### 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	<i>75</i>
> 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? /f 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 seventyfive (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 finalform 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. <u>Lighting:</u>

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 seventyfive (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;

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. <u>Lighting:</u>

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 seventyfive (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.

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.

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.

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 finalform 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.

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 <u>COMMENTS</u>

## 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.

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.

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/l5 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.

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.

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.

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.

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 bogs 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 finalform 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 flóoring 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 <u>may affect</u> 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.

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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.

The requirement of 10% of the dogs in the kennel being selected is:

- 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)

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.

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.

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.

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 <u>fresh air</u>. 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

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.

or retrofitted to the kennel meets the requirements of the regulations.

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 finalform 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 finalform 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 finalform 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 finalform 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:

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 of light 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 finalform 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 finalform 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