10/7/2009 11:26	April	Yenser	alishen@dejazzd.com	Birdsboro	PA
10/7/2009 16:38	Tammy	Tosti	trtosti@yahoo.com	Mechanicsburg	PA
10/7/2009 12:31	Les	Hoeltzel	hoeltzell1@verizon.net	Maple Glen	PA
10/8/2009 14:34	Karin	Kunz	karmelpups@yahoo.com	Shorewood	IL
10/7/2009 16:43	Teri	Trischett	tje4444@aol.com	Schenectady	NY
10/7/2009 17:50	Kathryn	Thompson	dogomine@gmail.com	Philadephia	PA
10/7/2009 11:18	Watson	Domurat	wdomurat@gmail.com	Birdsboro	PA
10/8/2009 2:39	Natalie	Perryman	nlieblievs@aol.com	Leawood	KS
10/7/2009 17:46	Laurie	Newman	Lclemme1@yahoo.com	Royersford	PA
10/8/2009 0:51	Rachel	Mazza	Rachelmazza@aol.com	Bronx	NY
10/27/2009 5:36	Sylvia	Fitzpatirick	sylfitzpatrick@yahoo.com	Royal Oak	MI
10/10/2009 9:34	Patti	Myers	nitenurs94@yahoo.com	Doylestown	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/28/2009 7:08	Janell	Mann	snugbugcrafts@yahoo.com	Conestoga	PA
10/13/2009 19:57	christine	Blake	talliss7@yahoo.com	Brick	NJ
10/8/2009 22:35	CARP;	BOLDT	huckleberry1996@yahoo.com	Riverside	CA
10/7/2009 12:49	Linda	Rosen	Thelillyputian@yahoo.com	eddystone	PA
10/7/2009 20:30	ANDREA	STOLTZFUS	MOMOFPUGS@AOL.COM	ELVERSON	PA
10/7/2009 20:00	Selina	Day	fgjm2000@yahoo.com	Lufkin	TX
10/10/2009 21:55	Rob	Rodriguez	robrooter@comcast.net	King of Prussia	PA
10/14/2009 0:49	Karen	Kosarych	grade2teach@gmail.com	McKees Rocks	PA
10/7/2009 11:04	Doreen	George	doe2658@yahoo.com	Fort Wayne	IN
10/7/2009 10:58	Jamie	McGrath	tromboneqt@gmail.com	West Conshohocken	PA
10/8/2009 1:41	Rena	Berbigler	RenaB47@aol.com	Norwood	PA
10/28/2009 7:48	dinda	evans	dindamcp4@yahoo.com	san diego	CA
10/7/2009 18:27	Andrea	Isaacs	poodle307@hotmail.com	New York	NY
10/8/2009 3:09	Panagiotis	Rigopoulos	panarigo@care2.com	Patra	ot
10/8/2009 7:27	Franziska	Eber	franziskaeber@t-online.de	Oldenburg	ot
10/7/2009 21:20	William	Beer	stubby12321@yahoo.com	DuBois	PA
10/7/2009 18:59	carolyn	barnes	jimwalker1340@aol.com	Greene	NY
10/7/2009 22:11	bill	rosenberry	speedy63@comcast.net	chambersburg	PA
10/7/2009 20:29	ed	frescoln	efrescoln@comcast.net	Aston	PA
10/28/2009 5:24	edward	colerich	e.colerich@yahoo.com	pittsburgh	PA
10/24/2009 10:21	Leonard	Rath	ckvebay@comcast.net	Barto	PA
10/23/2009 5:22	Crissy	Baker	curlygirl33428@yahoo.com	Tamarac	FL
10/7/2009 10:57	Nancy	Hooper	nan12563@verizon.net	Patterson	NY
10/8/2009 7:45	Richard	Fluharty	richpalm@dejazzd.com	Mifflinburg	PA
10/7/2009 17:45	Michele	Leaman-Potteiger	MichelePotteiger@msn.com	Harrisburg	PA
10/24/2009 6:02	m	diegelman	margied1958@yahoo.com	irwin	PA
10/23/2009 5:55	Ginger	Geronimo	gin2772@yahoo.com	Birmingham	AL
10/7/2009 22:05	George	Reinhart	george@netwind.org	East Berlin	PA
10/11/2009 10:53	Lina	Santa Maria	lmsm_122@yahoo.com	Tonawanda	NY
10/13/2009 18:34	Tammy	Rineer	onetoomany12@hotmail.com	felton	PA
10/8/2009 11:43	Amy	Capodici	amycapo@comcast.net	Berwyn	PA
10/7/2009 12:10	Susan	Phillips	phil40@ptd.net	Coopersburg	PA
10/7/2009 12:45	John	Omachel	spiritceltic@hotmail.com	CHAMBERSBURG	PA
10/8/2009 8:06	Marlene	Gallenz	mgallenz@ptd.net	Allentown	PA
10/7/2009 16:10	Mimi	Crawford	Icedancer44@comcast.net	Mechanicsburg	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 12:09	Gale	Cataraso	tacgrc@ptd.net	Ephrata	PA
10/7/2009 13:24	Karen	M	ladybtrfly@comcast.net	Springfield	PA
10/7/2009 11:27	Dana	Marino	dhmmarino@aol.com	Malvern	PA
10/7/2009 13:46	Penny	Hoeltzel	pwhoeltzel@verizon.net	Maple Glen	PA
10/7/2009 16:30	Gayl	Trump	gayltrump@yahoo.com	Allentown	PA
10/8/2009 22:48	Jennifer	Malik	xraybeanhd883@aol.com	Jackson	NJ
10/7/2009 15:13	Anthony	Montapert	amontapert@roadrunner.com	Ventura	CA
10/7/2009 10:39	Peg	kucek	pegkucek@alcatel-lucent.com	Pottstown	PA
10/20/2009 20:21	Cindy	Arena	barneydog19460@yahoo.com	Phoenixville	PA
10/7/2009 11:10	Eva	Misetic	evamisetic@yahoo.com	Malvern	PA
10/9/2009 0:25	Livvy	Roth	livvyroth@usa.net	Downingtown	PA
10/7/2009 10:41	Heather	Schultz	schultz.heather@gmail.com	chapel hill	NC
10/7/2009 12:26	Tina	Talarico	ritzeey1@hotmail.com	Erie	PA
10/7/2009 11:45	Denise	Lyons	DLyons11@verizon.net	Bellefonte	PA
10/7/2009 19:21	Kim	Champy	kimpetsit@aol.com	Phoenixville	PA
10/7/2009 22:24	fred	kistler	fredkistler@gmail.com	allentown	PA
10/9/2009 1:53	Cheyenne	Fincham	chey_cat@yahoo.com	emeryville	CA
10/7/2009 21:42	Leigh	Wood	leighwood@comcast.net	Bryn Mawr	PA
10/7/2009 15:32	Mike	DeRomo	nile@ptd.net	Coopersburg	PA
10/7/2009 12:45	susan	riepen	susanriepen@comcast.net	harleysville	PA
10/7/2009 20:15	Marcelle	Kelly	marcellekelly@yahoo.com	Garnet Valley	PA
10/7/2009 20:11	Robert	Good	goodie1@dejazzd.com	Lititz	PA
10/7/2009 11:50	Susan	Addison	susan.m.addison@questdiagnostics.com	Collegeville	PA
10/7/2009 22:59	Donna	Ideo	donnaidel@comcast.net	Philadelphia	PA
10/10/2009 20:48	William	Moore	thillantiq@aol.com	Narvon	PA
10/13/2009 17:44	tracy	becker	toripay@ptd.net	lititz	PA
10/7/2009 16:24	Sharon	Wilson	isaac1102@yahoo.com	Lansdale	PA
10/7/2009 11:04	Amanda	Francis	mcfrancis1218@yahoo.com	Ephrata	PA
10/7/2009 18:18	Susan	Bull	sbull222@aol.com	Broomall	PA
10/7/2009 20:54	Alyssa	Trometter	trometter.alyssa@gmail.com	Gladwyne	PA
10/7/2009 11:03	nancy	warshawsky	nancywarshawsky@comcast.net	New Hope	PA
10/7/2009 19:31	Dave	Kohl	dkohl22@comcast.net	glen mills	PA
10/8/2009 7:56	Laura	Tatti	night-breeze@email.it	Oristano	ot
10/7/2009 11:25	Amanda	Schwab	writer2be.amanda@comcast.net	Downingtown	PA
10/8/2009 13:10	joan	farrell	jfarrell46@comcast.net	coatesville	PA
10/8/2009 18:13	JEremy	Youndt	indymark13@hotmail.com	Terre Hill	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 17:24	Nancy	Woodward	ajmalacarne@aol.com	Etters	PA
10/7/2009 20:36	Kyle	Dilworth	khd7760@aol.com	Radnor	PA
10/8/2009 10:00	Jory	Beal	jorybeale@comcast.net	Spring City	PA
10/7/2009 10:50	Jane	Beal	jbeale@reallysi.com	Lansdale	PA
10/7/2009 10:47	Rachel	Rosenblum	rachelsrose@msn.com	Whitestone	NY
10/8/2009 8:06	Alessandro	Barracciu	alejandro.batterista@email.it	Oristano	ot
10/8/2009 9:45	Karen	Jows	daisy_tinker@yahoo.com	Mifflinburg	PA
10/7/2009 12:12	Caryn	Harris	carynian@comcast.net	Penn Valley	PA
10/7/2009 15:24	Matthew	Steger	n3ntj@embarqmail.com	Elizabethtown	PA
10/7/2009 12:04	Sabina	Ammons	saa1940@comcast.net	Annville	PA
10/7/2009 12:16	Susan	Johnson	gutsysue@verizon.net	Lancaster	PA
10/8/2009 21:51	Sharon	Koestler	safkoestler@comcast.net	Doylestown	PA
10/7/2009 18:41	Stephen	Roth	sr067@yahoo.com	Alburtis	PA
10/7/2009 11:04	vicki	kowaleski	vcats2@yahoo.com	bethlehem	PA
10/7/2009 11:04	Mary Ellen	Jones	jonsie789@yahoo.com	Havertown	PA
10/8/2009 20:04	deb	earhart	chfdby@dejazzd.com	lititz	PA
10/7/2009 12:47	Ann	Justich	annjustich@yahoo.com	Phoenix	AZ
10/7/2009 10:50	Mary	Brawner	mebrawner@comcast.net	Bryn Mawr	PA
10/7/2009 17:56	Lois	Jameyfield	jamey13050@aol.com	York	PA
10/7/2009 11:00	Sarah	Lindauer	sjlindau@gmail.com	Voorhees	NJ
10/7/2009 20:15	Susan	Lynch	schlekta@yahoo.com	Blandon	PA
10/8/2009 9:42	allyson	reed	thomranch@aol.com	vineyard haven	MA
10/7/2009 13:36	Richard	Coppock	OUFC4LIFE@aol.com	Bethlehem	PA
10/10/2009 8:26	Rosemary	Breslin	roebreslin1@aol.com	PHILADELPHIA	PA
10/7/2009 11:14	Michaelan	Cohen	michaelan3@hotmail.com	bryn mawr	PA
10/8/2009 8:48	Emily	Uliana	emuliana@gmail.com	Fountain Hill	PA
10/7/2009 11:52	Kimberly	Peacock	mikdenpho@hotmail.com	Perkasie	PA
10/7/2009 10:48	Shannon	Agostinelli	shannon1126@gmail.com	Wind Gap	PA
10/7/2009 11:38	Sandra	Nauman	sandman2puggies@aol.com	Marietta	PA
10/7/2009 14:13	Kelli	Clark	kelli@karasekandclark.com	Langhorne	PA
10/7/2009 13:29	Rebecca	Twine	beckytwine@patriotprinting.net	Dudley	MA
10/8/2009 19:48	Barbara	Brunelle	BarbaraBrunelle@verizon.net	Manchester	NJ
10/13/2009 20:23	Debra	Zuch	sndzuch@aol.com	Coatesville	PA
10/7/2009 23:04	Sandy	Robinson	Frampton77@yahoo.com	Quarryville	PA
10/22/2009 5:53	Joseph	Winters	actorjsw@yahoo.com	Elizabethtown	PA
10/7/2009 11:43	Barb	Bentz	bkbentz@comcast.net	Wayne	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 14:47	Lisa	Engroff	lovshack1991@yahoo.com	Lititz	PA
10/7/2009 19:20	Allison	Herbert	aherbert05@gmail.com	Phoenixville	PA
10/7/2009 13:16	Jeanmarie	Cozzi	cozzinla@charter.net	Madisonville	LA
10/7/2009 11:39	Dale	Miller	daleinpa@aol.com	Fleetwood	PA
10/7/2009 11:24	Ronnie	Corropolese	ronniecorr@yahoo.com	Limerick	PA
10/10/2009 18:46	Deborah	Bull	bailey434@comcast.net	Joppa	MD
10/7/2009 21:36	Maryann	Wilk	brunomwrosie@aol.com	Ephrata	PA
10/9/2009 0:27	Sharon	Drescher	oxymama27@embarqmail.com	Elizabethtown	PA
10/7/2009 12:26	Dwight & Kathryn	Sisak	dakasis@comcast.net	Hatfield	PA
10/7/2009 10:59	Eliza	High	lizzy6318@aol.com	Berwyn	PA
10/9/2009 7:39	Jenny	Wismer	jjwismer@verizon.net	Malvern	PA
10/7/2009 16:29	Leah	Mann-Daly	lmanndaly@gmail.com	Dallas	PA
10/8/2009 21:21	Linda	Gibson	linjongib@aol.com	Strasburg	PA
10/9/2009 21:49	Brenda	Miller	diamonds25@verizon.net	Lebanon	PA
10/7/2009 11:13	Vaughan	Hodges	ccshodges@gmail.com	Belgrade	MT
10/7/2009 20:07	diane	senatore	spiritgirl42@AOL.COM	ALBRIGHTSVILLE	PA
10/22/2009 6:11	Richard	Koshgerian, Jr.	richardkoshgerian@yahoo.com	Philadelphia	PA
10/7/2009 12:44	Elizabeth G.	Atterbury	eegapa@gmail.com	Malvern	PA
10/7/2009 21:42	Cynthia	Kokinda	ckokinda@comcast.net	Doylestown	PA
10/7/2009 12:52	Robert and Carol	Kuchar	ckuchar@gmail.com	mcmurray	PA
10/7/2009 11:00	Stefanie	Ulmer	smu24_2001@yahoo.com	Sellersville	PA
10/7/2009 17:49	Phyllis	Oxenreider	phyllis_oxenreider@msn.com	Phoenixville	PA
10/25/2009 5:15	Chantal	Buslot	chantal.buslot@yucom.be	Hasselt	ot
10/7/2009 10:41	Kimberly	Shaffer	kshaffer@crepsunited.com	Indiana	PA
10/7/2009 11:22	sherrie	zerfass	sherrie.zerfass@penske.com	allentown	PA
10/7/2009 12:21	DONALD	REIGART	DREIGART@GFNET.COM	YORK	PA
10/7/2009 11:12	Tracy	Tice	ruger901@verizon.net	Wrightsville	PA
10/24/2009 6:11	Christine	Cain	caincoo@yahoo.com	Columbia	PA
10/13/2009 9:39	Stephanie	Fortunato	s.e.fortunato@gmail.com	Drexel Hill	PA
10/7/2009 11:51	sheila	decourcey	sdecourcey@aegonusa.com	bel air	MD
10/7/2009 10:56	Heather	Fake	heather.fake@manheim.com	Mountville	PA
10/7/2009 14:26	TERRI	KENNEY	falls4me3@yahoo.com	DREXEL HILL	PA
10/7/2009 17:06	sharon	sweeney	sswe324@aol.com	broomall	PA
10/8/2009 6:44	Joan	Edmondson	Joan.Edmondson@uphs.upenn.edu	Philadelphia	PA
10/8/2009 9:17	Joanne	Senters	jsenters@ptd.net	Center Valley	PA
10/7/2009 10:58	Melody	Garrell	mgarrell@gmail.com	Spring City	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 10:59	Nancy	Ford	nancyf@ritterim.com	Harrisburg	PA
10/8/2009 15:25	Thomas	Murphy	zuttmurph@comcast.net	Philadelphia	PA
10/22/2009 11:59	Elizabeth	Dumond	edumond@chesco.org	Honey Brook	PA
10/7/2009 10:45	alexis	takas	alexis11@mac.com	wayne	PA
10/7/2009 10:42	Ellen	Jenkins	ebjathome@aol.com	Dillsburg	PA
10/7/2009 11:13	Ed	Adams	adamse1@embarqmail.com	Bellefonte	PA
10/7/2009 12:13	Annie	McDermott	awabottis@yahoo.com	Warrington	PA
10/7/2009 10:50	SUE	VRANICH	svranich@bonton.com	YORK,	PA
10/7/2009 17:15	Kristin	Lapp	mady227@hotmail.com	Lansdale	PA
10/7/2009 11:56	Natalie	Rhoads	nrhoads@ptd.net	Lititz	PA
10/7/2009 14:40	Candace	Jean-Louis	candace.jean-louis@us.mcd.com	Bear	DE
10/7/2009 11:03	mary	parke	mary092453@yahoo.com	finleyville	PA
10/7/2009 10:47	Sarah	Ritter	sarah237@verizon.net	Easton	PA
10/7/2009 11:12	Lynn	Grenier	iluvmygolden@comcast.net	Perkasie	PA
10/7/2009 11:10	carol	panati	carolpanati@gmail.com	Philadelphia	PA
10/7/2009 10:44	Mary	DeSantis	mdesantis@stairwaysbh.org	Erie	PA
10/7/2009 11:34	Patricia	Seman	pseman@stairwaysbh.org	Erie	PA
10/7/2009 15:23	jane	wells	jwells6741@aol.com	centennial	CO
10/7/2009 11:55	Diana	Bittel	dhbantique@aol.com	Bryn Mawr	PA
10/7/2009 18:37	Percy	Townsend	percy_townsend@verizon.net	Pottstown	PA
10/7/2009 10:41	Laura	Robelen	laura@levywilson.com	wilmington	DE
10/7/2009 15:14	Karen	Yarrish	karen.yarrish@keystone.edu	Wyoming	PA
10/7/2009 12:24	cheryl	whittaker	cheryl.whittaker@gmail.com	kennett square	PA
10/7/2009 16:07	caroline	laino	cvalletti@yahoo.com	philadelphia	PA
10/7/2009 15:22	Barbara	Brehm	bardonbre@pa.net	Carlisle	PA
10/7/2009 11:08	Renee	Coonradt	rkhostetter@yahoo.com	Harrisburg	PA
10/7/2009 13:43	teresa	maltese	tamaltese@gmail.com	enola	PA
10/7/2009 16:37	Michelle	Cramer	sjh622@gmail.com	Lebanon	PA
10/7/2009 10:40	Amy	Curtis	acurtis@arscollects.com	Honey Brook	PA
10/7/2009 15:44	Sallie	de Vou	saldev@verizon.net	pittsburgh	PA
10/7/2009 15:27	Anne	Weinhoffer	burke625@comcast.net	quakertown	PA
10/8/2009 17:01	Kristine	Stellato	purpeater@gmail.com	Malvern	PA
10/7/2009 12:15	Laurie	pompeo	laurie_a_pompeo@msn.com	Phoenixville	PA
10/7/2009 11:24	Gwyneth	Olsen	gbolsen@gmail.com	Philadelphia	PA
10/13/2009 20:38	patricia	corio	idacrazymamma@yahoo.com	slatington	PA
10/7/2009 19:26	Lisa	Harper	harper995@aol.com	Malvern	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 10:48	Sandra	Hall	mayhall@mac.com	Pearcy	AR
10/7/2009 12:15	Julianna	Menezes	menezesbrothers@comcast.net	Philadelphia	PA
10/7/2009 13:21	JOYCE	SOMMERER	CBI2030@MSN.COM	LEVITTOWN	PA
10/7/2009 14:12	kelly	ferrara	kelle317@aol.com	Brick	NJ
10/7/2009 17:37	Kimberly	Roemer	boontune@yahoo.com	Salisbury	MD
10/7/2009 14:12	Susan	Reardon	sreardon@attglobal.net	Philadelphia	PA
10/7/2009 13:19	Rebecca	Siwy	tapperrun@atlanticbb.net	Johnstown	PA
10/7/2009 12:12	Jessica	Freidly	stjff03@moravian.edu	Manheim	PA
10/7/2009 11:08	Pat	Sphar	toby2460@msn.com	Pittsburgh	PA
10/8/2009 11:49	Karen	Cucci	kcucci@personneldirections.com	Minnetonka	MN
10/7/2009 11:28	Vince	Pellicore	vince2445@comcast.net	Phoenixville	PA
10/7/2009 11:05	Bette	Portello	gryhd@comcast.net	Aston	PA
10/7/2009 10:45	Carla	Tate	cmtate3@juno.com	Philadelphia	PA
10/7/2009 11:43	Shelly	Norwood	s_norwood2005@yahoo.com	Odessa	TX
10/7/2009 10:51	Erin	Lisetski	ell3@lehigh.edu	Easton	PA
10/7/2009 11:07	Susan	Vandegrift	impulsv@comcast.net	Doylestown	PA
10/8/2009 8:17	Anne	McGuigan	themcguigans@verizon.net	Downingtown	PA
10/10/2009 14:20	Jeffrey	Skversky	jmsone2@comcast.net	Bensalem	PA
10/7/2009 10:50	Randi	Martin	randimartin@gmail.com	Elkins Park	PA
10/7/2009 12:15	Diana	Basciano	dianabas@comcast.net	Broomall	PA
10/7/2009 12:00	Linda	Leffler	lleffler@atlanticbb.net	Johnstonw	PA
10/7/2009 22:32	Janet	Smith	Jangsmith1@msn.com	Philadelphia	PA
10/7/2009 10:42	Andrea	DaSilva	adasilva@2mg.com	Voorhees	NJ
10/7/2009 11:18	Vincent	Herron	vphiii@yahoo.com	Mountville	PA
10/7/2009 11:08	Jessica	Baran	jessbaran@yahoo.com	Sunny Isles Beach	FL
10/7/2009 12:07	Jackie	LaSala	jackie1210@comcast.net	Fairless Hills	PA
10/7/2009 19:52	Cindy	Rosen	rosen.cindy@gmail.com	Elkins Park	PA
10/7/2009 17:09	Beth	Yancoskie	beth_yancoskie@hotmail.com	North Wales	PA
10/7/2009 14:16	Elizabeth	Wingard	druciew@yahoo.com	Gibsonia	PA
10/7/2009 11:49	Arthur	Dunham	adunham@sas.upenn.edu	Glen Mills	PA
10/7/2009 12:44	CHERYL	FEATHER	dirtshredder@comcast.net	ELKINS PARK	PA
10/7/2009 11:03	Kathleen	Beauparlant	hypnopadia@yahoo.com	Philadelphia	PA
10/7/2009 18:46	Victoria	Boyarsky	vboyarsky@gmail.com	Carlisle	PA
10/7/2009 11:28	Irene	Hendrix	ish_sjh@yahoo.com	Chalfont	PA
10/8/2009 13:45	Kelly	Kissling	kkissling@fs.fed.us	Anoka	MN
10/7/2009 15:27	Kara	Venekamp	karavenekamp@gmail.com	Spokane	WA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 10:42	Jane	Craft	jcraft@udel.edu	Newark	DE
10/7/2009 11:01	Dina	Dornseif	ddornseif@homesecurityabstract.com	Milaca	MN
10/7/2009 12:04	Jackie	Summers	jmsummers1@hotmail.com	New Freedom	PA
10/7/2009 12:55	jan	Hohlefelder	dynojan@aol.com	Honey Brook	PA
10/7/2009 12:07	Andrea	Lieberman	andeecandee@comcast.net	Jenkintown	PA
10/7/2009 10:43	Judi	McMearty	judimcm@verizon.net	Wayne	PA
10/14/2009 22:47	Joe	Corsello	jcorsello66@hotmail.com	Glen Mills	PA
10/7/2009 13:12	janice	mc shane	otterpus@aol.com	Churchville	PA
10/7/2009 15:27	Allison	Brubaker	brubs223@yahoo.com	Swarthmore	PA
10/7/2009 18:57	Lauren	Davidson	lauren_d2000@yahoo.com	Lansdale	PA
10/7/2009 10:49	Patricia	Gerstner	pattyg@zoominternet.net	Mount Pleasant	PA
10/7/2009 22:42	Monica	Carnesi	monicacarnesi@mac.com	Philadelphia	PA
10/7/2009 18:12	Lauren	Marchesani	xcloudsx@gmail.com	Drexel Hill	PA
10/9/2009 22:12	Larry	Klopfenstein	wwjd82606@aol.com	Levittown	PA
10/7/2009 12:07	Jackie	Dahlen	jadahlen@verizon.net	Downingtown	PA
10/16/2009 13:50	William	Simms	bsimms33@aol.com	Douglassville	PA
10/17/2009 11:22	Kaitlin	Gully	kg93fftl@yahoo.com	York	PA
10/8/2009 14:43	Amber	Back	aback@asu.edu	holland	PA
10/7/2009 12:48	Lynda	Maldonado	lynda.maldonado@gmail.com	Philadelphia	PA
10/7/2009 10:49	Kathleen	Cowie	kcowie@atlanticbb.net	Johnstown	PA
10/7/2009 21:42	Stacey	Coldiron	Lynne3179@aol.com	Ephrata	ot
10/10/2009 20:27	Janis	Kinslow	kinslowja@comcast.net	Aston	PA
10/7/2009 18:48	Marvin	Garner	mggarner@bwwonline.com	Red Lion	PA
10/8/2009 14:40	stephanie	thomas	stepha14@yahoo.com	norristown	PA
10/8/2009 19:48	Machelle	O'Neill	oneillinsurance@comcast.net	State College	PA
10/7/2009 16:34	Fran	Cappelli	cooz2@aol.com	Phoenixville	PA
10/7/2009 19:04	Louise	McLeod	louise.mcleod@verizon.net	Wakefield	RI
10/7/2009 11:44	Ellie	Foth	slave2thepaw@yahoo.com	Linwood	PA
10/7/2009 10:49	Denise	DeMarco	sanddollar47@gmail.com	Broomall	PA
10/7/2009 13:47	Karen	Kometa	ktootall@aol.com	Norristown	PA
10/7/2009 12:35	Elyse	Rubenstein	Elyon89686@aol.com	Devon	PA
10/7/2009 12:04	Mark	Lubner	acuramark@comcast.net	New Castle	DE
10/7/2009 19:50	Dagmar	Fisher	dagmarfisher@comcast.net	State College	PA
10/8/2009 10:02	Megan	Warner	meganh@pa.net	Fairfield	PA
10/13/2009 16:49	Kristen	Mode	ditzy1017@yahoo.com	East Stroudsburg	PA
10/7/2009 19:50	Neale	Stock DVM	ndsduck@yahoo.com	Abington	PA

