

establishes parameters that do not allow dogs in kennels to be housed in any primary enclosure that is more than 48 inches high for dogs under twelve weeks of age or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department believes ammonia measurements should be taken at the height of the dogs.

The same type of research and consultation went into establishing the revised ventilation, auxiliary ventilation and lighting ranges and provisions of the final-form regulation. This is in stark contrast to comments received, which disputed or criticized the Canine Health Board and the Department for the standards, but offered no supporting documentation or evidence that refuted the standards established.

Comment: Ventilation – Carbon monoxide detectors

In requiring carbon monoxide detectors, the Canine Health Board exceeded its authority, as there is no mention of regulating carbon monoxide in Act 119.

RESPONSE

The Department agrees with the Canine Health Board, that carbon monoxide levels should at the very least be monitored for safety purposes and to assure proper ventilation and air circulation is occurring within a kennel that utilizes a carbon based form of heating or mechanical ventilation. The engineers the Department consulted believe that carbon monoxide levels will take care of themselves if the kennel is properly ventilated and meets the air exchange rate criteria of the regulations. However, carbon monoxide gas can build up in any enclosed building where carbon based mechanical ventilation or heating equipment is in use. Carbon monoxide is colorless and odorless and is deadly. The animal scientists consulted and the veterinarians believe it is proper to monitor this gas to assure the welfare of the dogs. The regulations only require that carbon monoxide detectors be installed. If carbon monoxide levels rise to the point the detectors are triggered the kennel has a problem with ventilation or air exchange in that part of the kennel housing facility and needs to take action to assure the health, safety and welfare of the dogs housed in that area of the kennel. Section 207(h)(7) of the Act (3 P.S. § 459-207(h)(7)) states in pertinent part, "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and prevent moisture condensation ... the appropriate ventilation... ranges shall be determined by the Canine Health Board. One of the purposes of ventilation is to exchange or re-circulate air in a manner that removes pathogens, including carbon monoxide and replenishes oxygen. The regulatory requirement is inexpensive and necessary to assure the health, safety and welfare of dogs housed in kennels, which is the general overall duty and authority of the Canine Health Board under section 221(f) of the Act (3 P.S. § 459-221(f)).

Comment: Ventilation 28a.2(6) – Mechanical malfunction

At a(6) a commercial kennel operator is required to notify the Bureau in case of a malfunction in a mechanical ventilation system. It might be prudent if the failure resulted in the facility failing to meet temperature or air quality requirements to record such a failure. However, it seems arbitrary that a kennel operator would have to notify the Bureau if a passing thunderstorm caused a temporary power outage. Will the Bureau maintain a 24-hour call-in number for notification or should there be a sufficient time period allowed prior to notification? Will the Bureau be sending out an HVAC

technician to repair the problem, or should the kennel operator call his contractor before he calls the Bureau? If there is a power outage, would it not be difficult for a kennel operator to call the Bureau for notification, since it is likely that his telephone service would be down as well?

RESPONSE

The final-form regulation has significantly modified the provisions of the proposed regulations related to mechanical malfunction. Section 28a.2(g) establishes the specific steps and criteria that must be met by the kennel owner if there is a mechanical malfunction and sets reasonable time periods for contacting the Department. One of the criteria established is that there be windows, doors or other openings that can be opened to provide natural ventilation in the case of a system failure. Natural ventilation is allowed in that instance. In addition, the final-form regulation requires that the kennel owner notify the Department of the malfunction, provide other information and notify and consult his veterinarian regarding dog health issues that may occur because of the malfunction. The kennel owner must also notify the Department when the malfunction has been corrected. The kennel owner is free to consult any professional necessary to correct the problem. There is no need to "consult" with the Department.

Comment: Ventilation 28a.2(7) – Particulate matter

At a(7) the proposed regulations would require kennel operators to maintain less than 10 milligrams per meter cubed of particulate matter, including dander, hair, food, bodily fluids, and other sources from the primary enclosure. Again, there should be a reference or citation on the significance of 10 ppm. Further, it is confusing that the regulations should change up metrics from parts per million to milligrams per meter cubed. How will the Bureau determine the source of particulate matter? Will there be a means of distinguishing ambient particulate matter (for instance, if a farmer in the next field is harvesting soybeans, will the Bureau be able to determine the difference in that particulate matter from particulate matter originating from a primary enclosure)?

RESPONSE

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

Comment: Ventilation 28a.2(8) - Air Exchange

Paragraph a(8)i is particularly troubling. The proposed regulation would require 8 to 20 complete air changes of 100% fresh air each hour, in each room that houses dogs. It is doubtful that other requirements in Act 119 or the proposed regulations could be met with this rate of outside (assuming that is fresh) air exchange. Is it possible to maintain a required temperature of 50 degrees Fahrenheit in a building while the outside temperature is 15 degrees Fahrenheit and while importing eight air changes per hour? Is it possible to maintain a temperature of 85 degrees and a required range of relative humidity while

completing eight or more air exchanges per hour when the outside temperature is 95 degrees and the relative humidity is 90%? Further, the velocities of air exchange at the upper end of the requirement may in fact be irritating. The regulation requires "fresh air" but does not describe what fresh air may be. Is fresh air allowed to be heated through a furnace or passed through a dehumidifier? Is fresh air to be circulated prior to being cooled? May fresh air be filtered to meet the particulate requirements? Is it possible for recirculated air to be of better quality than outside "fresh air"? Finally under this section, the Bureau wants information related to building sizes and dimensions and requires several measurements. The only measurements relevant to air exchange would be volume of the facility (length by width by height) and the volume of intake or exhaust.

Comment: Ventilation – Measurement of air exchange

The draft regulations propose that air velocity measurements shall be taken throughout the kennel building. The true measurement should be rate of air exchange as velocity is only one of the components in determining air exchange, volume being the other factor.

RESPONSE TO BOTH COMMENTS

The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. In general, paragraphs (1), (2), (3) and (8) of section 28a.2 the proposed regulation have been deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific in the final form regulation. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

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

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would

already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility.

The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment: Ventilation - Enforcement

The draft proposes that the kennel operator shall be in violation if air exchange rates do not meet 8-20 required changes per hour. While a ventilation system may be designed by an HVAC technician to achieve the required air exchange, is it the operator's responsibility if the Bureau's technician observes an inadequate air exchange rate? We do not know what protocol or equipment the Bureau will be using to measure air exchange (and based on the requirements to submit facility measurements, one is unsure if the Bureau understands the physics of air exchange). A conflict of interest may arise if the Bureau hires the same HVAC engineer as the facility operator, or even more likely if the Bureau hires a competing HVAC technician to measure or comment on air exchange in a facility. The draft proposes that the Bureau may hire an engineer but does not qualify that the engineer must be certified in HVAC or even hold a professional engineer certification. The draft does not require that the kennel operator conform to the recommendations of the engineer hired by the Bureau. How will a resolution be reached in the situation where a professional engineer retained by the kennel operator disagrees with an engineer hired by the Bureau?

RESPONSE

As stated above, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

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

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

In addition, the final-form regulation no longer states that the Department shall hire an engineer to assure compliance with the standards. The more objective CFM requirements and measurement standards, set forth at section 28a.2 of the final-form regulation do not require readings to be taken each time a kennel is inspected and can and will be evaluated and checked through the capacity ratings on the ventilation equipment, certification by a professional engineer and volume and other information supplied by the kennel owner and certified by a professional engineer.

Comment: Ventilation 28a.2(8)(a) – Symptoms list

Section 8(a) lists a broad range of symptoms which dogs shall not exhibit. These symptoms may have a variety of causes, only one of which may be poor ventilation. Anyone involved in animal husbandry realizes that animals (or humans) may become ill and display symptoms of illness. Sometimes those symptoms persist even with the best of professional treatment. It is unrealistic for the Bureau to simply mandate that dogs must be in good health and asymptomatic. If such a mandate were possible and practical, there would be no need for health care for animals or humans.

RESPONSE

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

Comment: Ventilation 28a.2(10) - Odor

Section 8(a)10 states that the facility shall not have excessive dog odor. Excessive dog odor is a subjective description. What may be excessive to one individual may seem barely noticeable to another. This is unenforceable.

RESPONSE

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

Comment: Ventilation 28a.2(11) - Air filters

Section 8(a)11 requires “small particle, nonozone producing air filters”. Punctuation needs amended to indicate if these are “small, particle filters” or “small-particle filters”. Are there filters that produce ozone? Does Act 119 provide authority for the CHB to draft ozone regulations?

RESPONSE

After consultation with engineers and architects the Department broadened the language of what was subsection 28a.2 (11) of the proposed regulations. The new language appears at subsection 28a.2 (b)(5) of the final-form regulation and simply states any filter must have a minimum MERV value of 8 or higher. The kennel owner can choose a variety of filter types and brands, so long as they meet a MERV value of at least 8. There is no nonozone producing language in the final-form regulation.

Comment: Lighting – glazed glass, full spectrum lighting and excessive light

The draft regulations require that based on floor area, at least 8% glazed area shall be provided and that external openings shall be unobstructed. Is glass an obstruction to an external opening? Are shades permitted to assist in keeping temperatures down in hot, sunny weather? If shades are not permitted, how are dogs to be protected from “excessive light”? Must the primary enclosure be dark if it is to be protected from the direct light of the sun or a light bulb? May window panes be tinted to provide some reduction in “excessive light” and ensure privacy, or would tinting affect the requirement for “full spectrum” lighting? A specific definition of “full spectrum” should be required, citing the range of wavelengths expected, otherwise, full spectrum should be considered to approximate the range of light wavelengths from ultraviolet to infrared in ambient sunlight. There are no artificial lighting systems which provide such ranges of light.

RESPONSE

With regard to the 8% glazed area that requirement has been removed from the final-form regulation. Under the authority and parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, which is the authority under which this regulation is promulgated, the Department believed it had no statutory authority to require visual access to windows for dogs housed in kennel facilities that had received an exemption from outdoor exercise. The Department still requires natural light be provided in such kennels and

agrees that actual access to windows during exercise is a good idea, but not one that can be mandated by these regulations.

The final-form regulation eliminates the language set forth in the comment. The final-form language now utilizes the same language as set forth in the Federal Code of Regulations associated with the Animal Welfare Act (9 CFR § 1.1), definition of indoor housing facility, part (3) with regard to the coverings that must be on windows or openings that provide natural sunlight.

With regard to full-spectrum lighting, full spectrum lighting is a type of lighting system that is available. It is the type of lighting system that most readily mirrors the spectrum of light provided by the sun. The Department has defined the full spectrum lighting in the final-form regulation. From the research done by the Department, some form of full spectrum lighting has been available and in use since the 1930's, so it is not a new or novel type of lighting and it is readily available from various manufacturers.

Comment: Lighting – Foot Candle standards

Where did the foot-candles requirements come from? Is there a specific limiting factor in the growth, development, or behavior of dogs related to 50-80 foot candles? Is there a danger to dogs if lighting exceeds 80 foot candles? Considering the need for humans to visit with dogs or rectify emergencies during dusk or dawn hours, or even through the night, is 1-5 foot candles sufficient to ensure safety of the kennel operator, his employees, or a veterinarian to enter the kennel facility and complete necessary duties?

RESPONSE

The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

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

Comment: Lighting – diurnal cycle

The draft requires that lighting “must approximately coincide with the natural diurnal cycle”. At what latitude is the “natural diurnal cycle” supposed to coincide with provided lighting? Would it be better to require a certain number of hours of darkness or reduced light in the kennel, rather than expect the kennel operator to understand diurnal cycles and install a sophisticated lighting system to mimic changes in day length? Are there specific studies which indicate that a “natural diurnal cycle” is better for dogs than a set schedule of lighting? Lighting is considered one factor that triggers estrous in female dogs. How will approximating a natural diurnal cycle affect estrous cycles and the productivity of a kennel?

RESPONSE

The Act requires that a diurnal light cycle be provided for dogs housed in kennels. The regulation mirrors that provision and now defines a diurnal cycle as a 12 hour cycle. According to the Department and Canine Health Board veterinarians and animal scientists consulted, there is no adverse effect of a 12 hour cycle.

Comment: Flooring 28a.4 – Flooring examples

Section 28a(4) provides examples of flooring that are suitable for commercial kennels. Several examples are not necessarily good examples. Sealed tile and sealed concrete are poor choices for kennel flooring as they reduce traction, especially when wet. Imagine a kennel full of dogs at feeding time, jumping up and down on a sealed or painted concrete floor. It is not unreasonable to expect excited dogs to slip, fall, and sustain injuries. It has further been my experience that solid flooring, such as concrete or tile, leads to foot and leg degeneration, including arthritis before dogs reach advanced age.

RESPONSE

The flooring examples of sealed concrete, painted concrete, epoxy flooring, sealed wood, textured and sealed tile have been removed from the final-form regulation. Some new examples of flooring are set forth in subsection 28a.8(c)(8) and are based on examples of flooring received from the engineers consulted, both of whom design kennel housing facilities.

With regard to the flooring provisions that are contained in the final-form regulation, they establish standards and the restructuring of the provisions are based on suggestions made by the Independent Regulatory Review Commission. In restructuring this section the Department and the Commission felt it would be even more helpful to the regulated community if all the flooring standards established by the Act, were also delineated in the regulation. Therefore, the Department established two new subsections which reiterate the language contained in sections 207(i)(3)(i)(related to general flooring

standards) and (i)(3)(ii)(related to slatted flooring) of the Act (3 P.S. §§ 459-207(i)(3)(i) and (ii)). In addition, the Department had to then modify the language of the proposed regulations which sought to espouse the additional flooring options. In doing so, the Department established subsection 28a.8(c), which sets forth the language of the statute allowing the Canine Health Board to approve additional flooring options, and delineates the authority and duty of the Canine Health Board to assure the additional flooring standards adhere to the general requirements established by section 207(i)(3)(i) of the Act and that additional flooring options, based on proper animal husbandry practices, provide for the health, safety and welfare of the dogs confined to these kennels, as required by section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 459-221(f)). The Department included the standards set by the Canine Health Board in the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – but added language to these provisions to clarify the intent and provide more objective standards. In addition, based on discussions with Department veterinarians and some Canine Health Board veterinarians, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department’s veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices.

The requirements continue to utilize many of the same parameters established in the proposed regulation, but add language that further clarifies and objectifies the standards. Any additional standards are based on discussions and consultations with Canine Health Board and Department veterinarians and are based on their expertise and experience related to animal husbandry practices and the welfare of dogs.

Comment: Flooring 28a.4 – microbial assessment

This section also notes that flooring may be subject to “microbial assessment”. Again, the CHB may be exceeding its authority in trying to regulate “microbes”. What would be the standard for microbial populations? Are there specific microbes that are regulated or are all microbes proposed to be regulated? Who would make the “microbial assessment” and at what level or metric would a kennel be in violation?

RESPONSE

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

Comment:

In general, this draft of proposed regulations appears to be forwarded by persons who may be highly qualified in their particular field of expertise but have little specific knowledge outside of those fields. The minutes of the Canine Health Board meetings

indicate widespread disagreement on these standards, and further indicate that the Board was unwilling to consult appropriate resources (in any field, including their own area of expertise) that would result in reasonable, practicable, consistent, or enforceable standards and regulations. The point of these regulations appears to be an effort to drive kennel operators out of business by instituting standards that cannot be met; not to promote and protect the health and well-being of individual animals.

RESPONSE

The minutes of the Canine Health Board reveal that engineers, architects, animal scientists and a myriad of persons with experience related to kennel design and animal science were consulted by the Canine Health Board. Disagreement or more appropriately debate on issues is a normal dynamic on any Board and witnesses there was a debate of issues.