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/28/2009 7:33	Steva	Stowell-Hardcastle DVM	slsdvm@ptd.net	Lewisburg	PA
10/7/2009 12:16	Chung	Lee	vetman_z28@hotmail.com	Pittsburgh	PA
10/7/2009 11:12	Sharon	Matter	visionaryvet@aol.com	Cooperstown	PA
10/12/2009 21:40	Rafe and Lisa	Knox	vwk4@comcast.net	Lancaster	PA
10/10/2009 0:27	kevin	kerstetter	tdg037@aol.com	spring city	PA
10/8/2009 9:06	lisa	novatka	lnova68@hotmail.com	shenandoah	PA
10/9/2009 20:53	Leesa	Braun	LRBraun@aol.com	Carlisle	PA
10/8/2009 5:57	Marsha	May	marshmay@comcast.net	Pennsville,	NJ
10/7/2009 10:41	Thomas	Pagliaro Jr	tpagliarojr@hotmail.com	Bristol	PA
10/7/2009 12:10	Jeannie	Sexauer	jeangus1@comcast.net	Washingto n	PA
10/7/2009 10:51	Mark	Blomfield	markb@sterling-stairlifts.com	Bethlehem	PA
10/7/2009 18:26	Christina	Biesecker	tinabooth80@hotmail.com	Mountville	PA
10/9/2009 10:32	Adele	Miller	adele941@verizon.net	Reading	PA
10/7/2009 11:03	Diane	Stratton	dstrat215@yahoo.com	Ewing	NJ
10/7/2009 17:34	BARBARA	RITTER	rittrohs@hotmail.com	BETHLEHEM	PA
10/7/2009 21:52	Lorraine	Quintile	raine925@comcast.net	lansdowne,pa.	PA
10/8/2009 9:26	June	Stirling	jstirling568@dollarbank.com	Valencia	PA
10/7/2009 11:44	Lori	Canale-Smith	soridabela@aol.com	Pleasantville	NY
10/7/2009 10:48	Thomas	Smith	hammawood@aol.com	Pleasantville	NY
10/7/2009 10:55	Sandra J.	Hubbard	shubbard@gettysburg.edu	Gettysburg	PA
10/7/2009 10:41	Rebecca	Luyt	rene.luyt@decisionone.com	Springfield	PA
10/7/2009 11:35	June	white	junebwhite@gmail.com	Brick	NJ
10/7/2009 10:44	Susan	Ivens	sivens@Orthovita.com	Boyertown	PA
10/12/2009 6:27	Tamra	Zebovitz	imazebo1@comcast.net	Elkins Park	PA
10/8/2009 8:28	Judi	Rechner	jrechner.ambric@yahoo.com	Media	PA
10/7/2009 13:27	Gena	Hill	genamarie411@yahoo.com	Upper Darby	PA
10/7/2009 11:52	Cara	Tomasek	ctomasek@comcast.net	Coatesville	PA
10/7/2009 10:44	Christy	Wentworth	cwentworth@mtb.com	Lititiz	PA
10/7/2009 10:48	Carole	Dallek	Carole.D.Dallek@irs.gov	Brooklyn	NY
10/7/2009 23:31	Patricia	Dehoff	ffohed@hotmail.com	Gettysburg	PA
10/7/2009 10:46	Lynda	Cairo	lcairo@sofla.nef.com	Lake Worth	FL
10/19/2009 5:22	K	Watkins	kw@rudloff.org	Hatboro	PA
10/7/2009 10:53	Farrah	Mahan	farrah.mahan@towersperrin.com	Philadelphia	PA
10/7/2009 12:09	shaena	gardner	shaenagardner@comcast.net	Fishers	IN
10/7/2009 11:48	Carolyn	Duffy	cairoduffy@yahoo.com	Philadelphia	PA
10/7/2009 12:36	leo	garcia	dafonso411@yahoo.com	newark	NJ

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 12:33	Lisa	Hatcher	lhatcher7@aol.com	Newtown Square	PA
10/7/2009 10:40	Cecilia	Caiano Correia	ceciliacc@optonline.net	Elizabeth	NJ
10/13/2009 20:11	M. Cecilia	Correia	ceciliacorreia@yahoo.com	ELIZABETH	NJ
10/13/2009 9:55	maria	afonso	diane.afonso@gmail.com	newark	NJ
10/7/2009 10:45	Aurora	Caiano	auroritacaiano@optonline.net	Elizabeth	NJ
10/9/2009 13:46	Alicia	Schorkhuber	shorty@dejazzd.com	Lititz	PA
10/7/2009 21:30	emilia	golanska	golanska@aol.com	Philadelphia	PA
10/7/2009 19:08	Pamela	Jensen	jens0581@umn.edu	Wayne	PA
10/7/2009 10:48	lynda	kaspern	lynda.kaspern@sanofipasteur.com	palmerton	PA
10/8/2009 10:29	Tina	Nelson	nelson@vfsa.com	Pottstown	PA
10/11/2009 9:09	Debbie	Ennis	dkennis4@comcast.net	Downingtown	PA
10/7/2009 11:02	TERESA	PILCHER	springers3andme@hotmail.com	mohnton	PA
10/8/2009 10:32	Christa	McCarthy	cmccarthy@chesco.org	Honey Brook	PA
10/7/2009 11:05	Hilary	Wetzel	kreider23@msn.com	West Reading	PA
10/7/2009 10:50	Michele	Landis	LandisFamily3@comcast.net	Enola	PA
10/7/2009 11:25	Jacqueline	Shultz	shultzdante@yahoo.com	Philadelphia	PA
10/7/2009 15:24	Bonnie	Rohrbaugh	brohrbaugh@wildblue.net	New Freedom	PA
10/7/2009 11:10	Merrilee	Cichy	merrileec@aol.com	Little Falls	NJ
10/7/2009 14:23	Lisa	Fahrenholz	ldf0312@yahoo.com	Penfield	NY
10/7/2009 10:48	Flo	McEvoy	florence.c.mcevoy@questdiagnostics.com	Pottstown	PA
10/7/2009 10:47	Denise	Gallo	ottergallo@hotmail.com	Holland	PA
10/7/2009 15:49	maria	mcvay	mariacnj@yahoo.com	Barnegat	NJ
10/7/2009 10:53	Jill	Luettgens	jillfloydhank@hotmail.com	Lancaster	PA
10/11/2009 8:59	nancy	mcfarland	mcfarlanddickens@comcast.net	north wales	PA
10/7/2009 15:47	Anna	Kamstra	akamstra@comcast.net	Philadelphia	PA
10/7/2009 10:49	Hailey	Jacob	jej-8@comcast.net	Galloway Township	NJ
10/7/2009 11:17	Lori	Symmonds	lsymmond@geneva.edu	Beaver Falls	PA
10/7/2009 11:05	Maryanne	McGovern	Madmcgov@comcast.net	Delran	NJ
10/7/2009 10:43	Kathy	Ozga	kathy.ozga@cnh.com	New Holland	PA
10/7/2009 13:00	Paula	Berger	paulaberger@comcast.net	Wallingford	PA
10/8/2009 15:11	Shawn	Baker	sbaker@franklinrealtydev.com	Lansdale	PA
10/7/2009 14:28	Kimberly	Sanborn	kbsanborn@gmail.com	Easton	PA
10/7/2009 22:26	Kathy	Guse	gusefog@yahoo.com	Lititz	PA
10/7/2009 17:35	Barb	Colburn	bjcolburn@comcast.net	Harrisburg	PA
10/7/2009 10:41	alicia	castagliuolo	alicia.castagliuolo@exeloncorp.com	essington	PA
10/24/2009 5:49	lisa	salazar	lisajunior@netscape.com	Foster City	CA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 10:40	Barbara	Lefler	barbara.lefler@boke-mgmt.com	Pittsburgh	PA
10/7/2009 15:23	Jo-Anne	Vanyo	jgkvc@comcast.net	Malvern	PA
10/7/2009 10:51	Carol	Noblit	carolnoblit@comcast.net	Harrisburg	PA
10/8/2009 14:55	Patricia	Moore	pjm514@hotmail.com	North Wales	PA
10/7/2009 12:03	Deborah	Wilson	dae2@psu.edu	Bellefonte	PA
10/7/2009 12:14	Anndrienne	Watts	ahbwatts@msn.com	Philadelphia	PA
10/8/2009 13:54	Sharlene	Wiley	sharlene.wiley@convatec.com	Langhorne	PA
10/7/2009 12:00	saar	bonnie	saabon3@gmail.com	jersey shore	PA
10/8/2009 9:17	Carol	Burke	burke_cr@comcast.net	Glen Mills	PA
10/7/2009 10:44	Pamela	Gordon	pgordon@tuckerlaw.com	New cumberland	PA
10/7/2009 10:54	PAMELA	RYBA	PRYBA1@VERIZON.NET	SKIPPACK	PA
10/7/2009 14:28	jimmy	kershner	jpkershner@verizon.net	catawissa	PA
10/7/2009 11:23	Karen	Gerardi	KMG830@aol.com	Williamsport	PA
10/7/2009 14:27	Barb	Cousins	b.cousins@comcast.net	York	PA
10/7/2009 15:20	TOM	IVENS	IvensT@msn.com	BOYERTOWN	PA
10/7/2009 22:34	Clare	Myer	clareski@comcast.net	Royersford	PA
10/7/2009 11:29	Patti	Navilliat	pnavilliat@firedexpgh.com	Gibsonia	PA
10/7/2009 11:30	Amy	Witmer	aimeewitmer@yahoo.com	Harrisburg	PA
10/8/2009 10:28	David	Diamond	dgdiam@aol.com	North Wales	PA
10/7/2009 11:26	Christopher	Fisher	cfisher@tuckerlaw.com	Harrisburg	PA
10/7/2009 18:53	Sharen	Compasso	coolmema6@aol.com	Bath	PA
10/13/2009 14:49	D. Etic	Brown	Huffmail2@aol.com	Philadelphia	PA
10/28/2009 5:21	Scott	Tucker	odrone@yahoo.com	Raleigh	NC
10/7/2009 10:45	Lori	Reeser	lreeser@aydindisplays.com	Birdsboro	PA
10/8/2009 19:23	nancy	andrzejewski	harleyandr@aol.com	churchville	PA
10/7/2009 14:41	Cleatus	Temple	cleat414@windstream.net	Muncy	PA
10/7/2009 18:48	Heather	Maloney	hjmaloney@yahoo.com	Ardmore	PA
10/7/2009 10:42	Thea	Whiteman	ttwhiteman@chesco.org	Atglen	PA
10/7/2009 15:27	Leah	Zebovitz	leabae@comcast.net	Melrose Park	PA
10/7/2009 16:08	Lynn	Weishaupt	lynn.w@verizon.net	Williamsport	PA
10/7/2009 12:28	Sarah	Crawford	crawfordse@comcast.net	Bryn Mawr	PA
10/7/2009 10:41	valeire	rice	valerie.rice@delval.edu	lansdale	PA
10/7/2009 11:14	Joseph	Lewis	joe125@verizon.net	KING OF PRUSSIA	PA
10/7/2009 17:16	michelle	shields	mshields@phila.k12.pa.us	philadelphia	PA
10/7/2009 18:25	Carol	Deyo	duodeyo@aol.com	Bradenton	FL
10/7/2009 12:49	Joyce	Rivera	joyce.rivera@radian.biz	MULLICA HILL	NJ