The Department has no intention of crafting regulations for the purpose of putting commercial kennels out of business. The regulation, as required by the Act and as required of all regulations, is intended to set forth standards and carry out the duties imposed by the statute. These regulations, as directed by the statute, further regulate commercial kennels in the areas of ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, as well as, establish standards for alternative flooring. All duties imposed by the Act.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the

final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels. The regulation applies equally to all commercial kennels in the Commonwealth.

Comment:

The Department of Agriculture should be cautious about implementing such vague and ill-considered regulations as they are likely to become standards for other forms of agriculture, including dairy, swine, and poultry production. Kennel operators across the United States should also be concerned as we have seen the very same standards from drafts of Act 119 (some deleted) appear in new kennel laws and regulations in a large number of states. And since selling even one dog to a commercial kennel or person with a dealer license triggers these requirements for any individual, any citizen that owns and breeds dogs should be concerned.

RESPONSE

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes

ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

As for this draft, it is suggested that the Canine Health Board should be dismissed and new members should be screened for experience, competency, and willingness to work on a concise draft, within the limits of the enabling legislation to address the three distinct areas outlined in the regulatory product expected by Act 119.

RESPONSE

The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department, being the promulgating agency, decided to proceed with the proposed rulemaking realizing that, as with nearly all regulations, changes would most likely have to be made to the final-form regulation. In addition, the Department felt this was the best mechanism to assure a more timely set of regulations and to comply as nearly as possible with the mandate of the Act. The Department consulted with the Canine Health Board members, as well as, with Department veterinarians, architects, engineers, a regulated community group and animal scientists, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations. The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

V. **MARLENE LIPPERT – Commercial Kennel Representative**

Commentator:

Submitted by: Marlene Lippert
Member Pennsylvania Dog Law Advisory Board
1849 Meiser Road
Thompsontown, Pa 17094

Background:

As a long time breeder of quality dogs and also as a commercial kennel owner who is in complete compliance with the new Pennsylvania State laws. I submit the following on the Canine Health Boards current findings.

Comment: Ventilation – Need for Standards

Concerning the Canine Health Board and the matter of Ventilation in commercial kennels:

The CHB addressed ventilation as if it only relates to INDOOR facilities. ACT 119 requires the OUTSIDE exercise area. The dogs will go outside. The majority of the feces will be outside. The majority of the urine will be outside. The REAL point that seems to be being overlooked IS that ACT 119 changes all of the old ways.

With the new law in effect having all commercial kennels charged with having their dogs on solid flooring (no more wire cages) AND having them have unfettered access to the outside for exercise. The BIG issue being overlooked is that AIR exchange or ventilation WAS a problem for kennels in the OLD way that they were allowed to do things. As wardens would go into a kennel that was a building that housed dogs--on wire....allowing them to urinate and defecate through the wire... and ALL the smell stayed INSIDE the building....which most DEFINITELY caused ventilation problems.... I have been in kennels such as these that overwhelmed the nose with the smell of URINE and DISINFECTANT...because ventilation was not adequate by any means. I see the REASON why ventilation WAS a concern.

RESPONSE

The Canine Health Board and hence the Department as the promulgating agency, is required by section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) to set and establish proper ventilation, humidity and ammonia levels. The express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, “Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation...” The Canine Health Board is given the duty to determine those levels in the same section, which states, “...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board.” (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to “...determine the standards bases on animal husbandry practices to provide for the welfare of dogs

under section 207(h)(7)....” (3 P.S. § 459-207(h)(7)) The standards established in the final-form regulation are based on research and consultation with experts such as engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

Comment: Ventilation – Cost and Calibration of Equipment

What I have seen unfold is somewhat a lack of COMMON SENSE where this is concerned. In getting very technical--with "meters" to measure air exchange in kennels... that seems to ME to be overkill and unenforceable ---charging wardens with calibration of this equipment as well as having kennel owners having the same equipment--something many wardens tell me is going to be a nightmare for them to do. I have been assured that this equipment will not be expensive or hard to use. However all the data I have collected on it says just the opposite--it WILL be expensive.... hard to keep calibrated and hard to use.

RESPONSE

The standards established in the final-form regulation are based on research and consultation with experts such as engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

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

The final-form regulation, especially the ventilation provisions of the final-form regulation, has reduced the need for some of the measurement equipment that would have been required by the proposed regulation. However, with regard to any equipment that may still be necessary, such as temperature and humidity monitors, ammonia monitors and light meters, the Department has researched the various makes and models available to determine the equipment that will meet its needs and has listed the estimated costs of buying, calibrating and maintaining such equipment in the regulatory analysis form that accompanies the final-form regulation.

Comment: Ventilation – Outdoor Area alleviates stringent requirements

However as the new law goes into effect--the two things IN STONE in the law--- the flooring and outside exercise are going to take care of the ventilation problem. Dogs --- if left with a place to eat and sleep and get warm and get cool (the INSIDE of their enclosure) and a place to go outside for exercise AND to urinate and defecate---WILL go OUTSIDE... in fact they will go as far away as they can from their "sleeping" and "living quarters" to do this... with RARE exceptions.. It will then be the kennel owners responsibility to clean up the OUTSIDE enclosure and of course keep the inside clean also. I have ALWAYS raised my dogs like this.... because I WANTED TO --not because of the law. and I can tell you this is a FACT... not something I made up.. I ask you look to "Boarding" kennels--which do not fall under this law.... but look at how they have an "inside" place for the dogs.... and an "outside" run, most of them.... Very few I have been in HAVE a ventilation problem... as the dogs go outside to do their business.... In MY kennel... the most you will smell is on a rainy day---you might get a wiff of "wet dog" but you will NOT smell the ammonia that comes with urine buildup... I use ceiling fans to circulate air 365 days a year.... PLUS the dogs going in and out the dog doors allows good air exchange.

RESPONSE

As stated in response to the first comment by this commentator, the Canine Health Board and the Department as the promulgating agency are required by the statute to address ventilation within the kennel housing facility. Section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) requires the Department to set and establish proper ventilation, humidity and ammonia levels in kennel housing facilities. The express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, “Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation...” The Canine Health Board is given the duty to determine those levels in the same section, which states, “...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board.” (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to “...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...” (3 P.S. § 459-207(h)(7)) The standards established in the final-form regulation are based on research and consultation with experts such as engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

Comment: Requirements Putting Commercial Kennels Out of Business

As the commercial kennel Dog Law advisory Board member.... I can tell you --for the LARGE kennels previously in operation in this state.... those that housed 100 to 500 dogs in one building...ventilation ASIDE.... the flooring and outside access rules are either putting them out of business or making them GREATLY reduce the amount of dogs they can raise and conform to the law. What is going to remain in Pennsylvania when the dust settles on this law... are those who were

willing to make these changes.... and realize that "business as usual" is over. There will be very few kennels still in operation with HUNDREDS of dogs in this state and if they DO exist then their dogs are going to have to be able to go OUTSIDE when they want to... which makes this ventilation issue more or less a NON issue...

RESPONSE

The Act and not the regulations impose the basic flooring and outdoor exercise standards, as well as, the size requirements for the primary enclosures are requirements and costs imposed by the Act and not the regulations. The regulations are required to and do address ventilation, auxiliary ventilation, humidity, ammonia and lighting standards. The flooring standards in the final-form regulation reiterate the flooring requirements of the Act and (in part (c) of section 28.8a) establish standards for alternative flooring that carry out the duty of the Canine Health Board to assure alternative flooring standards are based on animal husbandry practices that protect the welfare of the dogs housed on that flooring (3 P.S. § 459-221(f)).

Comment: Ventilation – Air Exchange Rates

I was going to bring to the attention of the parties concerned that nursing homes etc... do not require this many air exchanges... I knew however that the "counter" on that would be the sanitary conditions are not the same for human beings-- having access to bathrooms etc. I submit to you that the NEW requirements for kennels DO now provide for an actual "bathroom" for the dogs. I implore the CHB to ASK the dog wardens who currently inspect kennels that already have the new regulations in place (for flooring and outside access) if what I am saying is not absolute fact. The current proposed regulation will force 8 to 20 air exchanges when they are NOT needed.

RESPONSE

The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

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

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the

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

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation.

In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel

housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility

Comment:

The new law was enacted to "raise the bar" on commercial kennels in this state. To stop Pennsylvania from being labeled the "puppy mill capitol of the east" and it has ACHIEVED that goal. I respectfully submit that the Canine Health Board--made up of Veterinarians--with NO input from GOOD dog breeders--may be well meaning... but they overreach on this "ventilation" issue. Making rules that are unenforceable... and in the end in almost ALL cases not at all necessary. A GOOD dog warden--upon inspecting the commercial kennels that have complied with the new law--or those that were already IN compliance... would be able to KNOW upon entering the building if the ventilation was adequate, without complicated equipment to aid them.

RESPONSE

The Department agrees that State dog wardens can ascertain, to some extent, whether a kennel is properly ventilated through their own sense of smell and other senses, such as irritation to their eyes and nose related to ammonia levels and a sense of humidity and temperature. However, with no set standards, enforcement is subjective. Without standards there are no actual and clear objective criteria and no proof -- other than the testimony of both parties as to the ventilation conditions. One result is that commercial kennel owners have been able to successfully challenge citations based on the State dog wardens' personal evaluations related to ventilation issues. By setting fixed standards for ventilation, such as, air exchange rates, humidity and ammonia levels, temperature and particulate matter levels, both the Department and commercial kennel owners now have objective standards that are known to all, are uniform across the board and can be accurately measured, attained and maintained.

VI. MARY REMER

Commentator:

Submitted by: Mary Remer

Member Pennsylvania Dog Law Advisory Board

Comment:

I have reviewed the General Provisions of the Canine Health Board Standards for Commercial Kennels and am in support of the Ventilation, Lighting and Flooring proposals. I have bred Bull Terriers for 33 years and as a breeder find these proposals basic for adequate standard of care. I fully support the Canine Health Board and their efforts to raise the bar for how dogs are forced to live in commercial kennels. Raising the standard increases quality of life and thus quality of product and really what we are talking about here is product: puppies.

A lot of income is generated by these large kennels as a result of puppy production, lets take another step forward and increase quality.

RESPONSE

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

KENNEL AND PET INDUSTRY ASSOCIATION COMMENTS

I. PENNSYLVANIA PROFESSIONAL DOG BREEDERS ASSOCIATION (PPDBA)

Commentator:

Submitted by: Walt Peechatka, Senior Consultant
Versant Strategies

On behalf of Pennsylvania Professional Dog Breeders Association

Background: The Pennsylvania Professional Dog Breeders Association submits the following comments on the above subject proposed rulemaking issued by the Department of Agriculture on behalf of the Canine Health Board. The regulation propose to establish minimum standards for ventilation, lighting and flooring for dog kennel operations regulated as commercial kennels under Pennsylvania's Dog law (as amended by Act 119 of 2008).

Our comments will illustrate how this proposed rulemaking will essentially force a number of small businesses out of business by making it economically impossible for these businesses to meet the requirements while placing them at an economic disadvantage to similar businesses in other states. If these rules are adopted without change Pennsylvania will lose these businesses arid similar businesses in other states will meet the need by sending dogs raised in those states with less regulation into Pennsylvania to meet the need.

Cost of Regulation

Comments:

1. Initially, our comments are focused on the Regulatory Analysis Form completed by the Department for this proposed rulemaking. In that analysis the Department provides, in response to Question 17, a specific estimate of the costs and/or savings to the regulated community associated with compliance. We submit that those estimates are unrealistic and that they underestimate the costs to the regulated community by as much as ten-fold. For example, the Department's analysis estimates that most kennels are less than 5000 square feet and proceeds to use that square footage in developing estimated costs for compliance.

The analysis concludes by providing estimates as follows: 1) average optional cost of equipment to provide mechanical means of ventilation and recirculating air would be \$10,000; 2) the cost of meeting all applicable code upgrades would be \$5000; 3) the cost of purchasing equipment to assess temperature, humidity, ventilation, air velocity, ammonia, and particulates, while not required, would be \$2995. It concludes with an estimate that the total optional cost would be \$12,995, assuming \$10,000 spent on a ventilation/filtration system.

We dispute these estimates without equivocation. A typical commercial breeding operation recently received an estimate from a licensed refrigeration business for one building with only 4000 square feet which is less than the size used in preparing the Department's estimate. This firm estimated that in order to meet all of the new

requirements, the base bid for the HVAC system would be \$118,905 and additional circulating fans would be \$13,653. Further, heating costs would be \$14,022 and estimated electrical operating costs would be \$34,954. TOTAL: \$181,534.

2. In addition, the Department minimizes the need for kennel operators to purchase monitoring equipment similar to that used by the Department's kennel inspectors by stating that the equipment is not required. We question the Department's conclusion. If kennel operators are to achieve compliance, they must be in a position to make those readings on a frequent basis and to double check the readings obtained by the kennel inspectors when conducting their inspections. Therefore, this is really not an option.

3. In response to Question 23 of the Regulatory Analysis Form the Department responds that "the guidelines were published and comments were received from members of the regulated community and others". This is true. However, the Department acknowledged in at least one meeting with members of the regulated community that those comments, which the Department received, were not considered in developing the proposed rulemaking. We submit that had those comments been considered the proposed rulemaking would have been modified to bring them in compliance with the statute, which in many instances they are not, and would have been modified to make it possible for the regulated community to meet the requirements. As currently written these regulations are not realistic, they exceed the ability of most commercial kennel operators to meet them, and they will result in the loss of many kennel operators in this industry due to their inability to meet the new standards. The adoption of these regulations will have a devastating affect on agriculture in the Commonwealth.

RESPONSE

1. The final-form regulation contains no requirement for temperature reduction. Air conditioning or HVAC is allowed but not required. The ventilation system language and requirements are based on consultations with and were reviewed by engineers – that design and build kennel housing facilities – and discussions with animal scientists. The humidity levels are based on consultations with animal scientists from the Pennsylvania State University, Canine Health Board and Department veterinarians, scientific research undertaken by Dr. Overall of the Canine Health Board, standards already contained in the Federal Animal Welfare Act and the experience and expertise of engineers that design and build kennel housing facilities.

The final-form regulation implements changes, such as establishing ventilation standards in cubic feet per minute per dog instead of air exchanges per hour and allowing up to seventy percent of the air to be re-circulated, as opposed to 100% fresh air, that will reduce the necessity to purchase monitoring equipment, provides an objective measurement of air circulation and reduces the cost of operation to the kennel owner. The changes were contemplated in response to issues set forth in the comments received and were made pursuant to the Department's consultation with animal scientists and engineers – Learned Design and Paragon Engineering Services – that design and build kennel housing facilities.

The final-form regulation requires air flow to be measured in cubic feet per minute per dog, as was the suggestion of the architects, engineers and animal scientists consulted by the Department. This allows the Department to check the CFM or capacity

rating on the ventilation and air circulation equipment employed by the kennel owner to assure it meets the required air circulation values. It also allows the kennel owner and engineer or architect to design and base the ventilation system on an objective capacity rating as opposed to a more subjective air exchange rate. In addition, a professional engineer must certify the ventilation, auxiliary ventilation and humidity systems to be utilized will meet the standards of the regulation.

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

The Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, “The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart...” (9 CFR § 3.1(d)). The Federal Animal Welfare Act Regulations further require that temperatures in enclosed or partially enclosed housing structures be maintained between 50-85 degrees Fahrenheit (9 CFR §§ 3.2(a) and 3.3(a)) and that proper ventilation and lighting be provided (9 CFR §§ 3.2(b) and (c) and 3.3(b) and (c)). Therefore, the costs estimates, which are set forth in the regulatory analysis form that accompanies the final-form regulation will necessarily be higher than those incurred by such kennel owners, because they should already have systems in place. The regulatory analysis form will set forth the greatest cost that could be incurred for a system that would meet the standards of the regulations.

With regard to the cost to operate the system, kennel owner regulated by the USDA are already incurring electrical or other operating cost, because they are required to provide proper ventilation and lighting and they must maintain the temperature of the kennel facility between 50 and 85 degrees Fahrenheit (9 CFR § 3.2(a)(b) and (c)), which does require some use of a mechanical system. In addition, the Federal Animal Welfare Regulations require, “The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart...” (9 CFR § 3.1(d)).

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

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

The Department has no baseline data with regard to a kennel's current utility costs, so it is impossible to project the amount of any increase in such costs. However, the regulatory analysis form accompanying the final-form regulation does estimate the average yearly cost of operating a system that would meet the ventilation, auxiliary ventilation and humidity standards of the regulations.

The Department's estimates will be high, because they do not take into account the fact that kennel owners already had previously existing utility costs as set forth above. Therefore, the estimates set forth in the regulatory analysis form will include those already existing costs. The existing costs for kennels regulated by the USDA will be much less, as those kennels already have to comply with heating (50 F) and cooling (85 F) regulations.

Finally, compliance with the lighting requirements should not generate any additional operational cost, since kennels are already required, by the Department's current regulations and USDA regulations to provide a diurnal lighting cycle and enough light to allow for observation of the dogs and normal animal husbandry practices. In fact, the Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)) and "Indoor housing facilities for dogs...must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs...and provide sufficient illumination to aid in maintaining food housekeeping practices, adequate cleaning, and the well-being of the animals (9 CFR § 3.2(c)) The Dog Law sets forth those same standards at section 207(h)(8) (3 P.S. § 459-207(h)(8)). The requirement to and cost of providing adequate lighting is actually established in the Act itself. The regulations merely mirror that language and then set forth a level of lighting as required by the Act.

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

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

3. The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted with the Canine Health Board members, as well as, with Department veterinarians, architects, engineers, a regulated community group and animal scientists, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations.

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

health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

The following are our comments regarding the proposed rulemaking on a Section by Section basis.

Section 28.1 Ventilation

Comments.

1. Under Section 207 of the statute the Canine Health Board is authorized "to determine auxiliary ventilation to be provided if the ambient air temperature is 85 degrees Fahrenheit or higher". The proposed rulemaking exceeds the authority provided to the CHB by requiring a "mechanical" ventilation, heating and cooling system. Further, the proposed rulemaking exceeds the authority in the statute by requiring that "cooling must be used to keep the temperature below 86 degrees Fahrenheit".
2. The rulemaking further exceeds the statutory authority by requiring that "dogs may not be present when temperature in any portion of the facility is 86 degrees or higher" including those instances where a mechanical system malfunction might occur.
3. Temperature requirements for newborn puppies are ignored by the CHB's proposed rulemaking. For example, the requirement that at no time may the temperature in the kennel exceed 85 degrees completely ignores the fact that newborn puppies cannot maintain their own body temperature until after 10 to 14 days of age. Supplemental

radiant heat or heat lamps must be used to create an average air temperature between 91 and 96 degrees Fahrenheit during the first 10 to 14 days of a puppy's life. The requirements of this section would expose newborn puppies to harsher conditions than is appropriate and increase the risk and danger to those puppies.

4. Please note our comments on the previous page as they relate to the costs of achieving compliance with the new requirements as they relate to heating and air conditioning. When relative humidity outside the kennel nears 100% during a rain event, requiring the kennel to achieve relative humidity in the 40-60% range while requiring 8-20 air exchanges per hour is not only nearly impossible but also is excessively costly to the kennel operator.

5. Regarding the requirement in subsection (4) of this section we question the scientific source of the requirement that "ammonia levels be less than 10 ppm". How was this standard determined?

6. In subsection (7) we believe that it would be impossible to meet the requirements that particulate matter be maintained below 10 milligrams per meter cubed when the bedding provided for dogs is a potential source of particulates. Wood shavings and shredded paper are routinely used as bedding and healthy dogs are constantly moving their bedding.

7. In subsection (8) we believe that the requirement that "the kennel shall provide between 8-20 air changes per hour" is excessive and far exceeds the need for air changes. For the record, most regulatory laboratories of the Department of Agriculture, Penn State and the University of Pennsylvania probably do not meet this standard. This requirement, we believe, exceeds the requirement for BSL-3 laboratories which are the next to the highest level of bio-secure laboratories. Further, meeting this requirement would create drafts, which are prohibited under the Federal Animal Welfare Act. We recommend that this requirement not exceed three air exchanges per hour.

8. We believe that the requirements of subsection (9) are absurd since dogs may exhibit nearly any of these conditions for a variety of reasons having nothing to do with the conditions in the kennel. For example, diarrhea, bloody diarrhea, and vomiting may occur due to a change in diet or upset stomach or gastrointestinal irritation for any number of reasons. We submit that other mammals, including human beings, have these symptoms from time to time for a variety of reasons, which have nothing to do with the environment in which they live. The same is true for the other conditions or signs of illness or stress, which the proposed rulemaking states are "associated with poor ventilation". To impose penalties on kennel owners who have dogs that exhibit these conditions is unrealistic and excessively burdensome to the regulated community.

RESPONSES

1. The final-form regulations no longer sets a temperature cap of 86 degrees Fahrenheit, nor does it require a reduction in the ambient air temperature in the kennel housing facility.

Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

However, since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from numerous commentators, including the Independent Regulatory Review, the Honorable Senator Brubaker and the Honorable Members of the Pennsylvania House of Representatives.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

The Department can now regulate the four hour window because there is technology available to measure temperature and humidity levels in kennels on an hourly basis for up to 3 years at a time. This technology will be employed by the Department, as set forth in the final-form regulation.

In short, the Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and

scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

2. The final-form regulation does not require dogs to be removed when temperatures exceed 85 degrees Fahrenheit. The final-form regulation in fact allows a four hour window to meet the humidity and heat index levels established. In addition, the final-form regulation modifies the notification requirements related to a mechanical malfunction.

3. The final-form regulation does not set a temperature cap or require a reduction in the air temperature in the kennel housing facility, but instead sets humidity levels, based on heat index values, that must be achieved when the air temperature in a kennel housing facility rises above 85 degrees Fahrenheit.

However, based on this and other similar comments related to neonates, which suggested the temperature for neonates should never fall below 90 degrees Fahrenheit, the Department consulted with veterinarians. The consensus among veterinarians was that normal animal husbandry practices dictate that the mother provides the necessary body heat to sustain the neonates/puppies and that no exception should be made to the 85 humidity index, because such an exception would be detrimental to the adult mother dog. Therefore, no changes have been made and the kennel must maintain a heat index value of 85 or below. The Department notes, that the Federal Animal Welfare Act regulations make no such exception for neonates and the Federal Animal Welfare Act regulations, unlike these regulations, does set an upward temperature cap of 85 degrees Fahrenheit.

4. First of all, the final-form regulations no longer require 100% fresh air, but provide that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing facility.

With regard to the humidity standards established by the final-form regulations, the general standard of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

With regard to the humidity levels when temperatures are greater than 85 degrees Fahrenheit, the Department, with the assistance of consultations with the engineers listed above, Department and Canine Health Board veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on their feet. However, perspiring or panting in and of itself does not result in the cooling of

the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, swine or cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

The Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards.

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

5. With regard to ammonia levels specifically, the Department consulted with engineers and architects related to the ammonia levels established by the proposed regulation and with regard to the ability to measure ammonia levels. In addition, the Department consulted with veterinarians and animal scientists and did its own research

with regard to commonly accepted levels of ammonia in animal operations such as swine operations. The engineers and architects all believed that if kennels were properly ventilated and achieved the air circulation values established in the regulations, then ammonia levels should not be a problem in the kennel. The Act, however, requires the Department to establish the proper ammonia levels for dogs housed in kennels. Discussions with veterinarians and research done by veterinarians on the Canine Health Board affirm that ammonia levels of 20 part per million or higher will cause respiratory and eye irritation and problems in animals. The veterinarians suggested the levels be set at some point below 20 parts per million and the consensus was that a level of 15 parts per million would both account for proper animal health and welfare and would be measurable. Ammonia levels are measured in the swine industry and can be accurately measured at levels of 15 parts per million. The Department's research also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel. That Act establishes parameters that do not allow dogs in kennels to be housed in any primary enclosure that is more than 48 inches high for dogs under twelve weeks of age or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department believes ammonia measurements should be taken at the height of the dogs.

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

7. The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

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

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too

burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements. Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. Although 100% fresh air circulation is not prohibited by the final-form regulation, the change to the regulation was made after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive and difficult to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The ventilation standards now established in the final-form regulation are more easily measured and verified, continued to account for the health and safety of dogs housed in commercial kennels and require or allow kennel owners to increase or reduce the air circulation in a kennel based on the number of dogs housed in the kennel facility.

There are two general reasons behind these changes. First, CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on the capacity or CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will require and allow kennel owners to design their ventilation systems to have the total capacity required to assure circulation of the proper amount of air required by the regulations for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs housed or kept in the kennel facility. In other words, the system will be easier to design and less costly to operate. While still requiring the system to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility, it will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. This not only lowers operation costs, but sets a proper standard to assure dogs are not subjected to a circulation standard that is too strong or unable to be enforced. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

8. The language that appeared in subsection 28a.2 (9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress, has been substantially modified in the final-form regulations and is now subsection 28a.2(h) in the

final form regulation. First, based on discussions with animal scientists, at the Pennsylvania State University and Department and Canine Health Board veterinarians, the number and type of conditions in dogs that may denote poor ventilation has been reduced. Second, and significantly for purposes of authority, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that animal scientists and veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that are too high, as well as, insufficient air circulation or auxiliary ventilation. Paragraph (2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Section 28a.3. Lighting

Comments:

1. This section requires that "each kennel shall have a mix of natural and artificial light". This requirement exceeds the authority provided in the statute which states "Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light". We recommend that this section be amended to read the same as the statute.

2. Subsection (I) (ii), we believe, exceeds the Department's authority since such authority does not appear in the statute. It is unrealistic and economically burdensome to require retrofitting existing structures or requiring new structures to achieve the 8% of floor space requirement.

Subsection (2) Artificial Light, requires that daytime lighting must provide between 50-80 foot candles at standing shoulder level of the dogs. We have taken light readings in offices at the State Capitol and have found those readings to be in the 12-20 range. The same thing is true of the average home. We believe this requirement is in direct contradiction with the statute, which states "Primary enclosures must be placed so as to protect the dogs from excessive light."

Further, the economic impact for purchasing light fixtures and retrofitting electrical circuits plus the additional cost of electricity is prohibitive to a small business. We recommend that this requirement be changed to coincide with lighting conditions in typical homes or offices.

3. Subsection (2) (ii) should be changed to read "Night time artificial lighting must be 1-5 foot candles of lighting at standing shoulder level of the dogs" rather than the way it currently reads.

Subsection (2) (iv) as currently written does not adequately define the term "visible flicker". This term should either be defined or this subsection should be deleted.

RESPONSES

1. The section has been amended to read the same as the statute. The final-form regulation deletes the requirement for kennels to provide both artificial and natural light. The language now mirrors the language of the statute with regard to providing light through natural or artificial light. The final-form regulation sets general standards that apply to lighting whether provided by artificial or natural light and also sets forth standards that apply specifically to either natural or artificially provided light. The final-form regulation does require some natural lighting source in kennels that were provided an exemption from outdoor exercise. It requires the light to reach each dog, but does not require the window or skylight to be directly over or in front of the primary enclosure. The Department agrees, from its research into the heat index that such exposure may not only violate the provisions of the lighting section related to "excessive light", but would run the risk of increasing temperatures – on a hot day – within the primary enclosure to levels that would be detrimental to the dogs' health. However, research done by the Canine Health Board indicates the exposure to natural light is vital to the health and welfare of dogs. The need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight. In addition, this requirement is congruent with the requirement that kennel buildings have operational windows, doors and other openings that can be opened in the event of a mechanical malfunction of the ventilation equipment.

2. First, the requirement that 8% of the floor space be utilized to provide natural light has been removed from the final-form regulation.

Second, the lighting levels in the regulation are established because of and in accordance with the requirements of the Act which states, "Housing facilities for dogs must be lighted well enough to perform routine inspection and cleaning of the facility and observation of the dogs...and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals..." (3 P.S. § 459-207(h)(8)). This language mirrors the language of the Federal Animal Welfare Regulations (9 CFR § 3.2(c)).

However, as noted in previous responses, the level of light that must be provided has been modified in the final-form regulation. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor

the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues, as required by section 207(h)(8) of the Dog Law. The NIH standards are attached to this document as Exhibit D.

Finally, the operation of the lighting should not add any additional cost, since kennels are already required, by the Department's current regulations and USDA regulations to provide a diurnal lighting cycle and enough light to allow for observation of the dogs and normal animal husbandry practices. In fact, the Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, "The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart..." (9 CFR § 3.1(d)) and "Indoor housing facilities for dogs...must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs...and provide sufficient illumination to aid in maintaining food housekeeping practices, adequate cleaning, and the well-being of the animals" (9 CFR § 3.2(c)). The Dog Law sets forth those same standards at section 207(h)(8) (3 P.S. § 459-207(h)(8)). The requirement to and cost of providing adequate lighting is actually established in the Act itself. The regulations merely mirror that language and then set forth a level of lighting as required by the Act.

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

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

Second, the term "visible flicker" has been removed from the final-form regulation. The Department has modified the language of what was subsection 28a.3 (2)(iv) of the proposed regulation, in a manner to better clarify its intent. The term "visible flicker" is no longer set forth in the final-form regulation. The modified language appears in subsection 28a.7 (b)(2)(ii) of the final-form regulation. The focus is on the

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

Section 28a.4. Flooring

Comments:

1. In Subsection (I) we believe that the addition of solid flooring increases the risk to the dogs of an unsanitary flooring environment. We recommend that this section be revised to eliminate the risk of an unsanitary condition for the animals.
2. In Subsection (2) we believe that it will be impossible to maintain a drain that is free of debris because dogs will continually track bedding particles and other materials to the drain area. We recommend that this problem be addressed and this subsection revised accordingly.
3. The standards established in Subsection (4) exceed those found in most biosecurity laboratories operated by the Department of Agriculture and its academic partners at Penn State and the University of Pennsylvania. This subsection should be revised to address these exorbitant and onerous standards.
4. In Subsection (5) the appropriate sources of the "latest edition of applicable codes" should be identified to properly clarify which codes this section is alluding to.
5. We believe that the standards established in Subsection (7) will be impossible to attain. When kennel owners clean the flooring in accordance with 207 (h)(14) of the statute, the floor condition may immediately be impacted by the urination and defecation of the dogs and thus not meet the standards for microbial assessment established in this subsection. We recommend that the potential for this condition to occur be addressed and this subsection be rewritten.
6. Regarding Subsections (6) and (8) we believe that the standards established in these two sections may be in conflict with one another. We recommend that this potential be eliminated and these two subsections be rewritten accordingly.

RESPONSES

1. The Department first points out that solid flooring is not required, but is only an option available to the kennel owner. So long as the solid flooring meets the criteria of section 207(i)(3)(i) of the Act and the additional flooring requirements of the regulations, as well as, the approval of the Canine Health Board, it may be utilized.