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 20:01	Elizabeth	Mikolajczyk	bethmik@gmail.com	Sicklerville	NJ
10/7/2009 11:12	patty	hnasko	phnasko@hotmail.com	seattle	WA
10/7/2009 11:01	Angie	Smith	ocean81261@hotmail.com	Malvern	PA
10/7/2009 18:36	Kim	Majczan	kimmquilt@aol.com	Richboro	PA
10/7/2009 19:22	r	f	tbib@comcast.net	Harrisburg	PA
10/15/2009 23:41	rochelle	ulrich	shelby222u@comcast.net	maple shade	NJ
10/9/2009 18:06	Candace	Albert	MIDDONKAT1@comcast.net	Warrington	PA
10/7/2009 12:14	Rebecca	Kase	rebeccakase@gmail.com	Pottstown	PA
10/7/2009 12:35	Finbar	McEvoy	fmcevoy@comcast.net	Berwyn	PA
10/7/2009 16:03	Sue	DiCocco	Suedstp@aol.com	Pennington	NJ
10/9/2009 8:38	barbara	campbell	interboro632003@yahoo.com	ocan veiw	DE
10/8/2009 8:34	Kevin	Koller	kkoller02@yahoo.com	Philadelphia	PA
10/7/2009 17:34	Charisse	Tamburelli	ctamburelli@arcadia.edu	Mohnton	PA
10/8/2009 12:34	Ruth	Thomas	ruthiethomas@comcast.net	Norristown	PA
10/7/2009 17:44	Judith	Roberts	jwr110@comcast.net	State College	PA
10/7/2009 11:13	Amanda	Wagner	awagner23@gmail.com	Columbia	PA
10/7/2009 13:34	Kevin	Boben	Bobens18@gmail.com	Columbia	PA
10/24/2009 20:29	Elisa	Minakis	el_isa_m@hotmail.com	toronto	ON
10/7/2009 12:50	Stephanie	Brown	slb382@gmail.com	new york	NY
10/7/2009 14:57	erin	Schriftman	cali112180@aol.com	Willow grove	PA
10/7/2009 21:33	Martha M	Chisholm	mmchisholm@comcast.net	Coral Gables	FL
10/7/2009 15:23	Susan	Shoch	Thesilentb@AOL.com	Doylestown	PA
10/12/2009 13:15	Serena	Fogelberg	serena_fogelberg@yahoo.com	Allenwood	PA
10/19/2009 20:13	Kilian	Long	kiliantlong@aol.com	North Wales	PA
10/8/2009 18:05	Jennifer	Clemons-Casillo	jennyc91@ptd.net	Lititz	PA
10/7/2009 12:43	Elyse	Devine	devinee856@aol.com	Bala Cynwyd	PA
10/7/2009 13:21	Sandy	Kuterbach	sandy.kuterbach@gmail.com	Pottstown	PA
10/7/2009 10:46	Nicole	Kesselman	nicole.kesselman@gmail.com	Los Angeles	CA
10/21/2009 5:17	Laura	Fleischer	Hotkoko99@aol.com	Flushing	NY
10/7/2009 16:31	Julie	Thumma	bigears@pa.net	Walnut Bottom	PA
10/7/2009 11:22	TJ	miernicki	TJMIERNICKI@YAHOO.COM	perkasie	PA
10/7/2009 11:02	christine	stahle	cstahle@comcast.net	lancaster	PA
10/7/2009 12:33	diane	dicesare	DDICESARE@PNAT.COM	TRAFFORD	PA
10/7/2009 10:43	Nikki	Bricker	nikk1099@aol.com	Harrisburg	PA
10/7/2009 12:39	Janet	Streng	JRSDVM@optonline.net	hewitt	NJ
10/7/2009 13:29	Bettie	Lombardi	blombardi@fvymca.org	Phoenixville	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 16:49	Barbie	Carrington	barbieann2@aol.com	kennett square	PA
10/7/2009 16:57	Dr. Andrea	Vlacho-Christos	avctherapy@aol.com	Philadelphia	PA
10/7/2009 14:32	Cindy	Mohn	CMohn66304@aol.com	Mohnton	PA
10/7/2009 10:42	Mariann	Roberts	murrski@dejazzd.com	Ephrata	PA
10/7/2009 10:47	rose	oseredzuk	rose@tristatecontainer.com	langhorne	PA
10/8/2009 10:41	Kimberly	Hunter	khunter@excellerx.com	West Conshohocken	PA
10/7/2009 10:57	Bev	Jacobs	crazydoglady64@aol.com	Goochland	VA
10/9/2009 10:55	james	Hicks	jandjhicks@verizon.net	Shillington	PA
10/7/2009 16:28	Kim	Forline	kimberly.forline@dechert.com	Philadelphia	PA
10/7/2009 12:07	Tina	Leifer Rettig	tlr32d@aol.com	Holland	PA
10/7/2009 13:30	Donald	Luce	dhluce@verizon.net	Downingtown	PA
10/21/2009 8:10	Rosemary	Farrow	jonroefarr@yahoo.com	Glen Mills	PA
10/7/2009 19:22	Mary	Kane	mlkane64@yahoo.com	Coatesville	PA
10/7/2009 11:01	Deb	Good	skatedlg@comcast.net	Sinking Spring	PA
10/7/2009 12:04	Barbara	Stewart	jbar-s@comcast.net	New Holland	PA
10/7/2009 11:40	Cristy	Brenneman	cristybrenneman@yahoo.com	Dillsburg	PA
10/7/2009 12:24	Terry	DeMari	tdemari@cox.net	Omaha	NE
10/7/2009 10:43	Janis	Erney	jerney@lehighgroup.com	Macugie	PA
10/7/2009 10:41	Nicole	Calarco	calarcon@aetna.com	Lansdale	PA
10/7/2009 10:44	KIRSTEN	ARDELEAN	kiki_a@verizon.net	SPRINGFIELD	NJ
10/7/2009 23:06	Jodi	Garrett	jaxsong02@yahoo.com	Alexandria	MN
10/7/2009 14:43	ellen	floyd	ellandhow@comcast.net	Philadelphia	PA
10/20/2009 15:30	Ashley	Gilbert	band_geek_aeg@hotmail.com	Fayetteville	PA
10/7/2009 13:21	Phyllis	Cortese	pxc308@aol.com	Philadelphia	PA
10/7/2009 12:29	Lori	Witmer	lawitmer@ptd.net	Denver	PA
10/7/2009 13:33	Helen	kearney	j.kearney@comcast.net	Greensburg	PA
10/7/2009 11:17	Linda	Adkins	lindan8r@yahoo.com	Madison	AL
10/8/2009 13:13	Bridget	Soto	bridget_mcf@yahoo.com	Berwyn	PA
10/7/2009 12:46	nancy	kenyon	enasgirl@aol.com	los Angeles	CA
10/9/2009 1:21	Heather	Negley	turtlefanatic1@yahoo.com	Shippensburg	PA
10/7/2009 11:42	Jane	Heatherington	janeheatherington@yahoo.com	Pittsburgh	PA
10/7/2009 10:53	Karen	Pecket	karen.l.pecket@lmco.com	Glenmoore	PA
10/7/2009 13:36	Bruce	Parthemore	bruce@parthemore.com	New Cumberland	PA
10/7/2009 12:10	Bill	Gumhold	bgumhold@gmail.com	Allentown	PA
10/7/2009 11:38	patricia	mannino	patricia.mannino@starwoodhotels.com	Mamaroneck	NY

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 13:37	Beth	Brennan	gypsee212@yahoo.com	Bloomsburg	PA
10/8/2009 16:20	Nancy	Savioli	nsavioli@shire.com	Melrose	MA
10/7/2009 11:09	Sheila	Bergemann	sber728@yahoo.com	Las Vegas	NV
10/7/2009 10:46	joan	Darbig	jdarbig@epicbuilds.com	Edison	NJ
10/7/2009 10:56	marilyn	James	marilynsue22@comcast.net	Reading	PA
10/7/2009 18:54	Amy	Pletscher	amypletscher@yahoo.com	Souderton	PA
10/8/2009 8:04	Kathy	DeSimone	kdesimone007@yahoo.com	Hatfield	PA
10/7/2009 14:26	David	Fisher	davidfisher@comcast.net	Pitman	NJ
10/7/2009 10:55	susan	garman	sgarman.ospt@comcast.net	enola	PA
10/10/2009 23:35	Maria	Siegert	marielynne@mac.com	Philadelphia	PA
10/7/2009 12:19	Arleen	Brighton	graydog48@comcast.net	New Holland	PA
10/8/2009 2:36	Amanda	Heavener	heavener_amanda@yahoo.com	New Providence	PA
10/7/2009 17:33	Anita	Pence	alp716@verizon.net	Lebanon	PA
10/9/2009 10:32	Christopher	Goldsmid	cgolds1@aol.com	Philadelphia	PA
10/7/2009 17:19	violet	bachmann	vkbachmann@comcast.net	phila	PA
10/7/2009 18:25	Kim	Tuttle	kimtsteelers1@neo.rr.com	Alliance	OH
10/7/2009 11:33	Lyndsay	Bolin	quigleyla@gmail.com	New Eagle	PA
10/7/2009 16:59	Adele	Cover	MyIllsa@aol.com	Carol Stream	IL
10/7/2009 12:13	nancy	peterson	lovablek9s@hotmail.com	Yorktown	VA
10/8/2009 8:19	Janina	Greth	stellasmom54@yahoo.com	Reading	PA
10/7/2009 11:52	Debra	Hawley	dbh_kh@yahoo.com	Rising Sun	MD
10/9/2009 6:49	JENNIFER	BOWEN	CWEBER5403@AOL.COM	READING	PA
10/7/2009 16:41	janell	fix	janell11@hotmail.com	leesport	PA
10/8/2009 10:42	Paula	Webb	dreamn2@comcast.net	Martinsville	VA
10/8/2009 9:15	Sheila	Paig	shewm9@comcast.net	West Mifflin	PA
10/7/2009 19:24	rose	black	reblack@embarqmail.com	aspers	PA
10/9/2009 2:41	S	Rae	sxrae14@hotmail.com	Vancouver	BC
10/15/2009 3:46	Mark	Parsley	airbornesept@yahoo.com	Frazeysburg	OH
10/7/2009 23:03	Franklin	Gurney Jr.	f2uby@dejazzd.com	Ephrata	PA
10/7/2009 10:48	Kaye	Kirkwood	kayekirkwood@aol.com	Santa Clarita	CA
10/7/2009 11:08	Sandra	Gendleman	baysunshine@gmail.com	Annapolis	MD
10/7/2009 13:18	Cassandre	Montell	cdmontell@yahoo.com	West Palm Beach	FL
10/7/2009 11:01	John C	Kowalski	kowalskijohn@yahoo.com	Aston	PA
10/7/2009 10:44	Maria	Suppa	maria.suppa@usdoj.gov	Fairfield	NJ
10/7/2009 10:50	Maryann	Cassidy	mcassidy@radnor.org	Wayne	PA
10/13/2009 20:26	Lisa	Walthers	ldwalthers@yahoo.com	Arlington	VA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 12:40	Lynnr	McCaffery	petdocmac@verizon.net	Milton	PA
10/7/2009 10:50	robin	foley	foleysign@verizon.net	blauvelt	NY
10/9/2009 12:12	Monica	Ciaffa	mjciaffa@hotmail.com	Alexandria	VA
10/8/2009 8:47	Erin	Higgins	EHiggins01@gmail.com	West Chester	PA
10/7/2009 13:02	Linda	Ellis	lirizarryellis@aol.com	Reading	PA
10/7/2009 11:41	Barbara	Macrone	mbmacrone@comcast.net	Hatboro	PA
10/7/2009 13:24	kristen	abessinio	kdv321@aol.com	chadds ford	PA
10/7/2009 13:22	Annette	Piazza	ampiazza@comcast.net	Newtown	PA
10/11/2009 20:08	Jo	Barnhart	jobarnhart@comcast.net	Hanover	PA
10/7/2009 11:54	Lisa	Wicks	ldwicks8@aol.com	Philadelphia	PA
10/7/2009 10:50	Merrily	Hilliard	mhilliard@caibenefits.com	Budd Lake	NJ
10/7/2009 11:38	Helen	Schlenker	helenconvery@gmail.com	West Chester	PA
10/7/2009 11:02	Linda	Thomas	Lthomas@kovatch.com	Tamaqua	PA
10/9/2009 11:34	robert	francis	rfrancis@umc-oscar.com	gilbertsville	PA
10/7/2009 11:22	Yvonne	Geary	ygeary@verizon.net	Hagerstown	MD
10/7/2009 11:19	Jennifer	Bova	bovajandt@comcast.net	Mohrsville	PA
10/7/2009 11:23	kathy	simmons	kdevey2000@yahoo.com	victor	NY
10/7/2009 11:28	Sarah	Gomez	sarahmariegomez@gmail.com	Philadelphia	PA
10/7/2009 11:07	kelly	batchelor	khalvonik@yahoo.com	royersford	PA
10/7/2009 23:50	allan	kamph	agkamph@comcast.net	downingtown	PA
10/7/2009 11:29	Sherry	Bezanson	sherry.bezanson@verani.com	East Lancaster	PA
10/7/2009 13:02	Marie	O'Neil	mboneil@nc.rr.com	Raleigh	NC
10/7/2009 19:02	Saundra	Schier	sschie@aol.com	Audubon	PA
10/7/2009 14:25	Toni	Blackwell	jdbpoppop@comcast.net	Southampton	NJ
10/15/2009 19:17	Kristina	Piggott	klpiggott@yahoo.com	Madison	AL
10/8/2009 6:20	holly	crawford	crawfordwedmore@msn.com	PERRY HALL	MD
10/7/2009 15:56	Christina	DiBenedetto	christinadibenedetto@yahoo.com	Whippany	NJ
10/7/2009 11:25	Erica	Oldham	dudoldve@ptd.net	reading	PA
10/7/2009 11:25	BILL	WHITEHEAD	GUINNESSWIZ@YAHOO.COM	PHILADELPHIA	PA
10/7/2009 15:46	carole	dumestre	fldogsavior@aol.com	Tampa	FL
10/8/2009 6:46	Amy	Marflak	tomamy1@comcast.net	Latrobe	PA
10/7/2009 16:13	Monica	Welch	mmwelch@verizon.net	Doylestown	PA
10/7/2009 12:47	Tina	Daly	tinamariedaly@yahoo.com	North Hollywood	CA
10/7/2009 17:38	Harriet	Dunkerley	senpaifoxglove@aol.com	New City	NY
10/7/2009 16:38	Carol	Schreiber	casoph@msn.com	Sanatoga,	PA
10/7/2009 16:09	Carey-Beth	James	cbjamesatc@hotmail.com	Audubon	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 10:40	ilene	ross	rosspitt@aol.com	pittsburgh	PA
10/7/2009 21:12	Jaclyn	Mycka	djmycka16@verizon.net	Pgh	PA
10/7/2009 10:54	Estefania	Elorriaga	foreignbean@gmail.com	Corvallis	OR
10/7/2009 11:06	Betty	Freeman	catcity1@verizon.net	Millsboro	DE
10/7/2009 10:52	Beth	borges	beth.a.borges@questdiagnostics.com	norristown	PA
10/8/2009 12:21	Karen	Piasecki	krpiasecki@verizon.net	Pittsburgh	PA
10/7/2009 12:53	Jessica	Sirak-Smith	jasjfs@comcast.net	Bluffton	SC
10/7/2009 12:02	CHRISTINE	MAZAK	CHRISTIN.EM@HOTMAIL.COM	MONROEVILLE	PA
10/9/2009 9:17	Patti	Davis	pdavis@sovereignbank.com	Wyomissing	PA
10/9/2009 9:18	Steve	Davis	leftyswd@comcast.net	Wyomissing	PA
10/8/2009 7:58	Carole	Sorokanych	casjs1@comcast.net	Aston	PA
10/7/2009 12:03	Kristie	Faust	krispie2843@yahoo.com	Bala Cynwyd	PA
10/8/2009 13:19	Barbara	Fende	barbara.fende@ssa.gov	Strongsville	OH
10/7/2009 12:35	Noreen	Buckley	norbuckley@yahoo.com	New York	NY
10/7/2009 11:46	Ruth	Winstel	MsPurdy3@aol.com	Pittsburgh	PA
10/12/2009 9:56	sandra	martinek	smartinek@washjeff.edu	mcdonald	PA
10/7/2009 13:36	brook	dejesus	brooklyn0209@yahoo.com	lancaster	PA
10/7/2009 12:53	Marsha	Fuller	mfuller@fred.net	Hagerstown	MD
10/7/2009 10:45	kelly	salone	ksalone@zilog.com	harleysville	PA
10/7/2009 11:46	Lauren	Owens	laurenowens204@hotmail.com	Lester	PA
10/7/2009 11:47	carol	haughton	carol.haughton@almacgroup.com	hatfield	PA
10/7/2009 19:49	Jackie	Burke	burkemcginnis9@hotmail.com	Manheim	PA
10/7/2009 12:50	susie	gross	susieslg@aol.com	pittsburgh	PA
10/7/2009 14:28	Jo Ann	True-Burkholder	jotrueburkholder@hotmail.com	New Alexandria	PA
10/11/2009 15:48	Lauren	Adamczyk	ljadamczyk@msn.com	Bellaire	TX
10/18/2009 14:30	Glenn & Debbie	Carson	debbie.a.carson@gmail.com	Medford	NJ
10/7/2009 10:57	Mary Ann	Wiest	mamwiest@comcast.net	New Holland	PA
10/8/2009 18:31	Betty	Weaver	lweaver@dejazzd.com	Denver	PA
10/7/2009 10:42	Pat	Magilton	pmagilton@wyattinc.com	Folcroft	PA
10/7/2009 12:34	Trina	Flack	tflack755@aol.com	Warminster	PA
10/7/2009 10:47	Dianne	Castelli	didi1156@aol.com	Chadds Ford	PA
10/7/2009 10:57	Diane, Riley, Casey and Riley	Smith	Ridismith@comcast.net	Doylestown	PA
10/7/2009 19:22	Catherine	Flemming	cflemming1@msn.com	Doylestown	PA
10/8/2009 19:00	Betty	Harner	magmae00@yahoo.com	Valley View	PA
10/7/2009 15:35	Irene	Mele	bookandcandle@comcast.net	Brewster	NY

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 16:14	Liza	Rudolph	lawysong@aol.com	Glen Mills	PA
10/7/2009 14:51	Susan	Thompson	ginsu@comcast.net	Manchester	NH
10/7/2009 14:48	Ginny	Smith	ginsu1@comcast.net	Manchester	NH
10/8/2009 14:41	Chris	Brooks	brooksnatural@gmail.com	Houston	TX
10/7/2009 12:32	Patti	Hoffmann	stoney_hoff@hotmail.com	Walnutport	PA
10/8/2009 14:23	Cynthia	Knudsen	cynthia@northwaters.com	Pottstown	PA
10/7/2009 20:46	Andrea	Cooperstock	Looneytune330@aol.com	Parkland	FL
10/11/2009 12:31	Rita	Stanley	rpstanley@frontiernet.net	Holtwood	PA
10/7/2009 14:31	Theresa	Whitehead	anita12beers@yahoo.com	Bear	DE
10/7/2009 19:02	Linnae	Knoll	linnae_knoll@comcast.net	bloomington	MN
10/7/2009 14:28	lynne	kaufmann	lykauf@yahoo.com	lafayette hill	PA
10/8/2009 10:42	Beverly	Sumner	Sumner10@cox.net	Virginia Beach	VA
10/7/2009 12:48	Leslie	Salkeld	sbj0257469@aol.com	Summerville	SC
10/7/2009 16:59	Francine	Spence	FSpence687@aol.com	King of Prussia	PA
10/7/2009 17:03	Lynne	Watson	lynnwtsn@yahoo.com	Albrightsville	PA
10/8/2009 10:34	Amy	Schifrin	amyschifrin@yahoo.com	Mechanicsburg	PA
10/9/2009 19:38	Cass	Lockhart	tattooedtaurus@inbox.com	Parma	ID
10/11/2009 19:39	John	Whitney	philamdia@yahoo.com	Newtown Square	PA
10/11/2009 12:15	debra	goldstein-lustig	debrasuecma@aol.com	boynton beach	FL
10/9/2009 22:17	Cornelia	Fortier	pawsfor@aol.com	Westport	CT
10/7/2009 12:20	Judy	Richardson	jfrich@optonline.net	Easton	CT
10/8/2009 8:11	Mary	Baldovsky	mebaldovsky@comcast.net	Harleysville	PA
10/7/2009 10:59	Dana	Wuerstle	danawuerstle@comcast.net	Quakertown	PA
10/7/2009 15:53	Chris	Lehr	clehr@tcirons.com	Mechanicsburg	PA
10/7/2009 10:50	Irene	Lewis	irene.lewis@mossadams.com	Portland	OR
10/8/2009 17:41	Jessica	Speart	speartj@aol.com	Easton	CT
10/7/2009 10:41	Wende	Rubin	wenderubin@gmail.com	Houston	PA
10/8/2009 8:34	maria	bufalo	mariabufalo@aol.com	wallingford	PA
10/7/2009 11:25	Joyce	Petrow	codymajic@msn.com	Heidelberg	PA
10/7/2009 20:10	Denise	Esposito	gmom1206@verizon.net	Wilmington	DE
10/7/2009 12:30	Tracey	Hinkson	mommiebomb@verizon.net	Drexel Hill	PA
10/7/2009 12:22	kellie	cummings	elephants1323@hotmail.com	jim thorpe	PA
10/7/2009 10:43	Wendy	Treasure	wendytreasure@somersethospital.com	New Florence	PA
10/7/2009 15:24	Christina	Zeck	czeck86@yahoo.com	Rochester	NY
10/7/2009 19:57	Eileen	McCauley	mccauleyeileen@yahoo.com	Wallingford	PA
10/7/2009 18:31	Ruth	Cox	Beaumuffy@comcast.net	King to Prussia	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 12:30	Ann	Sandy	aes13180@gmail.com	Earlville	PA
10/7/2009 21:16	M	Kennett	Mkenn531@aol.com	Baldwin	NY
10/8/2009 11:52	Rebecca	De Bakey	Rebeccadebakey@mris.com	Bethesda	MD
10/7/2009 13:41	Sara	Holmstrom	SnM1298@yahoo.com	Chadds Ford	PA
10/27/2009 21:47	kim	bachtlin	obxpisces@aol.com	reading	PA
10/7/2009 20:30	corinne	hummel	codcasdix@yahoo.com	quakertown	PA
10/7/2009 15:23	Robert	Stickel	rstickel@embarqmail.com	Saylorsburg	PA
10/8/2009 14:52	tajah	neubo	tjthepetnanny@verizon.net	la grande	OR
10/7/2009 13:40	brendan	walsh	brendandesign@yahoo.com	NY	NY
10/7/2009 12:52	Suzanne	Sparks	suzsparks17@yahoo.com	Oceanside	CA
10/15/2009 12:32	Sarah	Mueller	mueller.sarah1@gmail.com	FPO	AE
10/7/2009 10:43	Melissa	Hess	melissa.hess@allstate.com	malvern	PA
10/7/2009 20:27	CATHY	EDNIE	C.EDNIE@COMCAST.NET	POTTSTOWN	PA
10/8/2009 7:15	Jacquelyn	Dunion	jdunion@comcast.net	Chalfont	PA
10/8/2009 7:31	Kristin	Morsman	kkmorsman@yahoo.com	Malvern	PA
10/13/2009 19:47	Judy	Cali	judycali333@yahoo.com	Mount Shasta	CA
10/9/2009 5:44	michelle	barish	dixxielee@yahoo.com	burgettstown	PA
10/7/2009 18:38	Dena	Lebo	dfunk@dejazzd.com	barto	PA
10/13/2009 20:26	Karen	Goetze	theouterbankstraveler@yahoo.com	Germantown	MD
10/7/2009 11:06	Jill	Gray	beandog@comcast.net	Santa Maria	CA
10/7/2009 12:20	Silke	Wittig	silke@axel-silke.com	Orangeville	PA
10/12/2009 11:37	karen	anderson	shzawild1@aol.com	tucson	AZ
10/9/2009 16:00	Monica	Farrington	monifarr@aol.com	South Burlington	VT
10/7/2009 10:42	Dina	Kuchta	dkuchta@pbmnutritionals.com	sheldon	VT
10/13/2009 7:41	Emily	Frazier	emily.e.frazier@gmail.com	South Burlington	VT
10/7/2009 18:02	Linda D.	Welch	LDWelch55@yahoo.com	Manassas	VA
10/7/2009 20:54	melissa	maccormac	memaccorma@aol.com	commack	NY
10/7/2009 14:48	Mervi	Rantala	rantala.mervi@gmail.com	Tampere	ot
10/7/2009 14:41	sarah	Schipelliti	sschipel@uvm.edu	Burlington	MA
10/7/2009 11:59	Lynn	Soyka	lcs621@aol.com	Downingtown	PA
10/7/2009 12:00	Joseph	Quinn	quinny842@yahoo.com	Downingtown	PA
10/7/2009 21:09	Jessie	Wilson	jessie.wilson@comcast.net	Mechanicsburg	PA
10/7/2009 21:47	Catherine	Wickey	vizslapooch@yahoo.com	Hershey	PA
10/7/2009 13:13	Christa	Babst	seamusminnie@gmail.com	W. Hollywood	CA
10/10/2009 14:46	Kristi	Hutchison	stc34@aol.com	Fresno	CA
10/8/2009 7:31	Susan	Collins	svc2train@aol.com	Norwalk	CT

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 10:46	Elizabeth C	Smith	ElizCSmith@aol.com	Phila	PA
10/9/2009 11:18	Nicole	Daley	thedaleys1327@comcast.net	Pittsburgh	PA
10/7/2009 10:42	Constantina	Koulosousas	ckoulosousas@gmail.com	East Hanover	NJ
10/23/2009 20:58	Jen	Boyer	urbanhippy@yahoo.com	Denver	PA
10/11/2009 11:49	Joanna	Guido	johonig@hotmail.com	Philadelphia	PA
10/7/2009 11:06	heather	fischer	heathf6@yahoo.com	new castle	DE
10/18/2009 4:14	Nora	Weiss	nora.woo@verizon.net	Philadelphia	PA
10/26/2009 20:17	Agatha	Fletcher	acfrosie@netscape.net	Seattle	WA
10/7/2009 12:22	Elaine	Neth	ecneth@comcast.net	Plymouth Meeting	PA
10/7/2009 10:58	Cynthia	DelStritto	cdelstritto@verizon.net	Havertown	PA
10/7/2009 12:21	Renee	Yeager	renee.yeager@gmail.com	Morrisville	PA
10/7/2009 15:30	Christine	Coy	chriscoy@ptd.net	Alburtis	PA
10/7/2009 12:14	Kymberly	Kittridge	kpkittridge@yahoo.com	Stamford	CT
10/7/2009 11:20	Jane	Sholder	Jmsholder@comcast.net	Fleetwood	PA
10/7/2009 22:14	Brenda	Romanot	drtyb74@yahoo.com	Camp Hill	PA
10/7/2009 10:42	Jessica	Mauro	jfm207@lehigh.edu	Emmaus	PA
10/8/2009 10:01	pamela	geisinger	suspiria9@dejazzd.com	barto	PA
10/7/2009 12:49	Heidi	Chandonnet	hchandonnet@verizon.net	Gladwyne	PA
10/7/2009 17:03	marie	kreamer	redfiddler27@yahoo.com	mount union	PA
10/9/2009 15:10	Alison	Lewis	alli.a.lewis@gmail.com	Horsham	PA
10/7/2009 21:54	Dana	Mazzola	mazzgirl89@comcast.net	Mullica Hill	NJ
10/7/2009 11:19	Robyn	Betterly	greenbyrd@gmail.com	Fort Washington	PA
10/28/2009 5:17	Walter J.	Smith	waltsmith@fairviewbenefits.com	Glenmoore	PA
10/12/2009 16:43	Sara	Ward	ward.sara@gmail.com	philadelphia	PA
10/7/2009 12:51	john	moran	johnmoran4@comcast.net	devon	PA
10/10/2009 16:41	Rob	DeJesse	Rob.dejesse@gmail.com	Broomall	PA
10/8/2009 9:00	lori	onderko	steelerspf@aol.com	johnstown	PA
10/8/2009 19:09	Kelsey	Powell	kelseygp@optonline.net	fairfield	CT
10/7/2009 14:12	danya	minyan	dlivneh@hotmail.com	tigard	OR
10/7/2009 10:59	ann	scott	sterlingscott@roadrunner.com	carlsbad	CA
10/7/2009 20:36	Dennis	Kelly	denniskelly2003@yahoo.com	Collegeville	PA
10/8/2009 19:50	Carole	BELLEUDY	carole.belleudy@wanadoo.fr	PARIS	ot
10/8/2009 19:51	Marie-Rose	HECKMANN	marie-rose.heckmann@wanadoo.fr	MARSEILLE	ot
10/8/2009 19:51	Nicolas	BELLEUDY	mariekamikase@wanadoo.fr	ALLAUCH	ot
10/8/2009 19:53	Odile	HECKMANN	supermary@free.fr	MARSEILLE	ot
10/7/2009 11:54	Dana	Virgilio	dana_virgilio@yahoo.com	Arlington Heights	IL

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/13/2009 20:25	pley	nicole	pleysante@yahoo.fr	Brevonnes France	ot
10/7/2009 11:10	meredith	schoff	wlschoff5@aol.com	darien	CT
10/28/2009 5:24	Eric	Dougherty	edoc_4@yahoo.com	Perkiomenville	PA
10/12/2009 9:48	jo	wright	jowright6@comcast.net	media	PA
10/21/2009 10:28	Annie	PEYSSON	peysson.annie@orange.fr	PUSIGNAN FRANCE	ot
10/7/2009 13:23	Kelly	Gregory	kellgregs@gmail.com	Havertown	PA
10/7/2009 10:57	barbra	jefferies	bjefferies@mcnt.com	Arlington	TX
10/7/2009 16:29	Meredith	Hart	mermhart@yahoo.com	Philadelphia	PA
10/7/2009 12:19	Candyce	Henneberger	morrine@comcast.net	Mercersburg	PA
10/7/2009 11:02	Jennifer	McCracken	j_mccracken@easdpa.org	Ephrata	PA
10/7/2009 11:33	Jennifer	Farischon	Jenfarischon@yahoo.com	Pottstown	PA
10/7/2009 12:45	Karen	Kehoe	kehoe.karen@gmail.com	Camarillo	CA
10/20/2009 9:24	Joan	Galleo	jogall6@aol.com	West Conshohocken	PA
10/9/2009 20:55	Anne	Miller	armmiller753@embarqmail.com	Chambersburg	PA
10/7/2009 13:47	Laurie	Dushey	ldushey@yahoo.com	Brooklyn	NY
10/7/2009 13:28	Jennifer	Rose	msfur@hotmail.com	Honey Brook	PA
10/7/2009 11:58	Jonathan	Kailer	jonk117@gmail.com	West Chester	PA
10/7/2009 17:56	Kathleen	Hane	Kathleenh@knology.net	Panama City Beach	FL
10/18/2009 15:21	Margaret	Houtman	mhoutmann@gmail.com	West Chester	PA
10/7/2009 10:41	M Rute	Correia	mrute@optonline.net	Elizabeth	NJ
10/7/2009 10:57	Kimberlie	McFarlane	Kim.Vetter@gmail.com	West Chester	PA
10/7/2009 10:57	Judith	Thomas	jthomas903@comcast.net	Lancaster	PA
10/7/2009 11:28	Sarah	Giambuzzi-Tussey	seg219@psu.edu	Harrisburg	PA
10/7/2009 11:03	Lisa McErlane	Yao	lisamcerlane@yahoo.com	Malvern	PA
10/10/2009 9:11	marci	Eisenberg	mar933@aol.com	Langhorne	PA
10/7/2009 15:18	Liz	McCauley	rockinleadwoman@comcast.net	Reading	PA
10/7/2009 11:45	Nicole	Stabile	Nicole2142@aol.com	Blue Bell	PA
10/7/2009 11:17	Pamela	Holley	pholley@pcsgroupinc.net	Kempton	PA
10/7/2009 11:33	Sheila	Barlow	shebar@comcast.net	Perkasie	PA
10/28/2009 5:21	Frank	Hartig	frankhartig@yahoo.com	Durham	NC
10/10/2009 7:53	Ruth	Welsh	luckyfrise@aol.com	Emmaus	PA
10/7/2009 11:09	Janet	Amodie	babesbudsmom@hotmail.com	Albrightsville	PA
10/7/2009 18:55	Melissa	Swauger	melissakeith@yahoo.com	Mechanicsburg	PA
10/7/2009 10:53	Linda	Golden	ljgolden@comcast.net	Bryn Mawr	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 15:37	Mary	Fleming	flemingml@comcast.net	Pittsburgh	PA
10/9/2009 10:02	Carrie	Minahan	malcolmwoods@verizon.net	Wernersville	PA
10/7/2009 12:39	Gwen	Sullivan	dark_kittydemon@yahoo.com	Royersford	PA
10/7/2009 11:21	Claude	Poole	oleyreef@ptd.net	Oley	PA
10/9/2009 15:43	Sue	Williams	swilliams128@yahoo.com	Wernersville	PA
10/7/2009 11:06	Bonnie	Chojnacki	bonniechojnacki@yahoo.com	Pittsburgh	PA
10/7/2009 14:22	Maxcine	Parker	maxcineparker@yahoo.com	Chaska	MN
10/7/2009 20:56	Jen	Sansoni	Jenny11983@aol.com	Harrisburg	PA
10/8/2009 6:47	Jennifer	Reinert	bearbrick@aol.com	Marquette	MI
10/7/2009 11:42	MILA	GORMAN	mila@milagorman.com	blue bell	PA
10/8/2009 15:09	susan	reilly	tafarijones@yahoo.com	Blairstown	NJ
10/7/2009 12:18	Bobbi	Ronky	bobbironky@aol.com	Reading	PA
10/7/2009 11:13	Carol	Holmgren	carol.holmgren@gmail.com	Meadville	PA
10/7/2009 16:21	Patricia	Bettger	patty3825@aol.com	Mechanicsburg	PA
10/24/2009 5:50	Matsi	Yasei	matsirules@yahoo.com	McKinney	TX
10/7/2009 17:45	Peter	Bolewicz	bolewicz@ptd.net	Effort	PA
10/7/2009 15:46	Janice	Irving	janicei@localnet.com	Bensalem	PA
10/7/2009 19:37	Mary	Smith	marysmemos@comcast.net	Warminster	PA
10/7/2009 13:41	Elizabeth	Harned	betsharned@verizon.net	West Chester	PA
10/8/2009 8:40	Karen	Goeckler	bkg21@verizon.net	Doylestown	PA
10/8/2009 9:21	KAREN	GIRARD	KARENGIRARD@HOTMAIL.COM	PHILADELPHIA	PA
10/8/2009 7:02	anita	schultz	laceybeach@aol.com	lakewood	NJ
10/7/2009 16:22	Joy	Cully	merrywinnie@nni.com	West Grove	PA
10/28/2009 5:29	Linda	Minton	woofsing@yahoo.com	Folsom	PA
10/8/2009 19:20	Mary Kay	White	marykay41@verizon.net	Erie	PA
10/7/2009 17:15	rob	kenna	thisoldtruck2@yahoo.com	plymouth meeting	PA
10/7/2009 21:18	Vicky	Nguyen	mrsvnguyen@yahoo.com	Lancaster	PA
10/11/2009 20:21	Kathy	Cooper	2coop@comcast.net	Canonsburg	PA
10/13/2009 9:34	t	morin	traceym321@aol.com	Derry	NH
10/7/2009 19:48	Rosina	Feldman	rosinafeld@aol.com	Philadelphia	PA
10/12/2009 9:05	Kait	Fiumara	Kait.fiumara@gmail.com	Media	PA
10/7/2009 18:17	Charlotte	Jenkins	xocharbarxo96@aol.com	Swarthmore	PA
10/8/2009 22:58	Jeanette	Owen	jowen2222@hotmail.com	Tempe	AZ
10/7/2009 12:29	Alethea	Pena	penaa@mail.med.upenn.edu	Lansdowne	PA
10/7/2009 12:46	Rocio	Normand	rjerry2020@yahoo.com	Newton	MA
10/7/2009 12:58	Mary	Musser	musserma@verizon.net	Ardmore	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/9/2009 8:51	JeanneM	Irons	peaceofheavenrottweilers@yahoo.com	Exmore	VA
10/7/2009 11:09	Jeffrey	Cox	theimpactband@aol.com	Lemoyne	PA
10/7/2009 13:09	Michael	McQuown	mmcquown@comcast.net	Philadelphia	PA
10/7/2009 20:19	Erika	Wheeler	Imaczechmate@cs.com	West Chester	PA
10/8/2009 3:19	Megan	Patterson	mmpatterson@aol.com	Downingtown	PA
10/8/2009 1:38	Roberta	Guthro	cguthro@yahoo.com	Nashua	NH
10/7/2009 10:42	Mary	King	mking@sunortho.com	Lewisburg	PA
10/7/2009 12:00	Patricia	Costello	pcostello2@comcast.net	Philadelphia	PA
10/8/2009 19:50	Barbara	Yacos	doggie8888@aol.com	Levittown	PA
10/7/2009 10:46	Bob	Jackson	rrj0909@aol.com	Philadelphia	PA
10/7/2009 15:31	Cheryl	Rosenberg	Cheryl_Rosenberg@hotmail.com	Philadelphia	PA
10/8/2009 9:32	Ann	Bowman	adbblue@yahoo.com	Bradford	PA
10/8/2009 14:22	joe	wisienski	wisienski@comcast.net	pottstown	PA
10/28/2009 7:15	John	Peterson	john_v_peterson@yahoo.com	McMinnville	OR
10/7/2009 13:14	Ruth	Hathaway	ruthhathaway@yahoo.com	Chesterbrook	PA
10/7/2009 14:13	Joanne	Yalch	crystalbead@city-net.com	Pittsburgh	PA
10/7/2009 15:16	Geralyn	Polsky	belugaham@yahoo.com	Pennsburg	PA
10/7/2009 13:04	Margaret	Hinman	shinman9@comcast.net	Blue Bell	PA
10/7/2009 12:00	Katherine	Lopez	tulipwalk@gmail.com	Lansdowne	PA
10/8/2009 17:42	sharon	Schratz	sharon.schratz@gmail.com	Collegeville	PA
10/14/2009 17:15	Vivian	LePard	beagle524@comcast.net	Havertown	PA
10/7/2009 10:48	Maureen	Schmitt	mschmitt@astontownship.net	aston	PA
10/7/2009 10:56	Pamela	Miller	millerpmbeach@aol.com	Kimberton	PA
10/7/2009 11:06	Dianne	Grosko	shawnee935@yahoo.com	Blue Bell	PA
10/7/2009 10:47	Kim	Murray	mmurray@2spi.com	Schwenksville	PA
10/7/2009 10:45	Leann	Massey	Leann.Massey@siemens.com	Downingtown	PA
10/7/2009 16:36	CHRISTINE	SCHENKEL	schenkel@rumsey.com	Lafayette Hill	PA
10/7/2009 11:02	Stephen	Hall	st_steveo@yahoo.com	Philadelphia	PA
10/7/2009 11:20	John	Zeihan	zapadpro@comcast.net	Lancaster	PA
10/7/2009 10:41	Steve	Styers	sstyers@bucknell.edu	Mifflinburg	PA
10/8/2009 21:55	Susan	Roxandich	Rox007@aol.com	Phila	PA
10/7/2009 12:50	TERI	WARMING	RSILK328@COMCAST.NET	CLARKSBORO	NJ
10/7/2009 16:34	Allison	Wajert	awajert@2spi.com	West Chester	PA
10/7/2009 10:40	Mark	Mansfield	markamansfield@gmail.com	Wayne	PA
10/7/2009 10:42	Gemma	Koblentz	gkoblentz@sp-lawyers.com	Cranford	NJ
10/7/2009 10:41	Michelle	White	michelle.lwhite@gmail.com	Philadelphia	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 10:46	Stephanie	Moyer	Teff97@hotmail.com	Furlong	PA
10/8/2009 9:16	Pat	Sutherly	oreotaz2@aol.com	Newmanstown	PA
10/7/2009 10:47	Mary ruth	Bascelli	mbascelli@totalscopeinc.com	Woodlyn	PA
10/7/2009 18:21	Beth	George	psu972002@yahoo.com	Carlisle	PA
10/7/2009 10:56	Nicole	Minner	minner.n@gmail.com	Philadelphia	PA
10/7/2009 11:03	Nancy	Alford	nancyalford@mac.com	Gulph Mills	PA
10/9/2009 18:52	Sue	Bard	toby816@ptd.net	Mertztown	PA
10/8/2009 7:31	Lilith	Rose	lilithrose@comcast.net	Philadelphia	PA
10/7/2009 10:42	jean	riggins	whitecap65@hotmail.com	norristown	PA
10/7/2009 11:06	Alison	Ferreri	ferreri-alison@aramark.com	Sewell	NJ
10/7/2009 10:41	Gabrielle	Robertson	g.robertson@sap.com	newtown square	PA
10/7/2009 11:37	Amy	Izzo	axi111@yahoo.com	Swarthmore	PA
10/12/2009 11:49	Vicki	ROLLER	vroller@hhwlaw.com	SHILLINGTON	PA
10/7/2009 10:55	Ann	Faraoni	afaraoni@bucksiu.org	Lansdale	PA
10/8/2009 13:51	Kim	Chase	kchasing@yahoo.com	Exton	PA
10/7/2009 11:49	Sandy	Brownell	nell2b@comcast.net	Philadelphia	PA
10/7/2009 10:49	Patricia	Wolf	Patricia.wolf@wolterskluwer.com	Lansdale	PA
10/7/2009 16:54	Mollie	Gaffney	gaffneymollie@yahoo.com	Conyngham	PA
10/7/2009 10:43	Connie	Majka	cmmajka@academiesinc.org	Narberth	PA
10/7/2009 11:46	Verne	Smith	hrlawsmith@msn.com	Brookhaven	PA
10/7/2009 13:29	Marie	Vatter	mavatter@verizon.net	Port Allegany	PA
10/7/2009 12:57	Mary Lou	Herr	sooneri@aol.com	North Wales	PA
10/15/2009 17:46	Sarah	Dawson	im_a_mess924@yahoo.com	Jersey City	NJ
10/7/2009 10:41	Howard	Joint	hljoint@hotmail.com	Waterford	PA
10/17/2009 8:21	Lola	Mitchell	honorthyteacher@yahoo.com	Las Vegas	NV
10/7/2009 18:34	Trudy	DeArment	tadearment@comcast.net	Howard	PA
10/7/2009 11:04	Roxanne	Gliwa	Sybill8468@aol.com	Philadelphia	PA
10/7/2009 11:50	Jane	Slavinski	jslavinski@boothradiology.com	Mount Laurel	NJ
10/9/2009 12:00	Carole	Torrente	clt3515@cavtel.net	Newtown	PA
10/10/2009 12:14	Pam	Wagner	purrs2@ptd.net	Saylorsburg	PA
10/7/2009 12:10	Jack	Trautenberg	promojack@comcast.net	Lansdale	PA
10/7/2009 10:48	Pam	Kopchinski	pamks@sas.upenn.edu	Phila	PA
10/7/2009 10:49	henry	grassa	henry.j.grassa@boeing.com	Eddystone	PA
10/7/2009 13:28	shannon	holt	sholt2@msn.com	Philadelphia	PA
10/8/2009 8:21	Sheri	Perna	sperna@nutrisystem.com	Huntingdon Valley	PA
10/7/2009 12:35	stephanie	mcqueen	attorneymcqueen@aol.com	West Palm Beach	FL