Second, the Department disagrees that solid flooring is inherently unsanitary. There is no evidence to suggest that such a contention has any merit. Boarding kennels, humane society and other non-profit rescue kennels, as well as, standard breeding kennels currently house dogs on solid flooring with no ill effects. The commentator expresses a concern for sanitation. Solid flooring can be kept clean and sanitary as witnessed by a large number of kennels across the Commonwealth that currently utilize solid flooring in their kennels.

2. The Canine Health Board and the Department in promulgating the regulation, is under a duty to assure any alternative flooring established for alternative flooring would be based on animal husbandry practices that account for the welfare of dogs housed in commercial kennels (3 P.S. § 459-221(f)). The standards established in the proposed regulations and again set forth in the final-form regulations effectuate and carry out that duty and authority. Requiring that drains be provided to eliminate waste and wash water to name a few and that those drains be properly functioning is certainly within that very duty. The language of the final-form regulation has been modified for clarity purposes. It is also fully consistent with the standards established by section 3.1(f) of the Animal Welfare Act (9 CFR § 3.1(f)).

3. What was subsection 28a.4(4) of the proposed regulations (now 28a.8(c)(3) of the final-form regulations) has been revised in the final-form regulation to add clarity and objectivity and so as to not absolutely eliminate a particular substance. However, the basic animal welfare requirements – that the flooring material when exposed to a heat source can not rise to temperatures that would be harmful to the dog – has been kept in place. It is a reasonable standard that should already be part of any kennel owners consideration of the very surface upon which their dogs are housed.

4. All language referring to the “latest edition of applicable codes” has been removed from the final-form regulation.

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

6. The two subsections comment on, have been rewritten in the final-form regulation and there is no conflict in the language.

General Comments

Comment: Additional Input

We recommend that the Department utilize additional expertise readily available from our land grant university and the animal scientists at that institution, as it works with the Canine Health Board to revise the regulations. The regulations as currently written illustrate the absence of input from animal scientists and agricultural engineers and therefore lack reasonable and realistic standards that can be achieved by the regulated industry. The costs to the regulated industry to meet the standards in the proposed rulemaking as currently written will essentially eliminate this important small business industry from Pennsylvania and the agricultural community.

RESPONSE

As set forth in previous responses, in redrafting the final-form regulations the Department did its own additional research and consulted animal scientists and an engineer from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, an AKC Senior Field AKC Representative and Canine Health Board and Department veterinarians. The consultations included verification that the ventilation, auxiliary ventilation, ammonia and lighting level and flooring ranges and standards established were attainable, based on current practices, scientific information and/or animal husbandry practices and would account for the welfare of the dogs. The consultations also resulted in regulations that decreased the cost of compliance and set more objective, attainable and verifiable standards.

Comment: Cost of Regulation

In summary, it is also important to note that the requirements in the proposed rulemaking will force these small businesses to become large businesses and as a result may exceed what many local governments in Pennsylvania will consider as small businesses. This industry has always been considered as a small business and it may disappear if these rules and regulations are not modified. The costs associated with meeting these requirements will put the commercial breeding industry in Pennsylvania at an economic disadvantage with other states. The result will be the loss of Pennsylvania businesses and dogs will be coming from other states into Pennsylvania to meet the need.

RESPONSE

The Independent Regulatory Review Commission (IRRC) must decide whether the final-form regulations are in the best interest of the general public. In doing so the IRRC must consider all the costs associated with the regulation and can certainly consider costs associated with not properly regulating the industry. Regulations can impose costs on the regulated community and others. In fact, most if not all regulations do impose costs. But, the costs must be accounted for and justified under the duty imposed by the statute. The Department in the final-form regulation has worked diligently to assure the regulation is within the parameters of the statutory authority granted by the Act, is objective in nature, sets forth measurable standards and imposes reasonable standards and costs to accomplish the duty imposed on the Department by the

statute. The Department has also assured, through consultation with experts in the field, such as the engineers, animal scientists and veterinarians, that the final-form regulations provide for design options and are workable and able to be implemented, while at the same time accounting for the health and welfare of the dogs housed in commercial kennel housing facilities.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels

II. PENNSYLVANIA FARM BUREAU- Comments-General and Specific

Commentator:

Submitted by: John Bell, Esq.
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Pennsylvania Farm Bureau
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Background:

Pennsylvania Farm Bureau submits the following comments to the Department's proposed rulemaking governing minimum standards of ventilation, lighting and flooring for dog kennel operations regulated as commercial kennels under Pennsylvania's Dog Law, as amended by Act 119 of 2008. The provisions of Act 119 direct the Department to establish minimum standards for ventilation, lighting and flooring for commercial kennels. Pennsylvania Farm Bureau is a statewide farm organization with a membership of nearly 47,000 farm and rural families in the Commonwealth

Many farm families who are members of Farm Bureau operate commercial kennels as a means of earning the family's principal livelihood or as a means of providing the family with needed supplemental income to sustain their farms. Without this opportunity to operate and receive income from operating commercial kennels, these farm families will struggle to viably maintain their farms. This is especially true in the wake of the extreme economic downturn, in which traditional farm commodity prices paid to farmers, such as milk prices, have been slashed to levels where farmers are now operating at a severe economic loss.

Comment: General – Department's Duty

We are disappointed with the Department's failure in its proposed rulemaking to make any meaningful changes to the standards proposed in the temporary guidelines that were developed and issued by the Canine Health Board.' Although the Department is directed in Act 119 to promulgate regulations after CHB's development of temporary guidelines, Act 119 does not require the Department to adopt or substantially endorse the standards that the CHB established temporarily for commercial kennel.

We had hoped that the Department would make a conscious effort than the CHB did to understand that the proposed standards will establish unfair and unworkable mandates for kennel operations, will likely have repercussions beyond the canine industry, and may have serious adverse impacts on agriculture and the future existence of numerous family farms in the Commonwealth. Unfortunately, so far, the Department in its proposed rulemaking has decided to rubber stamp the CHB's unworkable guidelines and the seriously flawed process of fact-finding and decision-making in which the guidelines are based. Because of this, many of the same criticisms we offered to the CHB in February will again be restated in these comments.

We recognize that some revisions in the Dog Law and in standards applicable to regulated kennel operations were needed to deter the seriously irresponsible conduct of some commercial kennel operators in the industry. We do not condone the inhumane treatment of dogs by commercial kennel operators. We particularly denounce the type of

substandard care in kennels sporadically reported in newspaper accounts. Such conduct should have been violative of the Dog Law, and was in fact violative of the Dog Law even before the enactment of Act 119's statutory amendments.

But fundamental fairness, as well as statutory and constitutional principles, also requires that standards to be established by the Board not be arbitrary or based on what an individual may subjectively believe to be "good" for the animals. Animal husbandry standards should be based on sound and objective scientific analysis, and should provide a consistent and definitive way for those subject to regulations to measure and determine they are complying or not complying with the standards. Standards that essentially make it impossible for responsible commercial kennel operators to feasibly comply or to reasonably determine whether or not they are in compliance are not acceptable.

RESPONSE

The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the general public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted architects and engineers that design and build kennel housing facilities, a regulated community group, an AKC Senior Kennel Field Representative, animal scientists from the Pennsylvania State University and Department and Canine Health Board veterinarians, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations.

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

sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels

Comments: General – Flaws in the Regulation

The Department's proposed rulemaking suffers from the same afflictions as many of the mandates adopted by the CHB, including:

1. Failure to meet basic statutory and constitutional obligations provided to persons who will be subject to the regulations' standards;
2. Establishment of standards that are not supportable by reasonable or verifiable scientific study or empirical justification;
3. Failure to make a reasonable attempt to verify or quantify the accuracy or reliability of the few sources of information that were heavily relied upon as the supporting basis for the standards proposed;
4. Virtually no effort to analyze the practical ability or feasibility of regulated persons to comply with the standards proposed; and
5. Extreme failure in the proposed standards to establish any clearly defined method to be applied by enforcement personnel in determining "compliance" with standards which will avoid arbitrariness in determinations of compliance and ensure the standards will be measured and enforced in an objective and consistent manner.

RESPONSE

1.-5. The assertions made in the comment are very general nature and point to no specific provisions within the proposed regulations. However, in drafting and reformulating the final-form regulations, the Department did go back to sources utilized by the Canine Health Board and to literature utilized by the Canine Health Board for the purpose of asking questions and verifying information. Some of the information and research was utilized and some of the information and research was set aside. In addition, the Department consulted engineers, architects and a regulated group to request input. The Department consulted with engineers from the private sector (Learned Design and Paragon Engineering Services) and an engineer from the Pennsylvania State University, as well as animal scientists from the Pennsylvania State University and Department veterinarians and also did additional research of its own so that it had a better understanding of ventilation standards and measurement criteria, humidity, ammonia and lighting levels and requirements, as well as, the interrelationship and interaction between these ventilation, humidity, temperature and auxiliary ventilation and their relationship to animal health and welfare. The majority of the questions asked and issues raised and reviewed were based on the comments received from the general public, the General Assembly and the Independent Regulatory Review Commission. In addition, the Department reviewed the statutory authority behind the criteria established in the proposed regulation.

As a result of the information gained, the Department has made substantial and substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act, are attainable, comport with science, animal husbandry practices and expertise and experience of people in the field of kennel design and dog health issues and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels.

The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In

doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

Comment: General - Impossible Standards

We firmly believe that if the proposed rulemaking is adopted without serious change, the standards to be established will make it practically impossible for any responsible commercial kennel operator to meet, thereby prompting the elimination of commercial kennel operations altogether in the Commonwealth. The irony of such a result would be the proliferation of commercial dog breeding operations in states with far fewer regulatory standards than Pennsylvania - a scenario that is likely to seriously hurt the "wellbeing" of dogs in the long run.

RESPONSE

As set forth more specifically above, the final-form regulation has undergone significant and substantive changes based on expert input and analysis. Engineers that design and build kennels provided input with regard to the proper ventilation, auxiliary ventilation, humidity and ammonia level standards and assured the standards established by the final-form regulation were practical, attainable, objective and measurable. The Department received input from animal scientists and veterinarians regarding animal husbandry practices, research and scientific studies (where available) and utilized and integrated that information into the final-form regulation.

The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable, based on the expert input set forth above, are attainable and verifiable and will be enforceable.

Comment: General – Abuse of Discretion

In development of its temporary guidelines, it was readily apparent that the majority of the members of the CHB believed that the "well-being" of the dogs was the only legal consideration to be made. Throughout the process, several CHB members continuously and exclusively referenced the "well-being" of kennel-housed dogs as the sole purpose for establishment of its temporary guidelines. Such a belief by the CHB majority that "wellbeing" of dogs is the CHB's sole consideration constitutes an abuse of the CHB's discretionary authority. Action by the Department to blindly ratify the CHB's standards would equally constitute an abuse of the Department's discretionary authority. Statutory provisions and case law clearly require regulatory agencies to make a legitimate effort to address reasonable concerns of those persons to be regulated in promulgation of regulatory standards, and to develop and promulgate regulatory standards that are not unduly vague and provide a genuine opportunity for the regulated community to comply.

RESPONSE

The Department, during the actual regulatory review process and in the promulgation of the final-form regulations, has made a legitimate effort to address the concerns of all commentators, including the persons to be regulated and has made

substantive changes to the proposed regulations, so that the final-form regulation provides standards that are not unduly vague and provide a genuine opportunity for the regulated community to comply.

The Department followed all of the mandates of the Act and the regulatory process in promulgating the regulation. As stated previously, the Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the general public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted architects and engineers that design and build kennel housing facilities, a regulated community group, an AKC Senior Kennel Field Representative, animal scientists from the Pennsylvania State University and Department and Canine Health Board veterinarians, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations.

Again, in drafting and reformulating the final-form regulations, the Department did go back to sources utilized by the Canine Health Board and to literature utilized by the Canine Health Board for the purpose of asking questions and verifying information. Some of the information and research was utilized and some of the information and research was set aside. In addition, the Department consulted engineers, architects and a regulated group to request input. The Department consulted with engineers from the private sector and an engineer from the Pennsylvania State University, as well as animal scientists from the Pennsylvania State University and Department veterinarians and also did additional research of its own so that it had a better understanding of ventilation standards and measurement criteria, humidity, ammonia and lighting levels and requirements, as well as, the interrelationship and interaction between these ventilation, humidity, temperature and auxiliary ventilation and their relationship to animal health and welfare. The majority of the questions asked and issue raised and reviewed were based on the comments received from the general public, the General Assembly and the Independent Regulatory Review Commission. In addition, the Department reviewed the statutory authority behind the criteria established in the proposed regulation.

Based on all the input and expert advice, the Department made substantial and substantive changes to the final-form regulation. The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act, establishes objective, measurable and attainable standards and carries out the duty to assure that ventilation,

auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Regulatory Review Act Standards

Section 5.1 of the state Regulatory Review Act specifically requires governmental agencies in development of regulatory standards to consider and demonstrate consideration of:

- The need for the regulation;
- The costs that the agency's regulatory standards will cause the private sector to bear;

Any special provisions that meet the particular needs of small businesses and farmers;

Alternative and less-burdensome regulatory measures that the agency considered but rejected;

Development of the least burdensome regulation alternative.

And our courts have also recognized where the Commonwealth exercises regulatory power that is not reasonably necessary to accomplish a public purpose or that is unduly oppressive, such exercise of power is invalid. The Commonwealth may not, under the guise of protecting the public interests, arbitrarily interfere with private business or impose unusual and unnecessary restrictions upon lawful occupations. See, *Department of Environmental Resources v. Pennsylvania Power Company*, 490 Pa. 399, 416 A.2d 995 (1980), citing *Nebbia v. New York*, 291 U.S. 502 (1934).

Nothing on the record shows any effort made by the CHB to identify or consider any feasible alternatives to the standards it adopted in its temporary guidelines or shows the regulatory scheme that the CHB did adopt is not unduly oppressive or arbitrary or represents the least burdensome means to accomplish the Dog Law's purposes.

RESPONSE

The regulatory analysis form that accompanies the final-form regulation addresses the issue set forth in this comment. However, the Department will attempt to address the comments in this document.

The Pennsylvania General Assembly, by nearly unanimously passing the amendments to the Dog Law established in Act 119 of 2008, established the duty and necessity to regulate ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels. The Legislature, in sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, imposed the authority and the absolute duty on the Canine Health Board to develop and the Department to promulgate such regulations.

The Department has set forth and considered the costs to the regulated community and the private sector to the best of its ability. However, the mere existence of a cost to the regulated community or private sector does not mean the regulations themselves can not or should not be promulgated. The Independent Regulatory Review Commission

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

The statute does not provide any special exception and the Department believes that when promulgating regulations that are to set health and welfare standards for dogs housed in commercial kennels there is no rational basis for promulgating disparate or separate regulatory standards for small commercial kennels and large commercial kennels. The standards set forth in the final-form regulation establish basic and minimum standards for ventilation, auxiliary ventilation, humidity, ammonia, lighting and additional flooring options that account for the welfare of dogs housed in commercial kennels. There are no lower standards that would be acceptable based on the size or make-up of the business entity and the Department does not think it prudent to set higher standards for kennels that do not fall within a small business definition. In addition, there is no provision in the Dog Law that would allow the Department to assist commercial kennels that fall within a small business definition by providing grants or loans. Dog kennels are not considered normal agricultural operation and therefore do not fall within the category of a farm.