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 11:20	thelma	eberle	teberle@chesco.org	west chester	PA
10/7/2009 10:55	Katherine	Ellis	kellis@innovative-ss.com	Downingtown	PA
10/7/2009 11:20	Jennifer	Knapp	jknapp@sas.upenn.edu	Magnolia	NJ
10/11/2009 5:40	Patrick	Prout	patrick.prout@neuf.fr	Champs-sur-marne	ot
10/16/2009 15:11	Marie-france	Zamblera	marie-france_zamblera@aviva.fr	Villeneuve-le-comte	ot
10/11/2009 5:40	Caroline	Prout	caronyna@msn.com	Champs-sur-marne	ot
10/7/2009 10:45	Susan	Robinson	srobinson@adl.org	Willow Grove	PA
10/7/2009 14:43	Megan	Carmosky	carmoskym@yahoo.com	wescosville	PA
10/7/2009 19:22	Joseph	Canuso	joecanuso@yahoo.com	haverford	PA
10/14/2009 16:05	Eileen	Brown	martineadinieu@comcast.net	Philadelphia	PA
10/8/2009 11:35	Ted	Robinson	theopga@aol.com	Phoenixville	PA
10/7/2009 13:28	Dorothea	Johns	dmpuppylove@comcast.net	Harrisburg	PA
10/7/2009 10:46	BRENDA	BENNETT	brenda.j.bennett.ivlj@statefarm.com	TUNKHANNOCK	PA
10/7/2009 10:56	Lynda	Gilfert	lyndabruno@comcast.net	Enola	PA
10/7/2009 11:23	Joanne	Zeigler	jzeigler7@comcast.net	Bensalem	PA
10/7/2009 11:00	Irene	Zdana	IZdana@AOL.Com	Brookhaven	PA
10/7/2009 21:29	Beth	Hamilton	bethdefino@comcast.net	Havertown	PA
10/9/2009 20:01	Darren	Crozier	djcrozier@comcast.net	Spring City	PA
10/7/2009 15:48	melody	lyons	birdie@atmc.net	carolina shores	NC
10/7/2009 10:56	julie	caugherty-krieger	juliec61278@gmail.com	pittsburgh	PA
10/7/2009 14:50	Cindy	Hoffman	Hoffman17043@yahoo.com	Mount Joy	PA
10/7/2009 12:58	Janet	Clemenich	clemenich@hotmail.com	Alexandria	PA
10/13/2009 20:13	tina	horowitz	tinah53374@aol.com	philadelphia	PA
10/7/2009 16:07	Cindy	Silverman	silveroos@aol.com	New Freedom	PA
10/13/2009 8:41	Christine	Chavlick	chavlickcl@upmc.edu	Glenshaw	PA
10/7/2009 11:25	Karen	Blasius	klblasius@mqblaw.com	Huntingdon	PA
10/8/2009 9:04	Elaine	Donohue	usmcmomjd@hotmail.com	Philadelphia	PA
10/7/2009 11:08	Linda	MacAdam	LindsayMac6@yahoo.com	Roebling	NJ
10/7/2009 23:01	Barbara	Bolton	barbara_bolton@comcast.net	Kennett Square	PA
10/7/2009 17:29	Donna	Huber	catclaws2@gmail.com	Hatboro	PA
10/7/2009 12:08	Diane	Hellerung	dhellerung@optonline.net	Stamford	CT
10/9/2009 11:01	Gretchen	VanBacker	blue-skies@comcast.net	Clarks Summit	PA
10/7/2009 20:00	Laraine	Palmer	laraine0627@netscape.net	Drexel Hill	PA
10/7/2009 10:43	Jessica	Zone	jessica_amplo@hotmail.com	Norristown	PA
10/7/2009 17:21	Kim	Snyder	ksnyderinpa@hotmail.com	wrightsville	PA
10/11/2009 13:49	Ann	Mitchell	a_mitch@comcast.net	Sandston	VA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 11:29	George	Gelfer	ggelfer3@comcast.net	West Chester	PA
10/7/2009 17:59	sheila	cranford	calliedava@aol.com	columbia	SC
10/7/2009 13:08	m	pelkey	buttercup220@gmail.com	Puyallup	WA
10/7/2009 21:14	Brian	Tercha	btercha035@comcast.net	Chester	PA
10/7/2009 11:40	Wendy	Lewis	welewis0@gmail.com	Haverford	PA
10/7/2009 11:31	david	harriger	davidm4210@aol.com	north versailles	PA
10/7/2009 13:09	Thomas	Blackwell	tblackwell14@comcast.net	Hatfield	PA
10/7/2009 11:33	Lawrence	Lisnock	llisnock@hotmail.com	Drums	PA
10/7/2009 13:21	Sloan	Hartless	sloan977@gmail.com	Waynesboro	PA
10/7/2009 10:48	Susan	Macas	smacas1@jhmi.edu	Abingdon	MD
10/7/2009 12:57	Mary Eileen	Adams	crustachen@aol.com	Exton	PA
10/7/2009 10:45	Rosemary	Bongiorno	bongiornor@mlhs.org	Clifton Heights	PA
10/7/2009 10:46	Michael	Bongiorno	bongo11@rcn.com	Clifton Heights	PA
10/27/2009 5:34	Heidi	Adams	doecarlton@yahoo.com	Collegeville	PA
10/7/2009 12:57	Kathleen	Reidy	kreidy5504@aol.com	Newtown	PA
10/7/2009 11:19	TARA	ANDREWS	taralandrews@yahoo.com	IHB	FL
10/7/2009 11:07	barbara	palo	mompalo@aol.com	warrington	PA
10/12/2009 18:31	Jenny	McMahon	jennymcmahon@comcast.net	Spring City	PA
10/7/2009 11:55	Nelson	Levens	nlevens2@comcast.net	York	PA
10/7/2009 14:39	Shannon	Elliott	smelliot1130@hotmail.com	Bensalem	PA
10/7/2009 16:18	Helen	Major	4major@verizon.net	St. Davids	PA
10/7/2009 13:07	Lisa	Fox	laf522@comcast.net	Maple Shade	NJ
10/13/2009 8:17	Jennifer	Lennon	jel7@lehigh.edu	Lansdale	PA
10/13/2009 8:14	Domenick	Addesi	im12bnved@yahoo.com	Lansdale	PA
10/13/2009 8:15	Mary Ann	Lennon	mlennon15@yahoo.com	Pen Argyl	PA
10/13/2009 8:14	Gerald	Lennon	gal0@lehigh.edu	Pen Argyl	PA
10/7/2009 10:46	PAMELA	COCOSIS	PAMYJANE@AOL.COM	LINDENWOLD	NJ
10/7/2009 13:00	Sheli	Scott	sewinggranny114@comcast.net	Honey Brook	PA
10/12/2009 9:25	Amy	DiMartine	amylmaxwell@hotmail.com	mt. ephraim	NJ
10/7/2009 17:19	Nancy S.	Keenan	nancykeenan@enter.net	Perkasie	PA
10/7/2009 17:18	Dino	Fazio	dino.fazio@moreyspiers.com	Wildwood	NJ
10/7/2009 18:23	Heidi	Simpson	hasmp627@yahoo.com	Pottstown	PA
10/7/2009 15:24	lorraine	baj	lorraine2005@earthlink.net	phila	PA
10/18/2009 1:31	jill	pfister	jilliebean777@verizon.net	imperial	PA
10/7/2009 22:08	Mary Ann	Donnelly	phildons@aol.com	Newtown Square	PA
10/7/2009 10:43	Louis	Licitra	ljl1925@aol.com	New Hope	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/8/2009 10:44	Pamela	Thompson	pamthompson13@gmail.com	Rose Valley	PA
10/23/2009 6:53	VIER	EVA	bernhardteva@yahoo.fr	PARIS	ot
10/7/2009 10:41	Valerie	Hildebrand	drewstefer@aol.com	Winnipeg	MB
10/7/2009 12:05	Lisa	DiFilippo	iawl@comcast.net	Pipersville	PA
10/9/2009 13:50	Julia	Preston	jsskyw@ptd.net	Mohnton	PA
10/8/2009 16:22	karen	forrester	gregkaren1@comcast.net	stevensville	MI
10/7/2009 18:37	Jill	Sumner	greensleeves001@gmail.com	Warren	PA
10/7/2009 10:43	Gilbert	Albright	vendelavee@aol.com	Horsham	PA
10/7/2009 18:34	kathy	punzo	kpetme1@aol.com	philadelphia	PA
10/10/2009 23:27	Carrie	Brinkos	my3pugs@comcast.net	elizabeth	PA
10/7/2009 16:43	Ineta	Ilgunaite	inetai@gmail.com	Vilnius	ot
10/7/2009 11:01	Michelle	Strong	micwitt@msn.com	Lansdale	PA
10/8/2009 8:37	Barbara	Lawson	lawson_1969@yahoo.com	Tamaqua	PA
10/12/2009 14:07	Vicki	Smith	kirbyvicki@gmail.com	Gettusbirg	PA
10/7/2009 17:37	sherri	klucsarits	BKlucsarit@aol.com	croydon	PA
10/7/2009 14:57	carol	lundberg	sidneyboy9@yahoo.com	springfield	PA
10/7/2009 22:27	Hillary	Martin	hknowlson@comcast.net	Washington	PA
10/7/2009 18:52	lynn	reber	dogsnplanes@verizon.net	bethlehem	PA
10/7/2009 22:30	Cheryl	Hodolitz	cherylhody@comcast.net	Philadelphia	PA
10/7/2009 11:49	NANCY	FRANCO	STEVEANDNANCY208@COMCAST.NET	LEESPORT	PA
10/7/2009 11:17	Stephen	Franco	steven.franco@readingpa.org	Reading	PA
10/13/2009 2:02	Julie	van Niekerk	jvniekerk@angloplat.com	Gauteng	NJ
10/7/2009 15:08	Kerry	Hummel	kdhmn@comcast.net	SINKING SPRING	PA
10/8/2009 10:57	Allison	Litchkofski	a_litchkofski@yahoo.com	Mountain Top	PA
10/7/2009 11:58	P	Olins	polins@mtsinai.on.ca	Toronto	ON
10/7/2009 13:27	Ryan	Beagle	ryan_beagle@yahoo.com	Weirton	WV
10/9/2009 16:03	Jennifer	Jablonski	jennlynn98@hotmail.com	Moon Township	PA
10/7/2009 10:45	Margaret	Craig	magsc4@msn.com	Pittsburgh	PA
10/7/2009 10:42	Michelle	Beaumont	michelle_beaumont@mac.com	Blue Bell	PA
10/8/2009 11:29	Rebecca	Freed	rbcfre@aol.com	Norfolk	VA
10/8/2009 21:04	carol	loeb	ob1canopy@aol.com	SPRNG CITY	PA
10/7/2009 10:43	susan	ross	SGRBRR@aol.com	newtown	PA
10/7/2009 20:24	alan	hyneman	ahyneman@gmail.com	wyomissing	PA
10/13/2009 19:44	Kathryn	Gallo	Kathy_Gallo@yahoo.com	Meriden	CT
10/13/2009 20:26	crystal	morrison	mommycow1961@yahoo.com	nokomis	FL
10/19/2009 3:50	Janee	Cruz	kitty48@gmail.com	San Benito	TX