Comments: General – Cost of Regulation

Kennel operators will not only face extreme costs in construction and reconstruction of buildings and structures and in designing, purchasing and installing coordinated climate control systems for these facilities. They will also face oppressive energy costs in operating the climate control systems within these facilities. The guidelines standards for atmospheric control, together with the Dog Law's requirements for "unfettered access" of dogs within these facilities to the outside, will severely compromise the ability of commercial kennel operators to devise or operate systems that manage temperature, humidity and air exchange with any feasible degree of cost-efficiency. Kennel operators will not be able design or operate cost-efficient systems in kennel buildings that will require multitude of openings in the building walls to provide outside access for dogs.

The CHB should have been able, and the Department should have been able by now, to get at least some understanding of the degree of economic hardship that the guidelines' standards would impose by reviewing cost-estimates submitted by commercial and noncommercial kennel operators in their comments to the Department's proposed rulemaking of December 2006 (later rescinded) to augment regulatory kennel standards. But the process leading to the CHB's adoption of guidelines, which the Department is suggesting in its proposed rulemaking to be finally adopted without

change, is totally devoid of analysis or consideration of these comments or any other quantified analysis of adverse economic impacts likely to result from the regulatory standards to be permanently established.

RESPONSE

The Department considered the concerns expressed by this commentator related to the design and operational costs to commercial kennels when consulting with engineers and architects that design and build (including retrofitting) kennel housing facilities. The engineers took the unfettered access to outdoor exercise into consideration when providing input to the Department, verifying the final-form regulatory requirements could be attained and implemented and in providing cost estimates that are contained in the regulatory analysis form accompanying the final-form regulation.

In addition, the final-form regulation makes substantial and substantive changes, such as, not requiring air conditioning or setting an ambient air temperature cap, changing the ventilation standards to cubic feet per minute per dog which allows air flow to be based on the volume of the kennel building and the number of dogs, allowing for re-circulation of air as opposed to 100% fresh air, allowing a four hour window to come into compliance with the humidity and heat index standards, setting a top heat index standard during that four hour window which is the minimum standard to allow for survivability and safety of the dogs and allowing a wide range of options to attain the standards. All of these changes reduce the costs, make system design more flexible, provide more objective standards and according to the engineers consulted are attainable. The kennel owner has the flexibility to decide what if any other changes he would like to make to the kennel building to increase the efficiency of the ventilation system and humidity controls.

The second part of the comment is without merit regarding the Department's actions. The regulatory review process does not allow, nor does the Department suggest, that the proposed rules establish the final promulgated standards. The Department gained control of the promulgation process, once the proposed regulations were published and has responded in this document and by making substantial and substantive changes in the final-form regulation to every comment and concern expressed by all commentators.

Comments: Ventilation Standards – Section 28a.2

1. We particularly object to the regulatory posture in proposed regulation 28a.2 to require commercial kennel operators to separately meet each condition of temperature, humidity and air flow prescribed. During the period in which the CHB's temporary guidelines were being developed, several veterinarians serving on the CHB offered supportable evidence of scientific study of other species of animals that animals' climate control needs can be met through a holistic consideration of conditions of temperature, humidity and air flow together, even though one of these conditions was not individually meet the prescribed standard for that condition. But this evidence was summarily rejected by the CHB majority, without any scientific analysis, meaningful consideration or legitimate explanation.

2. The CHB's flat and unexplained rejection of the information and evidence that some CHB members tried to bring to the table exemplifies the arbitrariness that the CHB majority applied in the consideration and development of its temporary guidelines. By

blindly adopting CHB's guidelines without meaningful consideration and analysis of the empirical evidence that the knowledgeable and experienced veterinarians on the CHB tried to bring forth in development of regulatory standards, the Department would be equally culpable of acting arbitrarily and abusing its regulatory discretion.

3. We also strongly object to the rulemaking's proposed establishment in regulation 28a.2 of an absolute maximum temperature of 85 degrees for kennels, without exception. While the proposed rulemaking has made some cosmetic changes to the language adopted by the CHB in its temporary guidelines, the practical and legal effect of the standard will be no different from the standard established in the guidelines

It is clear from amendments made by the General Assembly to the version of House Bill 2525 originally introduced that Act 119 was not intended by the legislature to establish a static maximum temperature of 85 degrees for commercial kennels. The enacted version of House Bill 2525 (Printer's Number 4524) amended the bill's original provision, which did prescribe an absolute maximum of 85 degrees. The amended version of Section 207(h)(6) enacted by the legislature in Act 119 provides that the ambient temperature in commercial kennel housing facilities could not be above 85 unless auxiliary ventilation is provided. Furthermore, the amended version of Section 207(h)(7) specifically directed and required the CHB to establish standards for auxiliary ventilation when the ambient temperature in the housing facility is 85 degrees or higher. The common meaning and understanding of these provisions clearly establishes that kennel areas may operate at temperatures above 85 degrees with proper auxiliary ventilation.

Especially in light of the amendments to Sections 207(h)(6) and 207(h)(7) made by the General Assembly in the course of House Bill 2525's legislative process, no one can reasonably read these provisions in any other way than to conditionally allow the ambient temperature of a facility to be above 85 degrees if auxiliary ventilation is being used. The Department's establishment an unequivocal and absolute standard of 85 degrees and disregard of the General Assembly's clear statutory direction to provide and establish a standard for conditional allowance of housing facilities to be operated at temperatures above 85 degrees upon use of auxiliary ventilation systems is an abuse of the Department's discretionary authority.

4. We also take serious issue with proposed provisions for "measurement" of whether a commercial kennel is in compliance with the guidelines' prescribed minimum standards. There was no conscious effort made by the CHB, and apparently none was made by the Department in its proposed rulemaking, to identify any empirical or historical basis on which the "measurement" formula is based. Neither CHB's guidelines nor the Department's proposed regulations attempted to identify, standardize or regulate the calibration of devices that Dog Law wardens will use, or that regulated kennel operators may use, in determining whether kennel facilities are meeting or failing to meet the minimum atmospheric and other standards prescribed in the guidelines. Furthermore, no effort was made to consider or adopt safe harbor provisions which would provide commercial kennel operators with some assurance that they will be considered to be in compliance upon the performance and maintenance of specified climate control measures. And Dog Law wardens will be able apply a multitude of methods to "measure" compliance, anyone of which can individually doom a kennel operator who is making a

responsible effort to comply and whom the overwhelming majority of reasonably minded persons would conclude should be treated as being in compliance. The measure formula itself is arbitrary, and the lack of clarity in the measurement provisions of the guidelines will inherently lead to inconsistent and arbitrary application among enforcement officers, and will provide ample opportunity for abuse of enforcement authority.

5. We expect other organizations to describe in greater detail the gravity of economic hardship that responsible commercial kennel operators will face in complying with the standards prescribed in the guidelines. But we would offer comments we received from a reputable and responsible kennel operator who described in detail the impacts the CHB guidelines are having and proposed rulemaking will have on his kennel operation

His insightful comments noted, among other things, the impracticality (and we would describe as impossibility) in complying with the rulemaking's proposed carbon monoxide standard. Under this standard, a kennel would be required to be maintained "below detectable levels" of carbon monoxide. Yet the atmosphere in the county where the operator is located by its very nature has "detectable" levels of carbon monoxide. Even under optimum conditions of climate control, the operator will need to further purify the air within kennel areas to meet this "below detectable level" standard. But with the additional requirement imposed under Act 119 for each housing area within a kennel to have unfettered access to the outside, it is practically impossible for a responsible kennel operator providing dogs with "unfettered access" to fully comply at all times with the carbon monoxide standard in any area where carbon monoxide exists in the atmosphere. And it is our understanding that the areas where detectable levels of carbon monoxide normally exist in the atmosphere is far more the rule than the exception.

6. He also noted the impracticality with the guidelines' and proposed rulemaking's standard for ammonia. Levels of ammonia will be required to be at all times below 10 parts per million. But kennels are most often located on farms or in rural areas in very close proximity to farms, where levels of ammonia commonly exist because of storage and use of manure as fertilizer. Kennel owners have no real control over what neighboring farmers do and how they operate their farms. When a neighboring farmer spreads manure on land or is storing manure in large quantities in close proximity, chances are high that the levels of ammonia will be exceeded. As with the carbon monoxide standard, kennel operators will need to design air control systems in housing structures that reduce ammonia levels. But the additional need to provide a multitude of openings in these structures in order to meet Act 119's requirement for "unfettered access" of dogs to the outside makes nearly impossible and definitely infeasible for an air system to be designed that will fully comply with this standard.

7. He also offered some significant insights with respect to the guidelines' and proposed rulemaking's heat, humidity and air flow standards. He estimates that the "most economical" design of a structure housing approximately 50 dogs with a heating, cooling and air flow system having a chance to comply with the proposed rule making's 8-to-20-exchanges-per-hour requirement and Act 119's "unfettered access" requirement would add nearly \$200,000 to the total cost of a more commonly designed structure that provides fewer rates of air exchange, bringing the total cost of this structure to well over \$1 million. In addition, this structure would need to operate heating and cooling systems

at settings of 105 degrees F during much of the winter and at minus 10 degrees F during much of the summer in order to come close to complying with the guidelines' and proposed rulemaking's temperature requirements. The system would also have to include dehumidifiers to significantly reduce humidity during summer periods to meet the below 50% humidity requirement and humidifiers to significantly add humidity during winter periods to meet the 40%-60% humidity requirement that the guidelines and proposed rulemaking would impose.

RESPONSES

1. The Department in its research and consultations came to recognize the link between temperature, humidity and ventilation and the absolute importance of regulating those parameters properly and as an entire system. The response to the previous comments sets forth in detail the research and science behind the Department's humidity and ventilation requirements in the final-form regulation and the fact the Department realizes that without the ability to set a specific air temperature cap, it must address ventilation and humidity control in a manner that will protect the health of the dogs housed in commercial kennels. The final-form regulation does provide the proper standards – through ventilation and humidity ranges and controls - to assure the health and welfare of the dogs housed in commercial kennels.

A mechanical ventilation system is still required in order to meet the ventilation standards of the regulations. As set forth in previous responses, to the Independent Regulatory Review Commission for instance, it was determined by the engineers and architects consulted, that the proper rates of ventilation could not be achieved or properly maintained without a mechanical means of air circulation. A holistic approach or one that incorporates kennel housing facility location and natural wind or convection will not work and will not achieve the levels of ventilation necessary to assure the welfare of the dogs housed in commercial kennel housing facilities. Changes in wind direction and speed and inverse convection to name a few problems cited by the engineers, will lead to stagnant air and no air flow or circulation. There is no other technology that the engineers or architects are aware of, or this Department for that matter, that will achieve or assure the appropriate ventilation rates. If a new technology becomes available the Department can amend the regulation to add that technology. Until then, in order to properly clarify the standards established by the regulation, stating that a mechanical ventilation system must be utilized is necessary.

2. As evidenced by the responses to comments received and the substantial and substantive changes to the final-form regulation, the Department did not blindly, arbitrarily or capriciously adopt any standard set forth in the Canine Health Board Guidelines or the proposed regulations. The Department consulted engineers (Learned Design, Paragon Engineering Services, Pennsylvania State University), animal scientists from the Pennsylvania State University, had meetings with members of the Canine Health Board and conferred with Department veterinarians to address ventilation, auxiliary ventilation, humidity and ammonia level and lighting standards. The Department did its own research and eventually had the engineers verify that the standards established were congruent, attainable, minimal, objective, measurable and comported with animal husbandry practices and science and design incorporated in the kennel buildings they design, build and retrofit.

3. The final-form regulations no longer sets a temperature cap of 86 degrees Fahrenheit, nor does it require a reduction in the ambient air temperature in the kennel housing facility.

Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

However, since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from numerous commentators, including the Independent Regulatory Review, the Honorable Senator Brubaker and the Honorable Members of the Pennsylvania House of Representatives.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

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

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

With regard to ventilation standards, not only does the final-form regulation do away with air exchanges per hour and change to a more objective and defined standard of cubic feet per minute per dog, but the final-form regulation no longer requires 100% fresh air exchange. It now provides that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing facility. These standards will make the system easier to design and install, easier to assure compliance and less expensive to operate because a majority of the air can be re-circulated and the amount of air circulation is based on kennel volume and number of dogs.

In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The

consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advice and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

4. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

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

As set forth previously, the final-form regulation requires written certification under the signature and seal of a professional engineer verifying the engineer has inspected the ventilation system and that it meets all of the requirements of the regulations, including auxiliary ventilation and humidity standards. This change was made in response to comments that the ventilation standards were too subjective, too burdensome to continually assure compliance, could result in different readings depending on the equipment utilized or the place in the kennel the readings were taken and were too expensive to monitor. The certification is a one time cost, that according to the engineers consulted, is part of the price quoted for a project. The engineers would already certify a system to comply with applicable regulations and code requirements.

Therefore, the change allows for an objective standard, does not increase the cost of the regulation and in fact decreases equipment, monitoring and training costs and allows for a professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. The provisions of section 28.2(8)(i)(A)(I-V) of the proposed regulations have been either eliminated or extensively modified in the final-form regulation. The provisions were modified to account for the information needed to verify and calculate the cubic feet per minute (CFM) per dog standard of the final-form regulation, which replaced the air exchanges per hour standard. The information requested is based on consultations with and approved by the kennel housing facility engineers consulted by the Department.

In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility.

The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to

measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

5. The final-form regulation no longer establishes a carbon monoxide level or standard. The final-form regulation only requires that kennel housing facilities utilizing any carbon monoxide emitting device, functioning carbon monoxide detectors shall be installed and maintained in each room or area of the kennel and kennel housing facility – excluding outdoor runs - in which dogs are housed, kept or present. The carbon monoxide detectors shall meet or exceed the UL standard 2034 or the IAS 6-96 standard, or its successor standards.

6. The ammonia level standards have been changed in the final-form regulation. The Department consulted with engineers and architects related to the ammonia levels established by the proposed regulation and with regard to the ability to measure ammonia levels. In addition, the Department consulted with veterinarians and animal scientists and did its own research with regard to commonly accepted levels of ammonia in animal operations such as swine operations. The engineers and architects all believed that if kennels were properly ventilated and achieved the air circulation values established in the regulations, then ammonia levels should not be a problem in the kennel. The Act, however, requires the Department to establish the proper ammonia levels for dogs housed in kennels. Discussions with veterinarians and research done by veterinarians on the Canine Health Board affirm that ammonia levels of 20 part per million or higher will cause respiratory and eye irritation and problems in animals. The veterinarians suggested the levels be set at some point below 20 parts per million and the consensus was that a level of 15 parts per million would both account for proper animal health and welfare and would be measurable. Ammonia levels are measured in the swine industry and can be accurately measured at levels of 15 parts per million. The Department's research also indicated that ammonia is a heavy gas and therefore should be measured near the floor of the kennel. That Act establishes parameters that do not allow dogs in kennels to be housed in any primary enclosure that is more than 48 inches high for dogs under twelve weeks of age or more than 30 inches high for dogs over twelve weeks of age. Therefore, the Department believes ammonia measurements should be taken at the height of the dogs.

In addition, the final-form regulation no longer requires 100% fresh air exchange. With regard to neighboring farms and ammonia levels, the engineers did not believe it should present a problem. The ventilation requirements, if complied with, will alleviate any ammonia level issues.

7. The Department consulted the engineers at Learned Design and Paragon Engineering Services regarding the assertions made in this comment. The engineers stated that even under the proposed regulations a system could have been designed that would have met the requirement and would not have cost more than twenty-five dollars per square foot (\$25/square foot). The heating and cooling systems could have been operated at normal rates and a household system could have been employed to meet the requirements. In addition, the heating and cooling system, by its very design accounts for

humidity and humidity rates could have been met. The engineers did believe the humidity levels for temperatures between 50-85 degrees Fahrenheit should be in the 30-70% range.