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/12/2009 4:57	Debra	Krauss	Fusebox962@aol.com	CRESCENT	PA
10/28/2009 6:06	severine	stockling	shari1131@yahoo.fr	Marseille	ot
10/7/2009 16:15	michele	Quintric	michelequintric@laposte.net	Poissy	ot
10/7/2009 16:36	germain	Puerta	noxon61@hotmail.com	Marseille	ot
10/10/2009 3:20	mireille	azouzou	cleo57@hotmail.fr	Marseille	ot
10/7/2009 15:33	SERGE	vantalon	ser23.vantalon@gmail.com	TERCILLAT	ot
10/28/2009 7:48	Katherine	Riegel	kgriegel@yahoo.com	Brandon	FL
10/10/2009 15:03	Ashley	H.	ashleyjmiley@aim.com	SJ	ot
10/7/2009 10:58	Joanna	Marino	joannamarino@Hotmail.com	Selinsgrove	PA
10/7/2009 12:02	Stacy	McGuire	stacy.mcguire19@gmail.com	Philadelphia	PA
10/7/2009 11:01	Valerie	Firestone	vfirestone@adl.org	Melissa	TX
10/8/2009 8:47	Joy	Holden	radojka314@gmail.com	West Mifflin	PA
10/8/2009 15:34	Diana	Soares	dianansoares_27@hotmail.com	Porto	ot
10/8/2009 14:25	shelby	mcgee	eleanor.pitcher@mchsi.com	hendersonville	NC
10/7/2009 10:51	Adrianne	Puza	amp206@hotmail.com	Harrisburg	PA
10/7/2009 13:37	Kathleen	Cullen	kat_cullen117@yahoo.com	Eagleville	PA
10/7/2009 13:06	melissa	doogan	melisdoogan@yahoo.com	east fallowfield	PA
10/8/2009 15:24	Ma	Knight	maren_knight2000@yahoo.com	Somerville	MA
10/7/2009 10:44	Jenny	Bresnahan	jenny.bresnahan@gmail.com	Portsmouth	NH
10/8/2009 8:45	kymberly	paglione	kmpaglione@verizon.net	fort wayne	IN
10/7/2009 11:00	Betsy	Bockelmann	minivblb@comcast.net	Mohnton	PA
10/7/2009 10:44	April	Hartman	aprilhartman89@gmail.com	Oak Ridge	TN
10/7/2009 16:18	Christine	Zimmermann	cdz1971@comcast.net	North Wales	PA
10/7/2009 10:40	Lindsay	Hillard	lindsay.hillard@yahoo.com	Wyomissing	PA
10/7/2009 10:59	sallyann	gansky	sgansky1@gmail.com	Collegeville	PA
10/7/2009 11:18	Kristin	Nagg	klnagg@hotmail.com	Downingtown	PA
10/7/2009 11:19	Colleen	Safarowicz	jcs32898@aol.com	Philadelphia	PA
10/7/2009 21:06	Erica	Spizzirri	ericaspizzirri@yahoo.com	Glenside	PA
10/7/2009 12:32	Janice	Dean	jadean33@gmail.com	Glen Rock	PA
10/7/2009 11:04	Richard	Sasserath, Sr.	yank@ptd.net	Nesquehoning	PA
10/7/2009 10:57	Patty	Mullin	Patricia.Mullin@unisys.com	Collegeville	PA
10/9/2009 9:28	James	Wertman	jwertman@gmail.com	Phoenixville	PA
10/7/2009 10:54	Tammy	Razzano	razzanot@pepperlaw.com	Reading	PA
10/8/2009 12:55	Richard	Brownewell	rbrownewell@yahoo.com	Middletown	PA
10/7/2009 12:01	Johhn	Osinski	johnandjennie@cfl.rr.com	Ormond Beach	FL
10/7/2009 10:42	Elizabeth	Arellano	ciao89s@aol.com	Carlisle	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 11:13	Deirdre	Blackburn	deeblackburn@comcast.net	Malvern	PA
10/7/2009 12:13	Denise	Medvid	dmedvid@psu.edu	Harrisburg	PA
10/8/2009 7:44	MJ	Trace	tracemj@yahoo.com	Coatesville	PA
10/7/2009 11:56	Rick	Kiner	rakiner@cvty.com	New Cumberland	PA
10/7/2009 10:41	Gayle	Morse	gakmorse@verizon.net	Dauphin	PA
10/7/2009 11:02	Lawrence	Huff	huffeq3@aol.com	Phoenixville	PA
10/7/2009 12:12	Jaclyn	Margolies	jaclyn.margolies@sparta.org	Morris Plains	NJ
10/7/2009 10:44	Linda	Shope	lsp11@psu.edu	Alexandria	PA
10/8/2009 10:54	Wendy	Mudrinich	Mmudrini@comcast.net	Harrisburg	PA
10/7/2009 12:51	Heatherjoy	klein	heatherjoyklein@comcast.net	plantation	FL
10/7/2009 11:02	Lisa	D'annunzio	lisa_dannunzio@yahoo.com	Narvon	PA
10/7/2009 19:18	JAMIE	BURRIS	JNicole924@gmail.com	New Cumberland	PA
10/7/2009 12:07	Laurie	Talbot	ljtalbot@yahoo.com	Felton	PA
10/7/2009 16:18	Jesse	Hecht	Hechtor@hotmail.com	Mohnton	PA
10/7/2009 10:45	Marjorie	Hirshorn	mhirshorn@hirshorn.com	Glenside	PA
10/10/2009 2:33	Michelle	Heinz	mchesq@gmail.com	Furlong	PA
10/7/2009 11:03	Lesa	Kennedy	Lesakennedy@hotmail.com	Aliquippa	PA
10/7/2009 14:08	Martin	Seery	praufs@comcast.net	Lancaster	PA
10/7/2009 16:01	Mary	Balchunis	mebalchunis@comcast.net	Drexel Hill	PA
10/9/2009 9:23	Nicole	Famigletti	nfamigletti84@yahoo.com	west chester	PA
10/7/2009 10:46	geri	tulip	geri.tulip@mercercountybhc.org	Mercer	PA
10/7/2009 13:39	Joanne	Barbaro	jbarbaro@jkj.com	New Hope	PA
10/7/2009 13:18	Dennis	Kaufmann	dkauf53@yahoo.com	Lafayette Hill	PA
10/7/2009 20:25	Agnes	Watson	aggiewat@aol.com	Mohnton	PA
10/7/2009 12:08	Ricci	Banks	banksr@readinghospital.org	Reading	PA
10/8/2009 14:46	Allison	Fleitas	agfleitas@comcast.net	Devon	PA
10/7/2009 11:12	Laurance	Guido	ljgjr7@aol.com	Philadelphia	PA
10/7/2009 10:45	Joanne	Tadrzynski	joanne.tadrzynski@sap.com	Swarthmore	PA
10/9/2009 2:23	dogan	ozkan	doanodna@hotmail.com	turkey	AK
10/7/2009 14:42	EARL	HULLIHAN	e.hullihan@comcast.net	VENETIA	PA
10/8/2009 6:42	Susan	Hufford	hufford@ptd.net	Reinholds	PA
10/7/2009 10:47	Sean	Harmann	sean.harmann@gmail.com	Lancaster	PA
10/7/2009 11:05	Heather	O'Neill	hkoneill08@yahoo.com	Lancaster	PA
10/7/2009 10:57	Valarie	Weinzierl	vas31@pitt.edu	Seven Fields	PA
10/20/2009 20:44	dav	hun	lazzerwolf@hotmail.com	stowe	PA
10/7/2009 14:46	Donna	Mirynowski	dmirynowski@comcast.net	Lansdale	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 18:03	Rose	Buckwalter	brneydgrl2004@yahoo.com	Moon Township	PA
10/7/2009 16:10	Michael	Jadico	mjjadico@yahoo.com	Southampton	PA
10/7/2009 18:32	Russell	Mehrer	troyrwm1@msn.com	Laurel Springs	NJ
10/8/2009 17:39	Jeff	Brooks	binl0sen@verizon.net	Hatboro	PA
10/7/2009 11:10	Elene	O'Rourke	elene1@comcast.net	York,	PA
10/21/2009 4:27	Lisa	Tharp	lisa@thetharps.net	Norristown	PA
10/8/2009 19:21	Linda	Igou	tuckabee@comcast.net	Chambersubrg	PA
10/7/2009 10:44	Enid	Yonker	cellorn@aol.com	Edwardsville	PA
10/7/2009 18:42	Judy	Furjanic	furjanic@comcast.net	Huntingdon Valley	PA
10/7/2009 10:59	Balinda	Nonemaker	animallovers211@comcast.net	Summerdale	PA
10/7/2009 10:42	Barbara	Wilcox	bedewil@verizon.net	Philadelphia	PA
10/8/2009 21:28	Denise	DeLuca	DeniseDeLuca@Comcast.net	Malvern	PA
10/7/2009 12:44	Marcy	Somenek	iwantflowers@aim.com	Elk Grove Village	IL
10/7/2009 14:15	Linda	Durgin	fargo3@comcast.net	Marysville	PA
10/15/2009 12:39	SU	Atkinson	sf.urquidez@gmail.com	Phoenix	AZ
10/7/2009 11:03	dorothy a.	leistner	junkmail194@windstream.net	delmont	PA
10/7/2009 12:34	Wendy	Sweger	wsweger@pa.net	Millerstown	PA
10/13/2009 8:17	Meredith	Boyd	boydmer@gmail.com	Greenville	SC
10/7/2009 14:08	Lora	DiDominic	ldidomin@faycha.org	Fairchance	PA
10/7/2009 12:04	jane	di rico	janedirico@yahoo.com	west chester	PA
10/8/2009 8:12	Violet	Zimmerman	Vzimmerman01@aol.com	Allentown	PA
10/7/2009 10:50	Marilyn	Mosley	mjcmosley38@hotmail.com	ashon	WA
10/9/2009 16:32	Tina	Cataldi	tcataldi@sasllp.com	Harrisburg	PA
10/7/2009 12:57	Katie	Mallozzi	k.mallozzi@hotmail.com	Hatboro	PA
10/7/2009 16:38	Scott	Krone	skrone@sasllp.com	Harrisburg	PA
10/7/2009 12:27	Jackie	Wasdick	jackiewas@comcast.net	Atglen	PA
10/7/2009 12:11	Theresa	Upchurch	Theresa.upchurch@comcast.net	Parkesburg	PA
10/7/2009 11:09	James	Upchurch	james.upchurch@omegaflex.net	Parkesburg	PA
10/28/2009 7:37	Cindy	bushway	bugmomcmb@yahoo.com	port st lucie	FL
10/8/2009 8:38	judy	benes	sportysretreat@comcast.net	phoenixville	PA
10/7/2009 11:01	Cameron	Ruen	cameron.ruen@gmail.com	Chicago	IL
10/8/2009 1:08	Sally	Baker	sallybaker123456@yahoo.com	State College	PA
10/7/2009 21:04	Amanda	Marinari	aalixababy@aol.com	Schwenksville	PA
10/7/2009 15:35	Margaret	Gerrity	lacoog@comcast.net	Phoenixville	PA
10/7/2009 10:46	Chris	Huntington	huntingtonc@hanoverhospital.org	Hanover	PA
10/7/2009 13:43	Michele	Kale	kalem@hanoverhospital.org	Gettysburg	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/8/2009 21:09	Jerilyn	Donica	djdonica@aol.com	Cadiz	KY
10/15/2009 20:27	Grace	Young	ayoung@ptd.net	Blandon	PA
10/7/2009 17:31	Todd	Iaeger	fourtmi@yahoo.com	Reading	PA
10/7/2009 11:02	Stephanie	Deni	sdeni1972@yahoo.com	Reading	PA
10/7/2009 11:55	julia	Edgerton	julia7729@comcast.net	Morrisville	PA
10/7/2009 16:39	Tim	VanAmburgh	tvanamburgh1968@yahoo.com	Malvern	PA
10/11/2009 12:00	Lauren	Blakeslee	blakesll@gmail.com	Melrose	MA
10/8/2009 19:23	Robert	Davenport	bdaven2537@aol.com	Fleetwood	PA
10/13/2009 7:12	margaret	Armstrong	nightingale09@comcast.net	newtonville	NJ
10/12/2009 11:30	KELLI	WILSON	kswilson76@yahoo.com	ANDERSON	SC
10/7/2009 23:06	Kerry	Taylor	JewelGreenCougar@aol.com	Mechanicsburg	PA
10/12/2009 11:03	William	Waite	patwaite@comcast.net	West Chester	PA
10/7/2009 10:48	Lisa	Michael	lmichael@psu.edu	Lancaster	PA
10/7/2009 12:15	Brandy	Hauk	BLS2810@aol.com	Goose Creek	SC
10/7/2009 11:13	Lorri	Roush Shaver	glacier-lake@comcast.net	Hummelstown	PA
10/14/2009 9:22	Kathleen	Chesnet	kathie.chesnet@erm.com	Oxford	PA
10/8/2009 20:53	Cathy	Mack	stormiris@yahoo.com	Nantucket	MA
10/7/2009 10:59	Karen	Lehmicke	kmeise@comcast.net	West Chester	PA
10/8/2009 8:15	Cathy	Chaipis	clchaipis@gmail.com	Florence	SC
10/7/2009 12:18	kristin	mittl	krismittl@hotmail.com	catasauqua	PA
10/9/2009 7:54	Elizabeth	Schultz	elizabethq422@verizon.net	Collegeville	PA
10/13/2009 23:42	Mary	Alfonse	malfonse@aol.com	West Chester	PA
10/7/2009 17:39	Norma Michelle	lawson	normashelly@msn.com	west grove	PA
10/7/2009 11:39	Maria	Veriabo	veriabo@cavtel.net	Springfield	PA
10/7/2009 12:00	Emilia	Quattrochi	emilia.a.quattrochi@lmco.com	Mt. Laurel	NJ
10/7/2009 18:14	G	S	gsimeone_3@yahoo.com	Philadelphia	PA
10/8/2009 7:52	Marilena	Makri	marilena19@gmail.com	Athens	PR
10/7/2009 19:05	Rachel	Carenzo	recarenzo@aol.com	East Norriton	PA
10/7/2009 11:35	Paul	Baginski	pauliebag@aol.com	Harleysville	PA
10/7/2009 10:55	Kathryn	Stacy	kathryn.stacy@morganstanley.com	Pittsburgh	PA
10/7/2009 18:34	Patricia	Rusnock	desireer@ptd.net	HAZLETON	PA
10/7/2009 10:54	Joyce	Fishel	Joyce.Fishel@Navy.mil	Dillsburg	PA
10/7/2009 13:06	Connie	Moen	two.bassets@yahoo.com	North Las Vegas	NV
10/7/2009 13:02	Dawn	Jackson	dlvj@ptd.net	Drums	PA
10/7/2009 17:20	Laura	Moravinski	lou.mo@comcast.net	Pottstown	PA
10/27/2009 5:22	Mike	Antone	troubadour7777777@yahoo.com	Sacaton	AZ

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/11/2009 8:56	Colleen	O'Connell	betweenthebuttons81@gmail.com	Philadelphia	PA
10/7/2009 17:07	John	Shealer	jbshealer@embarqmail.com	New Oxford	PA
10/13/2009 21:17	omid	gholizadeh	omid@glaserweil.com	los angeles	CA
10/21/2009 21:47	Pam	Mitchell	pam.mitchell@bucknell.edu	Mifflinbuirg	PA
10/7/2009 15:23	Tiffany	Carey	Workone222@yahoo.com	Maitland	FL
10/7/2009 11:26	Mary Lynn	Gullette	mlgullette1@verizon.net	Blue Bell	PA
10/8/2009 9:38	Anne	Eckert	ake@temple.edu	Harrisburg	PA
10/7/2009 17:35	Linda	Salamone-Genovese	lgenovese@comcast.net	Huntingdon Valley	PA
10/7/2009 10:42	Robert	Huppman	robert.j.huppman@comcast.net	Aston	PA
10/8/2009 8:00	lucille	lezon	lucille.lezon@cox.com	annville	PA
10/7/2009 13:12	Amy	Clever	aclever6207@hotmail.com	Hershey	PA
10/7/2009 16:15	Andrea	Barlow	alb826@gmail.com	Seminole	FL
10/7/2009 15:49	Ernest	Denofa	ejdenofa@mac.com	Philadelphia	PA
10/7/2009 12:46	Rosemary	Lisnock	ral804@ptd.net	Drums	PA
10/8/2009 11:12	Christine	Ostopoff	Chrisforanimals@AOL.com	Philadelphia	PA
10/8/2009 7:06	Marilyn	Faughner	saymarilyn@gmail.com	Sinking Spring	PA
10/8/2009 8:05	Kelly	Whitehead	kowhitehead@yahoo.com	Wallingford	PA
10/27/2009 5:36	Carisa	Foulds	cfoulds90@yahoo.com	Coal Township	PA
10/7/2009 20:30	Wendy	SErfass	3serfass@comcast.net	East petersburg	PA
10/13/2009 18:41	Kris	Jackson	kajackson_2000@yahoo.com	Los Angeles	CA
10/7/2009 21:56	Barry	Burkhardt	drbhb13@aol.com	Paoli	PA
10/7/2009 19:04	Maggie	Alonge	maggiealonge@gmail.com	Tamaqua	PA
10/7/2009 16:32	Megan	Reightler	mekanabr@gmail.com	Littlestown	PA
10/8/2009 19:13	Stephanie	Malara	vixiegrrl@yahoo.com	Carlsbad	NM
10/7/2009 10:48	David	Siravo	dave.siravo@gmail.com	Arlington	VA
10/7/2009 11:50	Marilyn	Weisfuss	marilyn@kbology.net	Panama City Beach	FL
10/7/2009 11:12	Toni	Hadfield	jhadfield22@comcast.net	Schwenksville	PA
10/8/2009 8:58	anne	anthony	achuprevich@hotmail.com	BANGOR	PA
10/8/2009 15:00	Kathy	Kuesel	Kueselkh@aol.com	Glen Mills	PA
10/7/2009 10:53	Holly	Spittle	hspittle@gmail.com	West Chester	PA
10/7/2009 10:59	joyce	barker	jbarker@udel.edu	rising sun	MD
10/7/2009 11:46	Marsha	Davis	marshad501@comcast.net	Harrisburg	PA
10/8/2009 11:48	juliana	ispas	jsomers2007@yahoo.com	yorktown heights	NY
10/7/2009 17:47	LOUISE	GIUGLIANO	lcgiugliano@comcast.net	NARBERTH	PA
10/8/2009 7:18	matt	shay	fashay@aol.com	wyndmoor	PA
10/7/2009 11:26	Rachel	Mock	rharry013@yahoo.com	elizabethtown	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/24/2009 5:50	Deb	Fleck	flecks4@ptd.net	Kintnersville	PA
10/7/2009 10:42	Meghann	Peiffer	peiffer.meghann@gmail.com	Wernersville	PA
10/12/2009 0:01	theresa	rapp	alto4me@hotmail.com	walnutport	PA
10/7/2009 15:21	Barbara	Long	emeraldgem708@aol.com	Lancaster	PA
10/7/2009 13:26	Robert	Holroyd	rholroyd2@verizon.net	Norristown	PA
10/8/2009 8:19	martha	armstrong	meggiebaby1@hotmail.com	media	PA
10/7/2009 20:44	cindy	steich	tailpets@comcast.net	quakertown	PA
10/7/2009 14:26	Janice	Standish	janstandish@comcast.net	Manheim	PA
10/7/2009 16:41	CHarlene	Stoudt	charlenestoudt@yahoo.com	king of prussia	PA
10/7/2009 17:40	Magdalena	Depa	kittylandster@gmail.com	Wind Gap	PA
10/7/2009 18:45	Linda	Trosko	latrosko@gmail.com	Wayne	PA
10/7/2009 12:24	Eugene	Sabler	sam812gene@verizon.net	Bethlehem	PA
10/7/2009 12:25	Rachel	Bien	rbien8@gmail.com	York	PA
10/10/2009 4:17	jean Damien	susini	jdsusini@hotmail.fr	Planfoy	ot
10/18/2009 7:41	Andrée	Hussard	andree.hussard@yahoo.fr	Marseille	ot
10/10/2009 5:06	Geneviève	Pieroni	genevieve.pieroni@yahoo.fr	Fuveau	ot
10/7/2009 20:26	Kerstin	Torres	kdot90@yahoo.com	Philadelphia	PA
10/9/2009 22:03	Brooke	Higby	brooke_psu@yahoo.com	Baden	PA
10/7/2009 14:07	Marianne	Airey	aireyme@aol.com	East Norriton	PA
10/7/2009 14:51	Laura	Flanagan	sibhusky2002@yahoo.com	Oxford	PA
10/7/2009 20:11	Laurie	Jones	e-setter@comcast.net	West Newton	PA
10/7/2009 18:47	Susan	Herwig	suherw@aol.com	Oreland	PA
10/7/2009 19:56	Veronica	Martin	vbonniem@comcast.net	Columbia	PA
10/7/2009 12:14	Michele	Rubino	michelerubino@hotmail.com	Plymouth Meeting	PA
10/9/2009 10:08	Nolan	LeBlanc	nolanleblanc@hotmail.com	Lehighton	PA
10/7/2009 10:41	Frank	Dellen	Dellenjr2@aol.com	Columbia	PA
10/7/2009 11:28	Marian	Marchese	mvmcharlie@yahoo.com	Penn Valley	PA
10/10/2009 7:20	arnaud	Hussard	arnaudh71@yahoo.fr	Marseille	ot
10/7/2009 10:54	denise	hayes	denise.hayes@wolterskluwer.com	chalfont	PA
10/7/2009 15:06	Karin	Stocking	karinstocking@msn.com	Norristown	PA
10/7/2009 10:54	l	Williard	lwilliard@eastern-ind.com	Northumberland	PA
10/7/2009 11:18	Kathy	Speck	kspeck@eckertseamans.com	New Cumberland	PA
10/7/2009 10:49	Marie	lasota	mcl09@verizon.net	malvern	PA
10/7/2009 13:31	carol	zelenak	carolzelenak@garland-group.com	pa	PA
10/8/2009 16:25	Marilee	Gerdes	AvidFlyers@aol.com	Brownsburg	IN
10/7/2009 15:19	Sandra	Mays	itfinders@yahoo.com	Lancaster	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 11:23	Edward	Ost	ejostadv@yahoo.com	Warminster	PA
10/8/2009 11:25	Toni	Ferraro	tferraro@a-air.net	Aliquippa	PA
10/7/2009 14:29	alexandra	susini	alexast@laposte.net	Planfoy	ot
10/7/2009 12:06	Christy	Lohan	clohan516@aol.com	kennett square	PA
10/11/2009 21:34	Carolyn	Goodman	pennygoodman@aol.com	Radnor	PA
10/7/2009 11:54	Diana	Mizer	barkmeowetc@mac.com	Devon	PA
10/7/2009 22:23	Noga	Nir-Kistler	noganir@gmail.com	Allentown	PA
10/7/2009 10:55	Clare	Reay	clare.reay@gate7llc.com	HAGERSTOWN	MD
10/7/2009 11:00	Judy	Ellis	judy.ellis@ollyshoes.com	Kimberton	PA
10/7/2009 15:31	Stephanie	kershner	smkershner@gmail.com	Coatesville	PA
10/7/2009 10:44	Karen	Vasily	kvasily@lifetouch.com	Eagleville	PA
10/15/2009 15:28	Emilie	Johnson	emilie.b.johnson@gmail.com	Skokie	IL
10/26/2009 18:58	daniel	clemens	dclemens1@verizon.net	southampton	PA
10/7/2009 21:00	Becky	Tamayo	rlm1110@yahoo.com	Reading	PA
10/7/2009 15:29	Shannon	Bittinger	shannon_22@windstream.net	Apollo	PA
10/7/2009 17:47	Marilyn	Grace	mjgmallard@aol.com	Harrisburg	PA
10/7/2009 16:44	amanda	soppick	amandasoppick@verizon.net	eagleville	PA
10/7/2009 18:52	Jennie	Cartier	Jennie_Cartier@hotmail.com	Waterford	MI
10/7/2009 15:01	Rebecca	Ellis	rellis66@gmail.com	San Mateo	CA
10/7/2009 11:22	Deb	Cupp	dc22@comcast.net	Malvern	PA
10/7/2009 10:42	Susan	Stoler	susiestoler@warwicksd.org	Lititz	PA
10/7/2009 11:48	Laura	Wrong	Laura.Wrong@atlantichealth.org	Far Hills	NJ
10/7/2009 10:44	Mary	Slavin	mcslavin@verizon.net	Glenside	PA
10/7/2009 11:35	Michelle	Althouse	mattieandonyx@yahoo.com	Owings Mills	MD
10/7/2009 17:00	Hedy	Sirico	hedysirico@gmail.com	Philadelphia	PA
10/7/2009 17:06	Jill	Ruth	jillruth21@comcast.net	Lansdale	PA
10/7/2009 14:57	Jane	Vargas	janev58@gmail.com	Morristown	NJ
10/13/2009 16:21	Karen	Gibbons	klgibbons12@comcast.net	Warrington	PA
10/8/2009 15:04	Rainey	Rylko	Rainey.Rylko@TGSFinancial.com	Aston	PA
10/9/2009 9:22	janice	alley	jalleypeds@hotmail.com	philadelphia	PA
10/7/2009 13:07	Sally	Sapega	sallyforth123@yahoo.com	Morton	PA
10/7/2009 10:45	Bobette	Morgan	b1513@aol.com	Scranton	PA
10/7/2009 10:57	Mary Anne	Kramer	mkramer@cvty.com	Pittsburgh	PA
10/7/2009 11:08	Charlotte	Jay	jaysing@aol.com	Stowe	PA
10/7/2009 18:28	KIM	CONWAY	kconwayambs@yahoo.com	HARRISBURG	PA
10/8/2009 13:11	Jane	Hummel	jane.hummel2@verizon.net	Harrisburg	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 12:41	Cosette	Jurkovic	cosettegen@yahoo.com	North Huntingdon	PA
10/7/2009 10:42	Kristin	Massey	kristin120@gmail.com	Downingtown	PA
10/7/2009 10:59	Liz	Satterly	lizsatterly@comcast.net	Oreland	PA
10/7/2009 15:34	Janet	Murphy	janet.murphy@klinespecter.com	Philadelphia	PA
10/12/2009 15:02	Vicky	Hoffman	sophie55@ptd.net	Reading	PA
10/7/2009 11:05	L	Ruby	lruby0805@yahoo.com	dover	PA
10/7/2009 10:56	Erin	Miller	eemiller10@yahoo.com	Dover	PA
10/7/2009 10:58	Helen	Cook	helen.cook@villanova.edu	Wayne	PA
10/7/2009 10:43	Penny	Kefauver	pkefauver@allrisks.com	York	PA
10/7/2009 15:17	jessica	o'doski	jessica@binkagirl.com	pbg	FL
10/7/2009 19:33	Deanna	Elliott	DElliott@DEJazzd.Com	Manheim	PA
10/7/2009 11:39	zelda	bush	zelbush@gmail.com	levittown	PA
10/8/2009 12:40	Dawn	Chandler	dawn.m.chandler@gmail.com	San Jose	CA
10/7/2009 17:11	Jade	Kolb	ceejade@hotmail.com	Willingboro	NJ
10/7/2009 10:48	stacy	stanislaw	stacy.stanislaw@gmail.com	philadelphia	PA
10/7/2009 11:00	Barbara-Jean	Landsperg	cagmom5@verizon.net	Valley Stream	NY
10/7/2009 15:21	DArlene	Berchin	wolflady@dejazzd.com	Manheim	PA
10/7/2009 22:19	christina	toth	shadowcdt@aol.com	richboro	PA
10/7/2009 11:52	sara	fisher	sarafi70@hotmail.com	philadelphia	PA
10/7/2009 10:43	Pam	York	pam.york@cslbehring.com	HONEY BROOK	PA
10/7/2009 12:49	Elizabeth	Delewski	emd237@ptd.net	Fleetwood	PA
10/8/2009 1:18	Joan	Sandberg	car24girl@gmail.com	Lansdale	PA
10/7/2009 10:55	Andrea	Phillips	aphillips@caibenefits.com	New York	NY
10/7/2009 15:38	Krista	Van Wert	Krista1616@aol.com	Philadelphia	PA
10/8/2009 18:47	Richard	Yale	yale5970@gmail.com	Mercersburg	PA
10/7/2009 14:18	Joan	Cleveland	joan.cleveland@gmail.com	Berlin	NJ
10/7/2009 10:49	Shelby	Carland	trelby@gmail.com	Candler	NC
10/7/2009 10:42	Marzena	Czajkowski	marzenabc@aol.com	Cherry Hill	NJ
10/7/2009 10:43	Gerry	Barbato	gbarbatohome@aol.com	West Chester	PA
10/7/2009 12:00	Rondi	Bolliger	rondib67@ca.rr.com	Playa del Rey	CA
10/7/2009 12:33	Joan	Spiecker	sewingjoan@aol.com	Warrington	PA
10/7/2009 15:22	Marianne	Titus	Marimar2222@msn.com	Fairless Hills	PA
10/8/2009 14:20	elaine	martorano	rosedoggie@comcast.net	sicklerville	NJ
10/9/2009 21:53	Megan	Lehman	megsiup@hotmail.com	Williamsport	PA
10/7/2009 10:52	Nickolas	Otranto	notranto@gmail.com	Warrington	PA
10/7/2009 11:08	Deanna	Otranto	dyj729@hotmail.com	Furlong	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 10:56	Traci	Anderson	tracy.anderson-brustkern@wellsfargoadvisors.com	San Diego	CA
10/8/2009 7:25	Gregory	Shindledecker	gshindledecker@gmail.com	Coatesville	PA
10/7/2009 10:43	CHER	SHRAWDER	cshrawde@pahouse.net	Harrisburg	PA
10/7/2009 13:11	Michelle	Shapiro	mhs0804@yahoo.com	Philadelphia	PA
10/12/2009 14:18	Tracy	Lippel	xotlippel@aol.com	Newark	DE
10/9/2009 3:16	Karen	Parisano	kparisano@comcast.net	Philadelphia	PA
10/7/2009 11:04	Marcia	Hutchinson	mghutchinson@gmail.com	Sherborn	MA
10/8/2009 8:51	Kim	Dieter	kimelon1010@yahoo.com	Devon	PA
10/13/2009 22:40	Karen	Karvelis	karveliskaren@gmail.com	Richmond	VA
10/8/2009 13:27	monica	kulaski	mfkulaski@aol.com	malvern	PA
10/7/2009 17:06	Linda B.	Howell	Sambhowell@insightbb.com	Louisville	KY
10/7/2009 21:22	Linda	Selzer	lselzer@usa.net	Boston	MA
10/8/2009 15:48	Connie	Conaway	conniesvc@yahoo.com	Canonsburg	PA
10/7/2009 13:15	Maryann	Krajkowski	M_Krajkowski@fccc.edu	Philadelphia	PA
10/7/2009 17:38	JoAnn	Smith	joasmith748@hotmail.com	North Wales	PA
10/12/2009 17:40	Carol	Freed	cardix2003@yahoo.com	Englewood	NJ
10/7/2009 11:03	Tym	Macaleer	tymmac007@yahoo.com	Drexel Hill	PA
10/7/2009 11:10	nirav	mehta	nmehta@method4.net	wayne	PA
10/8/2009 7:51	Carla	Dabundo	carladabundo@verizon.net	West chester	PA
10/7/2009 11:49	linda	mowery	blonderella2300@aol.com	highspire	PA
10/7/2009 12:36	Ron	Donachie	rondon@ptd.net	Birdsboro	PA
10/7/2009 11:50	Deborah	Hankins	dh0307@gmail.com	Malvern	PA
10/7/2009 17:04	Kathleen	McLaurin	mcmal0604@comcast.net	Stafford	VA
10/7/2009 16:21	susan	farrell	bookysuefar@yahoo.com	phila	PA
10/11/2009 0:18	Suzanne	Pohlig	slp213psu@yahoo.com	Lansdowne	PA
10/7/2009 17:17	Joan	Keay	joank@bwm.com.au	Los Angeles	CA
10/7/2009 10:55	Allison	Kruper	akruper@arlcap.com	Lafayette Hill	PA
10/7/2009 21:07	Amy	Pollpeter	amy.pollpeter@hotmail.com	Ankeny	IA
10/7/2009 15:08	Constance	Korb	connie.korb@comcast.net	Furlong	PA
10/8/2009 9:53	Sonji	Lee, Ph.D	sonji.lee@keystone.edu	La	PA
10/7/2009 13:05	edith	aguila	aguila@ptd.net	allentown	PA
10/7/2009 18:01	mary	Hopper	dobesrcool@cox.net	lemon grove	CA
10/8/2009 1:00	Sarina	Compagnino	sleeping_beauty059@hotmail.com	Victoria	ot
10/23/2009 15:13	Janelle	Collett	janellecollett@hotmail.com	Philadephia	PA
10/7/2009 19:41	Teresa	Cavalla	c.scape911@gmail.com	Gainesville	FL

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Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 18:25	Lynn	Ketner	luvrofpets@yahoo.com	Hawthorne	CA
10/8/2009 12:39	fran	ferraguti	dmdf@verizon.net	lansdale	PA
10/7/2009 10:48	Kathy	Sennett	kathysennett@gmail.com	Coatesville	PA
10/8/2009 0:56	brooke	stauffer	bstauffer8@yahoo.com	N Wales	PA
10/7/2009 14:45	egan	Senker	eganrs@gmail.com	philadelphia	PA
10/7/2009 11:44	kat	bruce	happygummi@aol.com	Boyertown	PA
10/7/2009 17:52	Bob	Brauner	PhilyKraut@Aol.com	Havertown	PA
10/7/2009 16:39	Linda	Bescript	maxrules@cox.net	Tucson	AZ
10/27/2009 5:39	Judith	Rhodes	rhodesjf5@yahoo.com	New York	NY
10/7/2009 18:13	Thomas	Cole	drdoolittle2800@gmail.com	Hopkins	MN
10/8/2009 9:44	Julie	Service	julieservice@dejazzd.com	Denver	PA
10/24/2009 6:11	Toni	Wolfson	hummingdeer@yahoo.com	Felton	CA
10/7/2009 11:36	Helen	Hauser	hfhauser@verizon.net	Bowling Green	VA
10/9/2009 19:43	Mary	Porterfield	nikkialex@yahoo.com	greencastle	PA
10/8/2009 6:17	JOAN	WERTZ	joanw@catlover.com	PHILADELPHIA	PA
10/9/2009 7:11	David	Sharp	Sharpdave@yahoo.com	Philadelphia	PA
10/7/2009 12:34	Kathi	Harbonic	gkharbo116@aol.com	Topton	PA
10/7/2009 11:55	Sarah	Ogden	sarah.ogden@msn.com	Furlong	PA
10/7/2009 10:52	Linda	Peters	Linda.Peters@consultant.volvo.com	Allentown	PA
10/7/2009 11:04	kim	dubler	dubler-kimberly@cooperhealth.edu	erial	NJ
10/7/2009 15:50	Kate	Braunschek	kbraunschek@keystonekidney.com	Philadelphia	PA
10/7/2009 10:53	Concetta	Clayton	chettac@verizon.net	Wayne	PA
10/7/2009 11:24	Gail	Cranmer	gfitz311@aol.com	Egg Harbor Township	NJ
10/7/2009 15:55	Katharine	Avarese	chepurny@aol.com	Philadelphia	PA
10/7/2009 10:53	Mary-Alice	Bortz	mary-alice.bortz@alvernia.edu	Mohnton	PA
10/7/2009 12:41	Joseph	Sperazza	rjpg306@comcast.net	Pittston	PA
10/7/2009 17:32	Evelyn	Dix	dixycar29@gmail.com	Englewood	NJ
10/7/2009 10:49	Elizabeth	Vitko	lizv@rrccpa.com	Quakertown	PA
10/9/2009 22:04	Dawn	Kowalski	dmkowalski@nycap.rr.com	scotia	NY
10/7/2009 13:19	Jessica	Ainsworth	jess_pens@yahoo.com	Jersey City	NJ
10/7/2009 13:08	Chrissy	D'Alterio	chrissyflyers@yahoo.com	Brookhaven	PA
10/7/2009 16:35	Coleen	Sexton	colpat621@msn.com	Cape May Court House	NJ
10/7/2009 19:36	Lisa	Horan	lnhoran@verizon.net	Pgh	PA
10/7/2009 19:51	Debbie	Kohl	dmkohl5@comcast.net	Glen Mills	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/23/2009 5:54	Elizabeth	Heller	sbetty369@yahoo.com	Drexel Hill	PA
10/8/2009 10:21	Patricia	Curtis	Pat2655@aol.com	Duluth	MN
10/7/2009 11:58	Deena	Smith	deena917@yahoo.com	Conshohocken	PA
10/7/2009 12:32	Joseph	Ciavaglia Jr	jchevy@ptd.net	Jim Thorpe	PA
10/7/2009 11:35	Linda	Granito	ljsg19@aol.com	Fort Washington	PA
10/7/2009 11:15	Jacqueline	West	jmwdallas@gmail.com	Dallas	TX
10/7/2009 10:45	Shelley	Dodd	shelley@financialhouse.com	Wilmington	DE
10/7/2009 11:04	Robyn	Kevlin	rckevlin@comcast.net	Nashville	TN
10/8/2009 14:51	Jacqueline	Kalinowski	jmbk5@verizon.net	Temple	PA
10/7/2009 11:43	Christina	Eckhart	christinaeckhart@gmail.com	Lansdale	PA
10/15/2009 18:32	Joan	oliver	missbrandydog@yahoo.com	rio rancho	NM
10/7/2009 12:01	Mary	Carr	maryecarr@gmail.com	Los Angeles	CA
10/7/2009 12:29	Linda	Higgins	boroughofparkside@hotmail.com	Parkside	PA
10/7/2009 12:36	Anita	Campbell	harborco1@aol.com	Bristol	VA
10/7/2009 10:41	Barbara	Duke	Barbara.f.duke@tn.gov	Madison	TN
10/8/2009 9:05	Sean	Ryan	sryan@dormanproducts.com	telford	PA
10/7/2009 10:56	Eloy J.	Hernandez	lampreave@gmail.com	Philadelphia	PA
10/7/2009 11:52	Karen	Kovolski	kkov802@comcast.net	Villanova	PA
10/7/2009 11:10	Kathleen	Rupert	krupe27@comcast.net	Philadelphia	PA
10/13/2009 10:23	Dianne	Briggs	diannebriggs@yahoo.com	Newark	DE
10/8/2009 19:51	Suzie	Eisenstein	Suzie713@comcast.net	Phila	PA
10/7/2009 11:15	Elliott	Schulman	esmdha@gmail.com	Wynnewood	PA
10/7/2009 19:50	Jan	Hernandez	BermudaFile@Comcast.net	Horsham	PA
10/7/2009 14:49	Margr	Miceri	Margefithian@yahoo.com	Philadelphia	PA
10/7/2009 20:34	rebecca	slifer	rebeccaslifer@hotmail.com	cleveland	OH
10/16/2009 15:08	Brian	Cox	kvas77@yahoo.com	Eagleville	PA
10/8/2009 13:49	Mel	Kunz	mkkunz5@yahoo.com	Shorewood	IL
10/18/2009 20:48	F. Jean	Fellenbaum	petshasme22@Yahoo.com	Lancaster	PA
10/7/2009 17:08	Christine	Jones	christinejones7@hotmail.com	Yardley	PA
10/8/2009 16:48	Ruth	Bescript	rainbow26@cox.net	Tucson	AZ
10/12/2009 19:55	Kelly	Dee	sunny_gal_13@yahoo.com	New Cumberland	WV
10/7/2009 11:35	Susan	Groskin	womansmiles@verizon.net	Pittsburgh	PA
10/14/2009 12:42	Sue	Montalbano	susan.montalbano@sanofi-aventis.com	Schwenksville	PA
10/7/2009 11:51	JODY	NORDEEN	jodinordeen@yahoo.com	LAUREL	MD
10/7/2009 12:33	Elaine	Berg	elaine_berg@hotmail.com	Keller	TX
10/7/2009 12:33	Robert	Zwaan	bk.zwaan@comcast.net	Holmes	PA

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/8/2009 13:43	Jane	felker	jfelkerb4@verizon.net	Bethlehem	PA
10/7/2009 11:08	Donna	Haase	astrohaa@yahoo.com	ambler	PA
10/7/2009 11:21	patti	mead	patrina60@aol.com	brooklyn	NY
10/28/2009 7:47	Kathleen	Maher	catmmaher@yahoo.com	Ocean	NJ
10/7/2009 11:27	Amy	Romaine	amy@pawsofjh.org	jackson	WY
10/7/2009 17:47	betty	semler	donbet@ptd.net	macungie	PA
10/7/2009 11:11	Linda	Owarzani	bella0628@comcast.net	Lansdale	PA
10/7/2009 13:47	Fran	Wayne	beforeourtime@comcast.net	Lansdowne	PA
10/7/2009 11:51	luisa	mantini	luisa11361@yahoo.com	bayside	NY
10/10/2009 6:49	Nancy	Ceci	nsceci@verizon.net	Mays Landing	NJ
10/7/2009 17:06	Sarah	Parnell	sarahdara629@aol.com	Mount Holly	NJ
10/7/2009 13:43	Zach	Heskett	toonces@dejazzd.com	Elverson	PA
10/7/2009 15:17	Joyce	Harvey	jharv9141@yahoo.com	Bear	DE
10/7/2009 10:48	myra	gordon	chatte109@aol.com	mastic beach	NY
10/7/2009 16:27	Shannon	Jaeger	livesforlife@excite.com	Fenton	MI
10/7/2009 17:16	Rosemary	Doyle	rdoylerd@comcast.net	Lansdale	PA
10/19/2009 10:52	Susan	Hoover	migitdigit329@yahoo.com	Beaver Falls	PA
10/7/2009 13:08	Chris	beal	chrisbeal76@hotmail.com	louth	ot
10/7/2009 11:24	frederick	arnold jr.	frederic.arnold@comcast.net	philadelphia	PA
10/7/2009 12:29	Margaret	Schwartz	marge.schwartz@comcast.net	Wilmington	DE
10/7/2009 14:13	Pamela	Padgett	pamelapadgett@mac.com	Hoover	AL
10/8/2009 10:18	Douglas	Reasoner	Dougaye@dreasoner.com	Chalfont	PA
10/7/2009 11:25	Janis	Snavely	jbsnavely@dejazzd.com	Lititz	PA
10/7/2009 11:03	Sandra	Romanko	Sandron79@aol.com	New Brunswick	NJ
10/8/2009 7:25	Anthony	Russo	maxxpower01@yahoo.com	mount ephraim	NJ
10/7/2009 19:15	Peggy	Foti	pegster1221@comcast.net	Sewell	PA
10/11/2009 5:41	Lucette	Cabrilhac	lucette.vignes@sfr.fr	Clichy-sous-bois	ot
10/7/2009 16:19	Debra	Miller	lovanimals2@yahoo.com	Warwick	NY
10/7/2009 17:18	Joe	Mackey	joemackey108@comcast.net	Huntington	WV
10/7/2009 11:10	Rena	Grimmer	rcgrimmer@comcast.net	Newmanstown	RI
10/7/2009 16:25	Mary	Aull	maryaull@msn.com	Philadelphia	PA
10/7/2009 21:35	Elizabeth	Valencia; MD, JD	evalenciamdjd@gmail.com	Goodyear	AZ
10/7/2009 16:15	linda	patterson	mydividog@yahoo.com	san diego	CA
10/9/2009 12:11	Laura	Petrullo	pet23@ptd.net	Milford	NJ
10/7/2009 13:26	B	Blumenthal, Esq	bzblumenthal@gmail.com	Denver	CO
10/8/2009 8:58	Sarah	Loosbrock	sfl1@lehigh.edu	Bethlehem	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 11:12	Alisa	Skowronski	angellove65@msn.com	Wilmington	DE
10/7/2009 10:46	Karilin Anayaansi	Lopez Martinez	anayansi100@gmail.com	New York	NY
10/7/2009 17:40	Peggy	Allen	bluepeg@verizon.net	SOuthampton	PA
10/7/2009 13:13	Dineen	Trettin	dineenmm@yahoo.com	Langhorne	PA
10/7/2009 13:13	Lynn	Rosencrans	johnlynnncats@epix.net	Blandon	PA
10/7/2009 12:07	Heidi	Sentz	hsentz@ohl.com	Greencastle	PA
10/7/2009 20:08	Lee	Anderson	mleamail@gmail.com	Tuscaloosa	AL
10/7/2009 10:41	Tisha	Robinson-Daly	tisha.robinson@att.com	Jeffersonville	PA
10/7/2009 16:20	Kyle	Kirkby	kirkbyky@yahoo.com	Lansing	MI
10/7/2009 11:03	Melody	Hicks	melodyhicks@comcast.net	Edgewater	MD
10/7/2009 10:52	Amanda	DiLando	amanda_dilando@Hotmail.com	Weymouth	MA
10/7/2009 10:43	Michael	Thomas	mthomas@gsipt.net	Gainesville	VA
10/7/2009 17:37	Elaine	Tashjian	etolabi@cox.net	warwick	RI
10/7/2009 11:51	Robert	Johnson Sr	sheilaandbob@comcast.net	Aurora	IL
10/7/2009 11:31	Michael	Generalao	mike.gen@gmail.com	Lansdale	PA
10/12/2009 9:56	Rita	DiAntonio	rita.diantonio@villanova.edu	Malvern	PA
10/11/2009 19:10	william	diantonio	flydutchmotel@aol.com	Mantua	NJ
10/7/2009 20:24	Theodore	Humphrey	theodore.j.humphrey@gmail.com	Berywn	PA
10/7/2009 15:25	Joy	Cavender	joycavender@gmail.com	Berwyn	PA
10/8/2009 9:40	Nancy	Sima	obx_nancy@yahoo.com	Pottstown	PA
10/8/2009 9:49	Cynthia	Geary	ccgeary@hotmail.com	Royersford	PA
10/7/2009 18:01	Trisha	Lang	tlang@twp.ferguson.pa.us	State College	PA
10/8/2009 21:19	Vera	Auriemma	vauriemma515@comcast.net	toms river	NJ
10/7/2009 17:12	JOSEPH	MC KANE	JERZEEJD@AOL.COM	BELLMAWR	NJ
10/7/2009 12:09	Sue	Carter	homely53@yahoo.com	Melksham	ot
10/7/2009 11:03	Jennifer	Leonard	leonard_jen@yahoo.com	Hoboken	NJ
10/23/2009 5:56	Phyllis	Simpson	psimpson@ptd.net	Milford	PA
10/7/2009 10:56	Adam	Savett	asavett@gmail.com	Solon	OH
10/7/2009 12:34	Judy	Sereni	cnj72@verizon.net	Merion Station	PA
10/7/2009 11:36	Tina	Fortney	tfortney274@comcast.net	New Oxford	PA
10/8/2009 8:01	Debra	Willis	dwillis@sunrx.com	Barrington	NJ
10/8/2009 14:25	John	Denny	dennyjp@comcast.net	Wilmington	DE
10/8/2009 11:16	Janine	Oleksiak	janine.oleksiak@ssa.gov	Philadelphia	PA
10/7/2009 18:13	tom	tulibacki	ttulibacki@comcast.net	Wilmington	DE
10/8/2009 12:08	Maureen	Ogden	mozena14@aol.com	philadelphia	PA
10/7/2009 11:05	Linda	Fogel	lffogel@comcast.net	Huntingdon Valley	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 18:52	Marci	McKenna	forpoohs@yahoo.com	Latham	NY
10/8/2009 8:48	ROBIN	EDWARDS	RFEDWARDS1@AOL.COM	BLOOMSBURG	PA
10/7/2009 19:50	ginger	duemler	houndhill@comcast.net	hilltown	PA
10/8/2009 14:27	Ellen	Scherer	ellenscherer@yahoo.com	Bryn Mawr	PA
10/7/2009 19:01	Kimberly	Shaw	kshawpa@gmail.com	Pottstown	PA
10/7/2009 17:38	Mary Kathryn	O'Brien	katie531@optonline.net	east northport	NY
10/7/2009 18:03	Danielle	Hood	drhood113@gmail.com	Toronto	ON
10/7/2009 11:00	JOHN	RADOMSKY	jradomsky@hrenko.com	Morrisdale	PA
10/8/2009 11:11	Carolyn	Temple	lil_red_jeep@hotmail.com	concrete	WA
10/8/2009 9:43	Amy	French	admiralslady@hotmail.com	Washington	PA
10/7/2009 18:15	Karen	Gilles	karengilles@hotmail.com	Coatesville	PA
10/9/2009 18:16	Michele	Wyshywaniuk	mikylmo@gmail.com	Mullica Hill	NJ
10/8/2009 17:14	iris	nadel	irisaugust81@aol.com	sewell	NJ
10/7/2009 12:26	Deborah	DePhillipo	debd3360@yahoo.com	Boothwyn	PA
10/7/2009 22:53	Gail	Russell	grussell845@aol.com	Geneva	IL
10/7/2009 15:11	Lori	Kenna	loray8211@yahoo.com	Norristown	PA
10/8/2009 11:07	Irene	Lorenzon	ilorenzon@aol.com	Huntingdon Valley	PA
10/7/2009 14:47	Norma	Kelly	njkelly_98@yahoo.com	Totowa	NJ
10/7/2009 21:19	Sara	Causey	causeysara@yaHOO.COM	Wilmington	DE
10/7/2009 18:38	Rhoda	Moroff	rhodamoroff@verizon.net	Havertown	PA
10/17/2009 17:04	Gina	Pagnoni	gpags66@yahoo.com	West Chester	PA
10/13/2009 19:15	Megan	Foxall	mfoxall@gmail.com	Horsham	PA
10/7/2009 13:41	Kathy	English	kathy8383@gmail.com	State College	PA
10/16/2009 15:02	Angela	Yearian	redhead214ever@gmail.com	Murphysboro	IL
10/7/2009 10:48	Lois	Silvanovich	lsilvanovich@msn.com	San Juan	TX
10/14/2009 8:40	Mary	McGinnis	marymcginnis07@comcast.net	Oaklyn	NJ
10/7/2009 22:35	Jack	Moore	john.moore@gd-ais.com	Pittsfield	MA
10/7/2009 10:42	Jo Ann	Thompson	memejoann@hotmiail.com	Tamaqua	PA
10/7/2009 10:42	Rutocas	Correia	rutocas@optonline.net	Elizabeth	NJ
10/7/2009 10:42	Eric	Winkle	ericwinkle@hotmail.com	Lancaster	PA
10/7/2009 10:42	Robin	Mull	robin@madisonsettlements.com	Chambersburg	PA
10/8/2009 14:28	dominick	Natale	dnataleandson111@aol.com	scotch plains	NJ
10/7/2009 10:43	Geanne	Zelkowitz	gzelkowitz@comcast.net	Philadelphia	PA
10/7/2009 10:44	Rachel	McDannell	ramcdannell@hotmail.com	Hanover	PA
10/7/2009 10:46	Brynn	Buskirk	brb207@lehigh.edu	northampton	PA
10/7/2009 10:46	Jay-ne	LaChance	jayne12781@hotmail.com	Dover	NH