The cost estimates to design, install and operate a system meeting all the requirements of the final-form regulation is set forth in the regulatory analysis form that accompanies the final-form regulation.

Comment: Veterinary – Air Flow Standards

We have also heard anecdotally from what we consider to be reputable and experienced veterinarians. Ironically, these veterinarians have offered opinions that the objectives of “health and well-being of dogs” in commercial kennels will not be achieved but will be diminished by the excessive air flow and other atmospheric requirements the guidelines and proposed rulemaking will impose.

RESPONSE

The Department has already set forth the additional research and consultations it undertook in responding to comments and drafting the final-form regulation. The ventilation standards have been extensively revised. The ventilation standards of 100 cubic feet per minute per dog and are based on systems already implemented in kennels designed by the engineers consulted and animal husbandry and welfare practices. The standards are consistent with standards suggested by animal scientists and veterinarians consulted by the Department.

Comment: General – Conclusion/Summary

Anyone who has had any experience with Pennsylvania Farm Bureau knows that we are an organization that does not blatantly reject legislative or regulatory proposals, even those that may place additional responsibilities on our industry. Some burdens that legislation or regulations attempt to impose make reasonable sense, and in the long run, benefit the industry by strengthening public confidence in the quality and propriety of the production practices and the resulting product. And we consistently offer constructive criticism of proposed regulatory standards and suggest solutions to concerns we have on regulations to accomplish legitimate public goals in an effective and feasible manner.

But with respect to the proposed rulemaking, it is impossible for us to begin to offer constructive criticism. Like the regulatory embodiment created by the CHB in its temporary guidelines, the Department’s proposed rulemaking utterly fails to identify which empirical data, study or analysis - or any empirical data, study or analysis for that matter - that materially forms the basis and justification for the standards proposed. From the Department’s continued and pervasive silence in identifying the whats and whys of the decisions leading to the prescribed regulatory standards, we can only conclude - as we did with the CHB’s actions - that the Department either had no legitimate basis or is totally indifferent toward providing any justification for the regulatory standards devised.

The Department in its proposed rulemaking has singled out commercial kennels, is attempting to establish atmospheric standards for dogs that far exceed that standards that are required to be provided to humans, has failed to seek or provide meaningful input from those persons who will be directly affected, and is attempting to establish standards that knowledgeable and reputable professionals have serious questions of validity and

effectiveness. The totality of the Department's actions and inactions strongly supports our belief and conclusion that the proposed rulemaking violates the obligations that rule making bodies are legally required to meet in promulgation of regulatory standards.

RESPONSE

The Department has engaged experts in the field of kennel housing facility engineering and design, animal scientists, veterinarians from the Department and the Canine Health Board, met with members of the Pennsylvania Professional Dog Breeders Association and an AKC Senior Field Representative, reviewed research and minutes of the Canine Health Board, done additional research and consulted engineers and veterinarians with regard to that research and met with representatives of the General Assembly and IRRC in responding to the comments and making substantial and substantive changes to the final-form regulation. Any person that requested a meeting was engaged by the Department. In short, the Department has not been silent, nor has it stood pat on the information and research that led to the promulgation of the Guidelines and the proposed regulations. The Pennsylvania Farm Bureau did not request a meeting to discuss their concerns, but the Department has done research and elicited expert opinion and advice with regard to their comments. The Department has met all of the requirements of the Regulatory Review Process in its deliberations and promulgation of this regulation.

As set forth previously, the Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the general public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted architects and engineers that design and build kennel housing facilities, a regulated community group, an AKC Senior Kennel Field Representative, animal scientists from the Pennsylvania State University and Department and Canine Health Board veterinarians, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations.

Comment:

Our recommendation today is the same as the recommendation we made to the CHB per its published guidelines, and is the same as the recommendation that the Independent Regulatory Review Commission (IRRC) made in 2007, in response to the arbitrary and unworkable regulatory standards for kennels that the Department proposed. IRRC's suggestion was essentially for the proposed regulations to be scrapped and for the Department to conduct a process of meaningful dialogue to develop a more definitive, effective and balanced set of standards that materially accomplish the goals of animal welfare without doing so in a manner that shuts down reputable and responsible kennel operators.

RESPONSE

The Department, being the promulgating agency, decided to proceed with the proposed rulemaking realizing that, as with nearly all regulations, changes would most likely have to be made to the final-form regulation. In addition, the Department felt this was the best mechanism to assure a more timely set of regulations and to comply as nearly as possible with the mandate of the Act. As set forth more fully above, the Department engaged experts and professional, met with a major industry group, did additional research and verification and engaged with any person requesting a meeting while drafting the final-form regulation.

Comment:

We would urge the Department to rescind its proposed rulemaking, and reopen its consideration of minimum kennel standards, and devise new standards that reflect a serious and good faith effort by the Department to have discussions with and to meaningfully consider and incorporate input provided from the regulated community.

We are willing to help the Department develop more sensible and scientifically supportable standards for commercial kennels that effectively accomplish the objectives of maintaining the health and well-being of dogs in kennels in a manner that is not punitive to responsible kennel operators and is reasonably responsive to the economic realities and climate uncertainties of kennel operation.

RESPONSE

The Department, being the promulgating agency, decided to proceed with the proposed rulemaking realizing that, as with nearly all regulations, changes would most likely have to be made to the final-form regulation. In addition, the Department felt this was the best mechanism to assure a more timely set of regulations and to comply as nearly as possible with the mandate of the Act. As set forth more fully above, the Department engaged experts and professional, met with a major industry group, did additional research and verification and engaged with any person requesting a meeting while drafting the final-form regulation.

III. PET INDUSTRY JOINT ADVISORY COUNCIL (PIJAC)

Submitted by: Michael C. Maddox, Esq.

Pet Industry Joint Advisory Council

1220 19th Street, N.W., Suite 400

Washington, D.C. 20036

Background:

Statement of Interest

As the world's largest pet trade association, representing the interests of all segments of the pet industry throughout the United States, PIJAC counts among its thousands of members associations, organizations, corporations and individuals across the United States. More specifically, PIJAC represents manufacturers, distributors,

breeders, boarding facilities and retailers throughout the state of Pennsylvania. Nobody cares more about healthy and safe pets, and the safety and welfare of the pet owning public, than does PIJAC. PIJAC has for many years provided a well respected animal care certification program that is widely utilized by not only persons in the commercial pet trade, but also shelters and humane societies as well. Our association has long been recognized as the voice for a responsible pet trade, and we routinely advocate legislative, regulatory and policy proposals that facilitate support by the pet trade for appropriate governmental mandates, whether they come from the international, federal or state level. PIJAC has routinely worked with the USDA to ensure effective enforcement of the federal Animal Welfare Act since its inception, and regularly works with the Centers for Disease Control and other federal and state agencies to promote responsible pet ownership while protecting the public health and safety.

PIJAC actively participated in the process of crafting the Dog Law amendments precipitating this action, and would hope that final regulations adopted by the Department of Agriculture (Department) are consistent with the intent and letter of that statute.

Comment: Statutory Authority

As the Department notes, the Dog Law delegated to the Canine Health Board (Board) the responsibility for developing substantive standards. Various parties involved in the process of crafting House Bill 2525 (which ultimately became Act 119), including PIJAC, failed to reach agreement on certain standards in the bill, which resulted in this legislative mandate. The Board's mandate is specific in nature, and regulations stemming from the Board's recommendations should be consistent with such mandate.

PIJAC joins other stakeholders in its concern that the Board has exceeded its mandate, and that the Department's proposed rule making includes some provisions that are inconsistent with statutory law.

RESPONSE

The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form based on the Guidelines. The Department then received, reviewed and formatted all comments submitted by the general public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted architects and engineers that design and build kennel housing facilities, a regulated community group, an AKC Senior Kennel Field Representative, animal scientists from the Pennsylvania State University and Department and Canine Health Board veterinarians, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the

preamble and regulatory analysis form that accompanies the final-form regulations.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Fiscal Impact

PIJAC questions the impact analysis put forth by the Department. All costs, it asserts, "will be paid for entirely from the Dog Law Restricted Account." Yet the additional inspection costs necessitated by this proposal would be substantial. Revenue will be significantly impacted as well, inasmuch as a sharp reduction in license fees must be anticipated from the substantial reduction in the number of regulated entities. There are

already a large number of licensees who have announced they will relinquish their licenses as a result of the Department's new requirements. This number will undoubtedly increase. Finally, the cost impact to regulated entities themselves under the proposal is woefully understated. Indeed, it is this projected cost that is already driving countless numbers of licenses out of business.

RESPONSE

The regulations, which have not yet been promulgated, have not been the driving force with regard to kennels that have either gone out of business either on their own or because of enforcement action by the Department. The driving force to date has been the cost of compliance with the standards imposed by Act 119 of 2008 and kennel owners failure to take action to comply with those standards.

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

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

The final-form regulation contains no requirement for temperature reduction. Air conditioning or HVAC is allowed but not required. The final form regulation focuses on humidity levels in kennel housing facilities, and expands the range of the humidity level to 30%-70% when temperatures are between 50 and 85 degrees Fahrenheit. The final form regulation requires additional humidity reduction when temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, but allow the kennel owner four hours to reach the humidity level necessary to assure an 85 Heat Index value in the facility. The humidity ranges are based on expert analysis and opinion provided by the engineers consulted (Learned Design, Paragon Engineering Services), animal scientists and Canine Health Board and Department veterinarians. The Department with the assistance of Dr. Overall from the Canine Health Board found and utilized a dog survivability study that pinpoints the upper most range of the heat index that would allow for survival of dogs. The Heat Index value is based on the results and recommendations of a survivability study conducted on beagles. The study entitled "A Temperature/Humidity Tolerance Index for Transporting Beagle dogs in Hot Weather", was sponsored by the Federal Aviation Administration and authored by Gerald D. Hanneman and James L. Sershon. The document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.

The Heat Index Value is also based on the Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by in 1998 by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University

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

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

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

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

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

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

The Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, “The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart...” (9 CFR § 3.1(d)). The Federal Animal Welfare Act Regulations further require that temperatures in enclosed or partially enclosed housing structures be maintained between 50-85 degrees Fahrenheit (9 CFR §§ 3.2(a) and 3.3(a)) and that proper ventilation and lighting be provided (9 CFR §§ 3.2(b) and (c) and 3.3(b) and (c)). Therefore, the costs estimates, which are set forth in the regulatory analysis form that accompanies the final-form regulation will necessarily be higher than those incurred by such kennel owners, because they should already have systems in place. The regulatory analysis form will set forth the greatest cost that could be incurred for a system that would meet the standards of the regulations.

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

The Department has no baseline data with regard to a kennel’s current utility costs, so it is impossible to project the amount of any increase in such costs. However, the regulatory analysis form accompanying the final-form regulation does estimate the average yearly cost of operating a system that would meet the ventilation, auxiliary ventilation and humidity standards of the regulations. These estimates do not take into account the fact that kennel owners already had previous existing utility costs. Therefore, the estimates set forth in the regulatory analysis form will include those already existing

costs. The existing costs for kennels regulated by the USDA will be much less, as those kennels already had to comply with specific heating (50 F) and cooling (85 F) regulations and therefore, should already be operating heating and cooling systems in their kennels. The Federal Animal Welfare Act regulations in fact require the kennel to reduce the temperature to 85 degrees Fahrenheit.

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

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

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

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

Comments: Ventilation – Section 28a.2

1. The Act provides that "housing facilities for dogs must be sufficiently heated and cooled to protect the dogs from temperature or humidity extremes and to provide for their health and well-being. If dogs are present, the ambient temperature in the facility must not fall below 50 degrees F. The ambient temperature must not rise above 85 degrees F when dog are present, unless" specified requirements are met. Such requirements relate to ventilation of facilities, and the Act provides that:

"The Canine Health Board shall determine auxiliary ventilation to be provided *if* the ambient air temperature is 85 degrees F or higher. The appropriate ventilation, humidity and ammonia *ranges* shall be determined by the Canine Health Board." (Emphasis added)

While the proposed rule, pursuant to Section 28a.2(1), provides for the temperature conditions under which mechanical ventilation should be utilized, it improperly dictates that "each area of the kennel where dogs are present must utilize a functional, mechanical ventilation system ..." Inasmuch as the underlying statute requires the availability of auxiliary ventilation only in facilities where statutory ranges of temperature are not met, the regulatory requirement for all facilities to maintain specific systems of ventilation is one which inappropriately exceeds the statutory standard. In other words, for those facilities maintaining the temperature range specified in statute, the Department is not authorized to require *any* systems of ventilation.

2. Section 221 of the Act, establishing the Board, provides its purpose as determining standards "to provide for the welfare of dogs under Section 207(h)(7) and (8)." In point of fact, Section 207(h)(7) does not even involve establishment of temperature levels. Those are set forth in Section 207(h)(6). The section applicable to the Board's authority states that the Board shall determine auxiliary ventilation "if the ambient air temperature is 85 degrees F or higher." Regulatory standards emanating from the Board should be limited to a requirement for auxiliary ventilation. It has no authority to regulate with regard to temperature at all; only as to ventilation. And with regard to ventilation, the Board is charged with establishing the level of auxiliary ventilation only where the temperature exceeds 85 degrees F. In such cases, the law does not authorize the Board to dictate how the level of ventilation is achieved.

3. Likewise, the proposed requirement under Section 28a.2(7) exceeds the statutory authority of the Board. Nowhere does the Dog Law charge the Board with measuring or regulating particulate matter. Indeed, Section 207(h) of the underlying statute already specifies standards as to kennel cleanliness without regard to specific measurement of particulate matter. Establishment of such a standard in regulation imposes a standard different from the statutory standard, thereby conflicting with and exceeding statutory requirements.

4. Specific air change requirements under 28a.2(8) are questionable in terms of sustaining a healthful environment for the animals.

RESPONSES

1. The Department disagrees with this interpretation of the Dog Law statute. The language of the statute is clear and confers absolute authority for the Department to regulate ventilation and humidity levels at all times. Section 207(h)(7) of the Dog Law, along with Section 221(f) provides the authority to regulate ventilation at all times that dogs are present in a kennel facility (3 P.S. §§ 459-207(h)(7) and 459-221(f)). The Canine Health Board and hence the Department as the promulgating agency has the absolute authority, under section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) to set and establish proper ventilation, humidity and ammonia levels. The express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, “Housing facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation...” The Canine Health Board is given the duty to determine those levels in the same section, which states, “...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board.” (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to “...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...” (3 P.S. § 459-221(f))

The language is very clear and precise. The Board and the Department have the authority to set “at all times” the proper ventilation, humidity and ammonia standards in commercial kennels. This authority is in addition too, not a modification of the auxiliary ventilation authority and makes it perfectly clear the Department has absolute and specific authority to address proper ventilation, at all times, in commercial kennels. Under the authority set forth at section 221(f) of the Dog Law (3 P.S. 459-221(f)) these standards have to be and are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels. As set forth in answers to previous comments, the Department researched and consulted with engineers and architects that build and design kennel buildings, animal scientists from the Pennsylvania State University and department and Canine Health Board veterinarians in establishing the proper ventilation, humidity and ammonia ranges. It was determined by the engineers (Learned Design and Paragon Engineering Services) and architects consulted, that the proper rates of ventilation could not be achieved or properly maintained without a mechanical means of air circulation. Various factors, including wind, wind direction and inverse convection to name a few, make it impossible for any kennel building to be designed in a manner that would allow it to obtain the proper ventilation levels, on a consistent and necessary basis, without mechanical means.