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 10:49	Marie	Marino	mariehmarino.pa@gmail.com	Swedesburg	PA
10/7/2009 10:50	Barbara	Hammond	bdhammond@aol.com	Philadelphia	PA
10/7/2009 10:51	Kathleen	Kramer	kramer@temple.edu	springfield	PA
10/7/2009 10:51	Dawn	Werner	dawnteachman@gmail.com	Manassas	VA
10/7/2009 10:51	Lisa	Worley	lfetterman@gmail.com	Douglassville	PA
10/7/2009 10:52	Lisa	tarlecki	torihollow@aol.com	berwyn	PA
10/7/2009 10:52	Irene	Smoliga	reneeandmike30@omcast.net	Harrisburg	PA
10/7/2009 10:54	Jennifer	Ketcham	jketch16@yahoo.com	Framingham	MA
10/7/2009 10:54	Shelley	Coss	viola.oepra@verizon.net	Arlington	VA
10/7/2009 10:55	Kathleen	Greaves	KGreer61@aol.com	Plymouth Meeting	PA
10/7/2009 10:57	Cathleen	Jillson	c.kirbyjillson@gmail.com	Ridley Park	PA
10/7/2009 11:02	Roseanne	Pizzuti	spinoni06@gmail.com	Yonkers	NY
10/7/2009 11:03	Scott	DelStritto	sdelstritto99@yahoo.com	havertown	PA
10/7/2009 11:04	Mitchell	Fuchs	inurescue@gmail.com	Toms River	NJ
10/7/2009 11:05	Patricia	Varchol	pitsyv@gmail.com	Lancaster	PA
10/7/2009 11:05	Leslie	Ferguson	riceles@gmail.com	Coatesville	PA
10/7/2009 11:05	DAVE	CHALLENGER	DAVE.CHALLENGER@PROBUILD.COM	Cherry Hill	NJ
10/7/2009 11:06	Kay	Hirsch	Hirschmunchers@aol.com	Savannah	GA
10/7/2009 11:07	Donna	Coyne	dcoyne@pabmc.net	Harrisburg	PA
10/7/2009 11:07	christine	edmiston	cedmiston@caiu.org	enola	PA
10/7/2009 11:08	sue	Otranto	otrantos@eastonsd.org	easton	PA
10/7/2009 11:09	David	Ellis	davai.ellis@savannahnow.com	Savannah	GA
10/7/2009 11:10	Jane	Altemose	jca209@lehigh.edu	Easton	PA
10/7/2009 11:11	Ruth	Nolan	RNOLAN@MBOFWC.COM	Newtown Square	PA
10/7/2009 11:11	diane	tirendi	dtttirndi@co.bucks.pa.us	warrington	PA
10/7/2009 11:13	Felicia	Maisey	felicismaisey@comcast.net	Philadlephia	PA
10/7/2009 11:13	diane	tirendi	dttirendi@co.bucks.pa.us	warrington	PA
10/7/2009 11:14	Patti	Miller	pmiller@gatewaticketing.com	Boyertwon	PA
10/7/2009 11:14	Paul	Hatton	cridge520@aol.com	Southampton	PA
10/7/2009 11:16	ANN	LAU	mmummert5260@comcast.net	Dallastown	PA
10/7/2009 11:16	Mila	Bennett	mbennett@firstloans.net	Livonia	MI
10/7/2009 11:18	Erin	Marynak	eamarynak@gmail.com	State College	PA
10/7/2009 11:22	Karen	Boben	kboben3789@comcast.net	COlumbia	PA
10/7/2009 11:24	Helene	Goldberg	theanimalstudio@yahoo.com	Philadelphia	PA
10/7/2009 11:26	Deborah	Furst	reikifurst@snip.net	Downingtown	PA
10/7/2009 11:27	Vanessa	Tostaine	vtostaine@yahoo.com	Clifton	NJ

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 11:28	Robeta	West	RWSaylor2@comcast.net	West Chester	PA
10/7/2009 11:31	Donna	Triozzi	donnatriozzi@verizon.net	Wallingford	PA
10/7/2009 11:32	Fredercia	Szilagyi	fofadopt@nyc.rr.com	Briarwood	NY
10/7/2009 11:40	Ram	Dhurjaty	medical_imaging@hotmail.com	Rochester	NY
10/7/2009 11:40	Susan	Sunseri	smsunseri@hotmail.com	Pittsburgh	PA
10/7/2009 11:43	Carole	Deni	cld5451@yahoo.com	Harleysville	PA
10/7/2009 11:46	Lea Ann	Wood	lagwood1@comcast.net	marlton	NJ
10/7/2009 11:55	Debbie	Gannon	debbieganon@realtor.com	OceanView	NJ
10/28/2009 5:22	Mary F	Leres	lillymae2222@yahoo.com	Diamond Springs	CA
10/7/2009 11:57	Debi	Anderson	debmarand@yahoo.com	Glen Cove	NY
10/7/2009 11:58	Janice	Gazzillo	janice109@comcast.net	Pottstown	PA
10/7/2009 11:59	rebecca	perkins	rebeccap1@verizon.net	bala cynwyd	PA
10/7/2009 11:59	Janet	Gable	jlzgable@comcast.net	Gettysburg	PA
10/7/2009 12:01	Connie	Bandy	hbandy@yahoo.com	Warrington	PA
10/7/2009 12:01	Rebecca	Barr	becky@barrmarketing.com	Columbia	PA
10/7/2009 12:05	Deborah	Weaver	daweav@yahoo.com	Coatesville	PA
10/7/2009 12:05	Suzanne	Simpson	Sparker46@comcast.net	Doylestown	PA
10/28/2009 7:40	Carl	Nylund	carlnyund@carlnylund.com	Grandview	MO
10/7/2009 12:08	paula	current	selecshp@embarqmail.com	millerstown	PA
10/7/2009 12:08	wendy	solomon	w.solomon6@gmial.com	pgh	PA
10/7/2009 12:11	Nina	Sorensen	nmsorensen@verizon.net	Villanova	PA
10/7/2009 12:14	Linda	Klinger	dogmomklinger@msn.com	Jeffersonville	PA
10/7/2009 12:17	Vivienne	Rizzo	bellaviven@gmail.com	New York	NY
10/7/2009 12:18	Kelli	Barbato	Blondie1036Z28@aol.com	West Chester	PA
10/7/2009 12:18	Marion	Massaro	M72Mazz@aol.com	Cinnaminson	NJ
10/7/2009 12:20	Jillian	Gerber	AuntBlythe@aol.com	Hilton Head	SC
10/7/2009 12:25	Ellen	Pemberton	ebpemberton@gmail.com	Bryn Mawr	PA
10/7/2009 12:31	Jon	Everhart	earlvilleoutlaw@comcast.com	Earlville	PA
10/7/2009 12:41	Cynthia	Wise	cwise@its.jnj.com	Birdsboro	PA
10/7/2009 12:46	Barbara	Arms	barms@fullerton.edu	Palm Desert	CA
10/7/2009 12:55	judy	merten	judyz1011@yahoo.com	old tappan	NJ
10/7/2009 12:56	Stacy	Molchany	smolchany@gmail.com	Glenshaw	PA
10/7/2009 12:57	marcia	schmehl	cattales336@aol.com	reading	PA
10/7/2009 12:57	Kelley	Burkhouse	sambubbies@yahoo.com	New Castle	PA
10/7/2009 12:59	Ann	Pension	Apr104@comcast.com	Ardmore	PA
10/7/2009 12:57	Leone	Fogle-Hechler	leonefogle@hotmail.com	Seattle	WA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 13:00	Jane	Dalton	dalton@duanemorris.com	Philadelphia	PA
10/7/2009 13:06	Ashley	Cooney	acooney3686@gmail.com	Athens	PA
10/7/2009 13:06	paula	duprey	pauladuprey2002@yahoo.com	leesburg	FL
10/7/2009 13:10	Marsha	Long	mlong70513@comcast.net	Schwenksville	PA
10/7/2009 13:13	Bill	Neff	neffnews@ix.netcom.com	Harrisburg	PA
10/7/2009 13:18	Dawn	Hartman	dawnandrickhartman@yahoo.com	Mifflinburg	PA
10/7/2009 13:22	Jennifer	Spaeth	jzspaeth@gmail.com	Oreland	PA
10/7/2009 13:25	linda	ferris	ltferris07@comcast.net	bear	DE
10/7/2009 13:24	Barbara	Weber	bweber@weberinsurance.com	Yardley	PA
10/7/2009 13:27	Lalit	Madan	lalitmadan73@aol.com	Philadelphia	PA
10/7/2009 13:27	john	byers	info@porchesnewhope.com	new hope	PA
10/7/2009 13:27	Kass	Barnaba	live4jesus@qis.net	York	PA
10/7/2009 13:29	Ann	Meschter	crazycat@ptd.net	Reading	PA
10/7/2009 13:34	Patricia	Wakefield	angelolkus@yahoo.com	Downingtown	PA
10/7/2009 13:36	marirose	stewart	marirose3657@msn.com	philadelphia	PA
10/7/2009 13:37	Jennifer	Warsing	warsingj@hotmail.com	Huntingdon	PA
10/7/2009 13:39	Amy	Olsen	asolsen52@gmail.com	New Hope	PA
10/7/2009 13:39	Pam	Criswell	rugabean@aol.com	Coatesville	PA
10/7/2009 13:43	Thomas	Wersderfer	rollerreftom@comcast.net	Collingdale	PA
10/7/2009 13:43	Matt	Klopp	maddikp@gmail.com	Downingtown	PA
10/7/2009 13:47	Marje	Christy	mchristy@live.com	Erie	PA
10/7/2009 14:05	Sharon	Isacco	zacc98@yahoo.com	Slippery Rock	PA
10/7/2009 14:07	Axel	Olsen	olsenak@gmail.com	New Hope	PA
10/7/2009 14:10	Sue	Merewitz	feetheart50@aol.com	Gaithersburg	MD
10/7/2009 14:11	Gayla	Hausman	dogsdeservebetterne@hotmail.com	Beatrice	NE
10/7/2009 14:16	Stace	Bryerton	sbryerto@hotmail.com	State College	PA
10/7/2009 14:17	Loren	Varney	LORENVARNEY@HOTMAIL.COM	Audubon	PA
10/7/2009 14:17	Loren	Varney	LORENVARNEY@HOTMAIL.COM	Audubon	PA
10/7/2009 14:19	Heather	Gwin	heathermichele11@yahoo.com	Fayetteville	AR
10/7/2009 14:20	Barbara	Allison	baraw@ptd.net	Winfield	PA
10/7/2009 14:21	Blanche	Cilliers	polarbear4me@gmail.com	Edmonton	AB
10/7/2009 14:22	logan	robillard	l.loftin@yahoo.com	downingtown	PA
10/7/2009 14:27	eunice	richmond	eunice@neilrichmond.com	Pittsburgh	PA
10/7/2009 14:31	Gail	Markis	gailmhome@comcast.net	Pittsburgh	PA
10/7/2009 14:38	Shirley	LoPresti	shirlbus2004@yahoo.com	Stewartsville	NJ
10/7/2009 14:48	Kris	Miller	krmiller@burgettstown.k12.pa.us	Canonsburg	PA

DOG PACK FORM LETTER COMMENTATORS

Addendum B

Date Email Sent	First Name (Supporter Record)	Last Name (Supporter Record)	Email (Supporter Record)	City (Supporter Record)	State (Supporter Record)
10/7/2009 14:54	Lisa	Rodriguez	lpizazz@hotmail.com	Milltown	NJ
10/7/2009 14:55	Scott	Promish	moonhear38@hotmail.com	Horsham	PA
10/7/2009 15:00	Betty	Clark	boopers007@dejazzd.com	Douglassville	PA
10/7/2009 15:00	Anita	Svetkovich	asvetkovich@yahoo.cojm	Greensburg	PA
10/7/2009 15:00	Dikane	George	ms.maj1@live.com	Oaks	PA
10/7/2009 15:06	Sophia	Roth	rothsophia@yahoo.com	Fleetwood	PA
10/7/2009 15:11	deanna	Nagy	deannaln@ol.com	chadds foed	PA
10/7/2009 15:13	David	Nevin	creaturesteward@hotmail.com	West Hempstead	NY
10/7/2009 15:20	Linda	Dimock	powerless2@verizon.net	Kingston	PA
10/7/2009 15:28	Anne Marie	Young	amyoung63@comcast.net	Marshfield	MA
10/7/2009 15:29	Carolyn	Anthony	carolynanthony78@yahoo.com	Palos Verdes	CA
10/7/2009 15:29	Patrick	Kelly	pkelly31693@aim.com	hu;;	MA
10/14/2009 11:43	Jerilyn	Capaccione	jcapaccion@state.pa.us	Aliquippa	PA
10/7/2009 15:31	Stacy	Pinkerton	pinkertonstacy@yahoo.com	Marietta	PA
10/7/2009 15:32	Barbara	Menin	menin1911@comcast.net	Jenkintown	PA
10/7/2009 15:46	Donovan	James	jimndoug@comcast.net	Sumneytown	PA
10/7/2009 15:42	karen	lawson	karenlaw@ptd.net	lewisburg	PA
10/7/2009 15:50	Jeannette	Barnes	jfooksbarnes@yahoo.com	Mabelvale	AR
10/7/2009 16:02	mary	hagen	katsndogs3@verizon.net	ellicott city	MD
10/7/2009 16:07	elinor	friedman	3lliefriedman1@comcast.net	wayne	PA
10/7/2009 16:11	Mark	Jenkins	marksjenks@aol.com	Dillsburg	PA
10/7/2009 16:19	Christina	Minsky	newtpenn@aol.com	Newtpown	PA
10/7/2009 16:28	Brent	Tribble	festiv22@aol.com	swartz creek	MI
10/7/2009 16:30	Audrey	Munch	mtnhiker@optonline.net	Ronkonkoma	NY
10/7/2009 16:36	Jill	Shank	Shankjilan@aol.com	Carlisle	PA
10/7/2009 16:40	Tricia	Psota	tlp153@psu.edu	Phil	PA
10/7/2009 16:40	PATRICIA	REICH	pattyr33@yahoo.com	ALLENTOWN	PA
10/24/2009 6:17	Nina	Mandel	ntikvah@yahoo.com	Selinsgrove	PA
10/7/2009 16:45	Lauren	culley	Laurenculley@westfieldgrp.com	lititz	PA
10/7/2009 16:46	Greta	Hemcher	gh91181@yahoo.com	Malvern	PA
10/7/2009 16:54	Andria	Saia	asaia@levinlegalgroup.com	West Chester	PA
10/7/2009 17:02	Linda	Bowman	lbo83@dejazzd.com	Ephrata	PA
10/7/2009 17:11	Paul	Hess	plsolebury@verizon.net	New Hope	PA
10/7/2009 17:32	Kathy	Becker	misty-blue16137@yahoo.com	Mercer	PA
10/7/2009 17:39	karen	rozo	karenrozo@aol.com	tamarac	FL
10/7/2009 17:44	joy	worrell	Joyworrell@mac.com	Wayne	PA