A holistic approach or one that incorporates kennel housing facility location and natural wind or convection will not work and will not achieve the levels of ventilation necessary to assure the welfare of the dogs housed in commercial kennel housing facilities. There is no other technology that the engineers or architects are aware of, or this Department for that matter, that will achieve the appropriate ventilation rates. If a new technology becomes available the Department can amend the regulation to add that technology. Until then, in order to properly clarify the standards established by the regulation, stating that a mechanical ventilation system must be utilized is necessary.

2. The Department disagrees with the premise that the Canine Health Board and the Department as the promulgating agency can only regulate auxiliary ventilation. Auxiliary ventilation is just that – additional ventilation techniques available if the temperature in the kennel rises above 85 degrees. Section 207(h)(6) of the Dog Law (3 P.S. § 459-207(h)(6)) is the provision of the statute that requires such regulation. Section 207(h)(7) establishes the authority and duty of the Canine Health Board to address and the Department to regulate ventilation, humidity and ammonia levels at all times when dogs are present in the kennel facility. Section 207(h)(7) reads, in pertinent part, “Housing facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board.” Section 221(f) requires the Canine Health Board to address and set those standards and the Department to promulgate regulations based “...on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...” (3 P.S. § 459-221(f)). The final-form regulations carry out that very duty and set standards for ventilation based on cubic feet per minute per dog. The regulation then addresses how the standard will be measured, the standards to assure animal welfare, compliance and the duty of the kennel owner to meet that standards at all times. All of this is well within the authority conferred by the Act.

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

4. Various commentators have questioned the air exchange rates established by the Canine Health Board. Only one, the Pennsylvania Professional Dog Breeders Association, suggested an alternative measure (3 air exchanges per hour) and no scientific or engineering data was offered to support that recommendation. The Canine Health Board, comprised of nine veterinarians with expertise in animal and specifically canine health issues, although criticized by some commentators for not providing a scientific rationale or basis for their air exchange requirements, actually did do research and analysis to determine the air exchange rates. That research and analysis was discussed by the Canine Health Board at open public meetings leading to the drafting of the Canine Health Board Guidelines, which are the basis of the proposed regulation.

However, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of “air changes per hour”, but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and

consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

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

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

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by State dog wardens, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comments: Lighting – Section 28a.3

1. The Act, in Section 207(8) sets forth the requirement that facilities "must be lighted well enough to permit routine inspection and cleaning of the facility and observation of the dogs." It goes on to require a "regular diurnal lighting cycle" and that "lighting must be uniformly diffused throughout housing facilities." This section also states that dogs must be protected from excessive light. The sole and exclusive charge under the Act relative to lighting was that the Board shall determine "lighting ranges." The manner in which such ranges are achieved is beyond the scope of the Board's authority. Further, the Board's attempt to specify requirements for "natural light" are actually contravened by the statute. The Act explicitly states that animals must be provided "either natural or artificial light." So long as a licensee provides either natural or artificial light, within "the appropriate lighting ranges" then it is in compliance with the law.

RESPONSE

The language cited by the commentator merely reiterates the language contained in section 207(h)(8) of the Dog Law and is absolutely appropriate and it is within the authority of the Department as the promulgating agency to restate the statutory language in the regulation. The statutory language applies and is enforceable whether or not it is in the regulation. Inserting the statutory language into the regulation adds clarity and is informative to the regulated community with regard to the standards with which they must comply.

With regard to requiring natural and artificial light, the final-form regulation now allows for either type of lighting source or a combination of both to be utilized to meet the lighting requirements of the regulation. The final-form regulation no longer

contains the language of what was section 28a.3(1) of the proposed regulation (now section 28a.7 of the final-form regulation). The final-form regulation now allows for either natural or artificial light or for a combination of both. It sets general standards for all lighting and establishes specific standards that in addition to the general standards, apply to specifically to either natural or artificial lighting. What was subparagraph (1) of the proposed regulation is now contained in a provision that relates only to natural light. Natural light is no longer required. What were subparagraphs (1)(ii)-(1)(vi), have been removed from the final-form regulation. The new language, regarding general lighting standards, mirrors the language of the Act and is also consistent with existing United States Department of Agriculture, Animal Welfare Act regulation standards.

Comment: Flooring - Section 28a.4

As with the other areas of responsibility in developing substantive standards, the authorization for "additional flooring options" that may be approved by the Board was inserted in the Act in order to address insufficiency of legislative amendments in legislating that issue. Specifically, it was recognized that safe, healthy and humane flooring options are available and the intent was that the Board would devise parameters for them. It is unfortunate that proposed regulations do not address this deficiency.

RESPONSE

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

welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices. The final-form regulations address this comment by actually establishing parameters for additional flooring options.

Comment: Conclusion

PIJAC appreciates the efforts of the Board to provide greater detail in regulation with regard to specified substantive standards. Regrettably, we believe that in proposing these regulations the Board has gone beyond that specific grant of authority by seeking to impose substantive requirements, or means for meeting standards, that are not authorized in the Dog Law. We believe that the work of the Board should be limited to those areas delegated to it by the statute, and that these proposed regulations should be revised to eliminate excessive requirements.

RESPONSE

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

IV. SPORTSMENS' AND ANIMAL OWNERS' VOTING ALLIANCE (SAOVA)

Submitted by: Robert Youngs, President Susquehanna Brittany Club and Pennsylvania
Director, Sportsmen's and Animal Owners' Voting Alliance

And

Susan Wolf, President, Sportsmen's and Animal Owners' Voting Alliance
315 Stoner Road
Mechanicsburg, PA.

Background:

The Sportsmen's and Animal Owners' Voting Alliance (SAOVA) is a nationwide, nonpartisan group of volunteers working to protect both sportsmen and animal owners in the legislative and political arenas. SAOVA's members hunt, fish, own and breed livestock, dogs, cats and other pets. On behalf of our members in Pennsylvania, we submit the following comments on the standards for commercial kennels as proposed by the Canine Health Board.

Comments: Ventilation – Section 28a.2

1. The Canine Health Board has been charged as specified in Section 207 (h)(7) with the responsibility to determine appropriate ventilation, humidity and ammonia ranges to ensure dogs' health and well-being. However, the precise, detailed regulations proposed by the Canine Health Board exceed those outlined by USDA/APHIS and appear far more exacting than even guidelines used by the Office of Laboratory Animal Welfare. Engineering standards to the detailed level currently proposed are problematic for several reasons:

- a. Carbon monoxide detectors and monitoring are not included in Act 119 for regulation.
- b. Proposed regulations state: When the temperature is 50-75 F, the relative humidity shall be in the range of 40-60%. The relative humidity shall be measured at standing shoulder level of 10% of the dogs in the kennel, randomly selected from all rooms. This method of measurement is both excessive and unnecessarily time consuming for kennel owners and dog wardens.
- c. Complete air change of 8-20 times per hour is likely to create difficulty in

maintaining temperature without drafts or wide variances in room temperature.

2. Section 28a.2.(1) states that dogs may not remain in the facility if temperatures rise to 86 degrees or above. Removing the dogs to the outside when temperatures are 95 degrees or more does not seem a logical alternative if the ventilation system malfunction has caused a temporary rise but will be corrected within a reasonable time frame.

3. The tedious and exact regulations proposed for monitoring and recording air quality will substantially decrease the number of inspections that can be performed in a day by each dog warden. It would be reasonable to assume that additional inspectors must be hired and trained to accomplish the current workload of inspections. We believe that cost to the Department has been greatly underestimated.

4. Section 28a.2 (8)a of the proposed regulations states that dogs may not exhibit conditions or signs of illness or stress associated with poor ventilation and lists 17 symptoms of canine illness. Every veterinarian and anyone with the most basic animal husbandry knowledge is aware that each of the listed symptoms has multiple causes completely unrelated to air quality. For example:

(i) Nasal mucous can be caused by rhinitis, foreign bodies, nasal irritation, nasal mites, or even nasal tumors.

(ii) Redness, crusting of eyes can be caused by seasonal allergies, corneal scratches, entropion, or excessive tear production.

(iii) Diarrhea can be caused by something as simple as change of diet

The mere attempt to draft legislation prohibiting dogs from showing signs of illness defies reason, common sense, and practicality. To enact this into law establishes a dangerous precedent of mandating what is not achievable.

RESPONSES

1.a. The final-form regulation no longer establishes a carbon monoxide level or standard. The final-form regulation only requires that kennel housing facilities utilizing any carbon monoxide emitting device, functioning carbon monoxide detectors shall be installed and maintained in each room or area of the kennel and kennel housing facility – excluding outdoor runs - in which dogs are housed, kept or present. The carbon monoxide detectors shall meet or exceed the UL standard 2034 or the IAS 6-96 standard, or its successor standards.

1.b. First, with regard to humidity ranges, the final form regulation focuses on humidity levels in kennel housing facilities, and expands the range of the humidity level to 30%-70% when temperatures are between 50 and 85 degrees Fahrenheit. The final form regulation requires additional humidity reduction when temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, but allow the kennel owner four hours to reach the humidity level necessary to assure a 85 Heat Index value in the facility. The humidity ranges are based on expert analysis and opinion provided by the engineers consulted (Learned Design, Paragon Engineering Services), animal scientists and Canine Health Board and Department veterinarians. The Department with the

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

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

Second, with regard to required measurement standards and techniques there is no longer a requirement that 10% of the dogs be tested and there are no parameters within the regulation setting standards or protocol for the number or the place of measurements. The more objective standards established by the final-form regulation – CFM per dog – no longer requires such measurements and the installation of humidity and temperature monitoring devices by the Department does away with this requirement. Dog warden training and protocol will be undertaken by the Department, just as in any other agency that enforces regulations, but should not be set forth in a regulation.

1.c. In response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set

forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

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

Because of the restructuring of that section, all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the

kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

2. The final-form regulation no longer contains any language requiring dogs to be removed from the kennel housing facility if temperatures in that facility rise above 86 degrees Fahrenheit. The final-form regulation contains humidity and auxiliary ventilation standards that must be employed and sets forth specific notification requirements if there is a mechanical malfunction.

3. The amendments made to the final-form regulation, specifically those made to the ventilation and humidity provisions will reduce the cost of inspection and compliance with the regulation in several ways.

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

The ventilation system language and requirements are based on consultations with and were reviewed by engineers – that design and build kennel housing facilities – and discussions with animal scientists and implement changes, such as establishing ventilation standards in cubic feet per minute per dog instead of air exchanges per hour. This was done in response to comments and discussions with the architects, engineers and animal scientists consulted by the Department. This allows the Department to check the CFM or capacity rating on the ventilation and air circulation equipment employed by the kennel owner to assure it meets the required air circulation values and not have to utilize air exchange or circulation monitoring devices. It also allows the kennel owner and engineer or architect to design and base the ventilation system on an objective capacity rating as opposed to a more subjective air exchange rate. A professional

engineer must certify the system will meet the ventilation, auxiliary ventilation and humidity standards of the regulation.

4. The language that appeared in subsection 28a.2 (9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress, has been substantially modified in the final-form regulations and is now subsection 28a.2(h) in the final form regulation. First, based on discussions with animal scientists, at the Pennsylvania State University and Department and Canine Health Board veterinarians, the number and type of conditions in dogs that may denote poor ventilation has been reduced. Second, and significantly for purposes of authority, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that animal scientists and veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that are too high, as well as, insufficient air circulation or auxiliary ventilation. Paragraph (2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Comment: Conclusion/Summary

The regulations as proposed would create a source of constant violations for kennel operators until in frustration they decide to go out of business or leave the state. According to the 2008 Dog Law Bureau Annual Report 2,674 kennels were licensed of which only 84 (3%) were licensed to have more than 250 dogs. A total of 6,033 kennel inspections were completed and the department revoked or refused licensing to 14 kennels (0.52%). Using current standards, the inspections produced 182 kennel citations for unsanitary or inhumane conditions (6.8%). The overwhelming number of kennels appear to be operating satisfactorily and the onerous regulations proposed by the Canine Health Board are therefore not justified and should be rejected in their entirety.

RESPONSE

The Legislature of this Commonwealth determined that the provisions of the Dog Law regulating commercial kennels were inadequate to provide appropriate and sufficient protections for the health and safety of dogs housed in commercial kennels. Therefore, the Legislature passed, nearly unanimously, Act 119 of 2008, amending the Dog Law. The provisions added to the Dog Law by Act 119 that regulate commercial kennels, specifically sections 207(h) and 207(i) (3 P.S. §§ 459-207(h) and 459-207(i)) were not effective until October 9, 2009. The statistics related to compliance in 2008 do nothing to prove that additional standards are not necessary. The Canine Health Board and the

Department were charged with the duty to promulgate regulations (3 P.S. §§ 459-207(h)(6)(7)(8) and 459-221(f)) to further clarifying and setting specific standards to assure there are proper ventilation, humidity, ammonia, lighting and flooring standards to protect the health of dogs housed in commercial kennels. The Canine Health Board in setting forth Guidelines, to be published as proposed regulations by the Department, carried out its duty imposed by the Legislature and the Department in promulgating these final-form regulations is carrying out its duty under the statute.

V. PA KENNEL ASSURANCE PROGRAM (PA KAP)

Submitted by: James E. Burkholder, President
PA Kennel Assurance Program
316 Good Road
East Earl, PA 17519

The following comments are submitted on behalf of members of the PA Kennel Assurance Program (PA KAP) regarding proposed regulations developed by the Canine Health Board (CHB) to fulfill sections of Act 119 in the Dog Law.

Comment: Statutory Authority

Section 221(f) of Act 119 charges CHB with the duty of determining standards for Class C (Commercial) Kennels to provide for the health and well being of dogs in three specific areas: ventilation, lighting and flooring.

Rather than establishing standards for the health and well being of dogs relating to the three designated areas, the CHB has created guidelines that will absolutely result in animal welfare issues. CHB has grossly failed in their charge, which has caused the PA KAP to question their competency.

CHB has failed to address in its entirety the impact of the costs to the Bureau of Dog Law Enforcement (Bureau) to:

1. Purchase the necessary equipment to measure relative humidity, airborne particulate matter, air exchange, temperature and ammonia.
2. Train wardens to calibrate and accurately read measurements.
3. Provide additional man hours for the increased time required to complete lengthy inspections of Class C Kennels.

The proposed standards, if enacted, will further burden the Dog Law restricted account, creating serious concerns for future economic stability.

RESPONSE

The Department has a duty under the Act, to promulgate regulations that address ventilation, auxiliary ventilation, humidity, ammonia and lighting levels and may address parameters for additional flooring options (3 P.S. §§ 459-207(h)(6)(7)(8) and 459-221(f)). The Department is required to set standards that are based on animal husbandry practices will account for the welfare of dogs housed in kennels. While the Department is required to set forth the cost of such regulation, the cost can not be an excuse for promulgating regulations that do not adhere to the duty imposed by the statute.

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

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

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

The final-form regulation contains no requirement for temperature reduction. Air conditioning or HVAC is allowed but not required. The final form regulation focuses on humidity levels in kennel housing facilities, and expands the range of the humidity level to 30%-70% when temperatures are between 50 and 85 degrees Fahrenheit. The final form regulation requires additional humidity reduction when temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, but allow the kennel owner four hours to reach the humidity level necessary to assure a 85 Heat Index value in the facility. The humidity ranges are based on expert analysis and opinion provided by the engineers consulted (Learned Design, Paragon Engineering Services), animal scientists and Canine Health Board and Department veterinarians. The Department with the assistance of Dr. Overall from the Canine Health Board found and utilized a dog survivability study that pinpoints the upper most range of the heat index that would allow for survival of dogs. The Heat Index value is based on the results and recommendations of a survivability study conducted on beagles. The study entitled "A Temperature/Humidity Tolerance Index for Transporting Beagle Dogs in Hot Weather", was sponsored by the Federal Aviation Administration and authored by Gerald D. Hanneman and James L. Sershon. The document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.

The Heat Index Value is also based on the Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by in 1998 by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine and first published in "Recognizing and Reporting Animal Abuse: A Veterinarian's Guide." This widely-used scale, one of several canine

assessment tools focused on consequences for the dog, indicates that, even with water and shade available as in a commercial kennel setting, a potentially unsafe situation develops above a 90 degree F temperature, especially for brachycephalic, obese or elderly dogs, as well as dogs under 6 months of age. Although the regulation is based on heat index, regulates relative humidity rather than temperature, and a temperature of over 90 degrees F would be permitted if combined with a relative humidity that would result in a HI of no more than 90, the inclusion of the TACC Weather Safety Scale as a basis for the regulation emphasizes that the standard being set goes beyond survivability to minimize adverse heat-related consequences for dogs in commercial kennels. The survivability study and the TACC Weather Safety Scale are generally acknowledged to be the only two scholarly resources that give specific heat-related guidance applicable to canines.

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

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

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

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

The cost of the mechanical ventilation system will vary according to the sophistication and complexity of the system the kennel owner decides to install.

However, the Department has consulted several engineers and engineering companies that build kennel buildings and asked them to assess the cost of designing and installing a ventilation system that would meet all the ventilation requirements – including auxiliary ventilation and humidity levels - of the final-form regulation. The costs are based on a kennel owner having to retrofit or build from the ground up and include the cost of installing all of the equipment, even though most kennel owners, especially those subject to United States Department of Agriculture regulations, should already have some form of mechanical ventilation, auxiliary ventilation and – in the case of USDA – temperature control devices already installed in the kennel.

The Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, “The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart...” (9 CFR § 3.1(d)). The Federal Animal Welfare Act Regulations further require that temperatures in enclosed or partially enclosed housing structures be maintained between 50-85 degrees Fahrenheit (9 CFR §§ 3.2(a) and 3.3(a)) and that proper ventilation and lighting be provided (9 CFR §§ 3.2(b) and (c) and 3.3(b) and (c)). Therefore, the costs estimates, which are set forth in the regulatory analysis form that accompanies the final-form regulation will necessarily be higher than those incurred by such kennel owners, because they should already have systems in place. The regulatory analysis form will set forth the greatest cost that could be incurred for a system that would meet the standards of the regulations.

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

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

The Federal Animal Welfare Act regulations in fact require the kennel to reduce the temperature to 85 degrees Fahrenheit.

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

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

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

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

Comment: Temperature Cap - Puppies

Members of PA KAP have concerns regarding the health and well being of puppies housed with a temperature cap of 86 degrees F in the neonatal unit of Class C Kennels. Newborn puppies do not maintain their own body heat for the first week to ten days of life, thereby requiring an average temperature of 90 degrees F. The proposed standards would render each puppy in the neonatal unit with a pending violation of the law. The proposed requirement of eight to twenty air exchanges per hour further exhibits the

erroneous thinking and lack of knowledge and understanding by CHB, and creates additional risk to newborn puppies. Similar to hospital neonatal units, PA KAP recommends that newborn puppies require housing that is free from cold air and drafts.

RESPONSE

The final-form regulation does not set a temperature cap or require a reduction in the air temperature in the kennel housing facility, but instead sets humidity levels, based on heat index values, that must be achieved when the air temperature in a kennel housing facility rises above 85 degrees Fahrenheit.

However, based on this and other similar comments related to neonates, which suggested the temperature for neonates should never fall below 90 degrees Fahrenheit, the Department consulted with veterinarians. The consensus among veterinarians was that normal animal husbandry practices dictate that the mother provides the necessary body heat to sustain the neonates/puppies and that no exception should be made to the 85 humidity index, because such an exception would be detrimental to the adult mother dog. Therefore, no changes have been made and the kennel must maintain a heat index value of 85 or below. The Department notes, that the Federal Animal Welfare Act regulations make no such exception for neonates and the Federal Animal Welfare Act regulations, unlike these regulations, does set an upward temperature cap of 85 degrees Fahrenheit.

Comments: Ventilation – Section 28a.2(9)

The requirements of this section indicate that "Dogs may not exhibit conditions or signs of illness or stress ... " Dog wardens are not licensed veterinarians and do not qualify to assess and diagnose illness in dogs. We have grave concerns that wardens may misinterpret symptoms such as:

- (i) Excessive panting. Excessive panting may be encouraged solely by a stranger entering their domain.
- (ii) Elevated body temperature. Female dogs ready to whelp or one in season often exhibit natural rises and falls in body temperature.
- (iv) Shivering. Shivering may be associated with excitement when a stranger is in the kennel.
- (v) Huddling of dogs 12 weeks of age or older. Like people, dogs and puppies like to cuddle and often huddle together while sleeping.
- (xi) Moist areas of hair. Act 119 requires unfettered exercise for all adult dogs in Class C Kennels. If a dog chooses to wander outdoors on a rainy day, there is a great probability that hair will be wet. Puppies playing with water nipples may acquire moisture on their coat.
- (xii) Diarrhea. Diarrhea is not necessarily an indicator of illness or disease in dogs. During the worming process, the dog's stool will soften, sometimes to a diarrhea like form. Upon completion of treatment, the stool returns to normal.

(xlv) Vomiting. Occasionally a canine will engorge himself, resulting in regurgitation. A female dog cleans her puppies by licking them when they defecate and urinate. This inborn trait can enhance vomiting.

(xvi) Presence of blood. Female dogs have bloody discharge for seven to fourteen days in season, and up to six weeks after whelping.

(xvii) Death. This requirement is open to misinterpretation due to its failure to properly differentiate and clarify the type of deaths. Some puppies are born dead due to harsh labors or developmental issues. In addition, it does not address natural deaths that occur at the end life.

PA KAP members understand the intent of Section 28a.2.(9), however, CHB has gone beyond the scope of the charge they were given. The health of dogs should only be assessed and diagnosed by licensed veterinarians, who are trained professionals equipped to do so. We highly recommend Section 28a.2.(9) be deleted in full.

RESPONSE

The Department appreciates the concerns expressed and has modified the language of that section to carry out the intent. The language that appeared in subsection 28a.2(9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress, has been substantially modified in the final-form regulations and is now subsection 28a.2(h) in the final form regulation. First, based on discussions with animal scientists, at the Pennsylvania State University and Department and Canine Health Board veterinarians, the number and type of conditions in dogs that may denote poor ventilation has been reduced. Second, and significantly for purposes of authority, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that animal scientists and veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that are too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Comment: Lighting – Section 28a.3

The proposed comprehensive lighting standards are not grounded in sound science. In lighting ranges of 50 to 80 foot candles, human beings would need to wear eye

protection. How much more would it then be necessary to protect the eyes of dogs? Rather than protecting the animals, these measures create animal welfare issues, causing us to question the sensibility of this requirement. Once again, the CHB exceeded their charge to establish lighting ranges and PA KAP recommends the entire lighting section be revised. The means and method used to address lighting (artificial or natural) should be addressed by kennel owners and professionals who serve them.

RESPONSE

The assertions regarding eye protection are incorrect, as evidenced by the NIH standards and the fact that exam rooms at the Pennsylvania State University require lighting of 40-60 footcandles. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

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

The final-form regulation allows lighting standards to be achieved through the use of either natural or artificial light or both.

Comment: Flooring – Section 28a.4

Solid flooring, the only flooring addressed by CHB, has already been determined acceptable in Act 119. The CHB again failed to meet its charge to properly address additional flooring options. Sealed concrete or tile may be poor choices for kennel flooring due to the reduction of traction, especially when wet. Such flooring can lead to

foot and leg degeneration, including arthritic and hip conditions, before dogs reach advanced age, resulting in untimely demise.

RESPONSE

In response to a comment from the Independent Regulatory Review Commission, regarding the clarity of the language in the flooring section of the proposed regulation, the Department made substantial changes to the final-form regulatory language. The Department in response to the Independent Regulatory Review Commission's suggestion, restructured the section related to flooring, section 28a.8 of the final-form regulation. In restructuring this section the Department felt it would be even more helpful to the regulated community if all the flooring standards established by the Act, were also delineated in the regulation. Therefore, the Department established two new subsections which reiterate the language contained in sections 207(i)(3)(i)(related to general flooring standards) and (i)(3)(ii)(related to slatted flooring) of the Act (3 P.S. §§ 459-207(i)(3)(i) and (ii)).

In addition, the Department had to then modify the language of the proposed regulations which sought to espouse the requirements or parameters for additional flooring options. In doing so, the Department established subsection 28a.8(c), which sets forth the language of the statute allowing the Canine Health Board to approve additional flooring options, and delineates the authority and duty of the Canine Health Board to assure the additional flooring standards adhere to the general requirements established by section 207(i)(3)(i) of the Act and that additional flooring options, based on proper animal husbandry practices, provide for the health, safety and welfare of the dogs confined to these kennels, as required by section 221(f) of the Act (3 P.S. §§ 459-207(i)(3)(i) and 459-221(f)). The Department included many of the standards set by the Canine Health Board in the proposed regulations – such as requiring proper drains, flooring that is not capable of heating to a level that could cause injury to the dogs and will provide a non-skid surface – but did remove the language regarding sealed concrete and made the language regarding non-slip services more objective. The Department also added language to these provisions to clarify the intent and provide more objective standards. Finally, based on discussions with Department veterinarians and some Canine Health Board veterinarians, the Department added language that provides for the welfare of the dogs, based on proper animal husbandry practices. The Department's veterinarians have witnessed the ill effects caused to dogs that are housed on a surface that splays their feet, caused damages to the feet or pads or allows the pad, foot or toenail of the dog to become snared or entrapped. Therefore, an additional provision, subsection 28a.8(c)(4), was inserted into the final form regulation in order to effectuate those animal husbandry and welfare practices. The final-form regulations address this comment by actually establishing parameters for additional flooring options.

Comment: CHB Deliberations

Most disappointing to PA KAP is the fact that our representatives witnessed and did nothing as the CHB drafted its proposal with the intent to create "unattainable standards" for Class C Kennels. Meeting Minutes from the CHB indicate widespread disagreement on the proposed standards and revealed the desire of some members of CHB to glean from the experience of those who excel in the dog breeding industry. Rather than consult with dog breeding experts, leaders on the CHB chose to dismiss the suggestion to do so

with the wave of a hand, while stating, "Let's forget about experience and create data." Creating data without science to address a dog's health and well being is not acceptable. Neither is it acceptable for regulating the requirements needed to promote the care and welfare of man's best friend.

PA KAP respectfully requests that the Guidelines established by the CHB be dismissed in their entirety. It is imperative that standards be established in conjunction with licensed veterinarians, who are screened by their experience and competency, with the duty of determining standards for Class C (Commercial) Kennels to provide for the health and well being of dogs in the three specific areas of ventilation, lighting and flooring. The Pennsylvania Dept. of Agriculture should be cautious about implementing and supporting unrealistic standards that could then trickle into other Industries, such as dairy, swine and poultry production.

RESPONSE

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects

who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Dog kennels are not considered normal agricultural operations. The standards established in the final-form regulations are specific to dogs and kennel operations. As pointed out in this document, dogs have different and additional physiological needs.

VI. PENNSYLVANIA STATE GRANGE

Submitted by: Betsy E. Huber, President, Pennsylvania State Grange
20 Erford Road, Suite 310
Lemoyne, PA 17043

Background:

I am writing on behalf of 13,000 members of the Pennsylvania State Grange to comment on the proposed rulemaking on standards for commercial kennels. The Pennsylvania State Grange is a family fraternal organization dedicated to the betterment of rural American through community service, education, legislation and fellowship.

Comment: Cost and Economic Impact

The Grange is concerned that the proposed health standards will force most small dog breeders in the state out of business because of cost of compliance. Small breeders may show more care, personal attention, and socialization to their dogs than large kennels who can afford to make all the environmental alterations to meet the standards. Sixty dogs sold in a year is not many considering that some breeds normally have litters of ten puppies. Breeders who do not expect to sell 60 dogs may find themselves in violation if one dog has a larger than expected litter.

RESPONSE

The Act itself, not the regulations, determine the definition and parameters that result in a kennel being considered a commercial kennel and subject to the provisions of the Act and the regulations. The Department is under an obligation to promulgate regulations that address ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels.

The Pennsylvania General Assembly, by nearly unanimously passing the amendments to the Dog Law established in Act 119 of 2008, established the duty and necessity to regulate ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels. The Legislature, in sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, imposed the authority and the absolute duty on the Canine Health Board to develop and the Department to promulgate such regulations.

The Department has set forth and considered the costs to the regulated community and the private sector to the best of its ability. However, the mere existence of a cost to the regulated community or private sector does not mean the regulations themselves can

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

The statute does not provide any special exception and the Department believes that when promulgating regulations that are to set health and welfare standards for dogs housed in commercial kennels there is no rational basis for promulgating disparate or separate regulatory standards for small commercial kennels and large commercial kennels. The standards set forth in the final-form regulation establish basic and minimum standards for ventilation, auxiliary ventilation, humidity, ammonia, lighting and additional flooring options that account for the welfare of dogs housed in commercial kennels. There are no lower standards that would be acceptable based on the size or make-up of the business entity and the Department does not think it prudent to set higher standards for kennels that do not fall within a small business definition. In addition, there is no provision in the Dog Law that would allow the Department to assist commercial kennels that fall within a small business definition by providing grants or loans. Dog kennels are not considered normal agricultural operation and therefore do not fall within the category of a farm.

Comment: Cost to small businesses

Today's economic climate makes it difficult for most small businesses to survive. Mandating these excessive regulations will force many kennels out of business, losing their livelihood, rather than expend thousands of dollars to comply with these requirements which are not based on science.

RESPONSE

The comment asserts the same issue raised in the first comment above and the Department's response is the same.

Comment: Supplemental business

Kennels are often a supplemental business on a family farm. Pennsylvania's farm families are struggling to maintain their farms in the economic downturn. Forcing them to give up this source of supplemental income will make it even more difficult for our farmers to remain economically viable.

RESPONSE

The Act itself, not the regulations, determine the definition and parameters that result in a kennel being considered a commercial kennel and subject to the provisions of the Act and the regulations. The Department is under an obligation to promulgate regulations that address ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels.

The Pennsylvania General Assembly, by nearly unanimously passing the amendments to the Dog Law established in Act 119 of 2008, established the duty and necessity to regulate ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels. The Legislature, in sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, imposed the authority and the absolute duty on the Canine Health Board to develop and the Department to promulgate such regulations.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Sales and income tax

Loss of these small businesses will cause loss of income to the Commonwealth in sales and income taxes as well as all income from associated businesses and sales.

RESPONSE

The Pennsylvania General Assembly, by nearly unanimously passing the amendments to the Dog Law established in Act 119 of 2008, established the duty and necessity to regulate ventilation, auxiliary ventilation, humidity, ammonia and lighting standards in commercial kennels. The Legislature, in sections 207(h)(6)(7)(8) and 221(f) of the Dog Law, imposed the authority and the absolute duty on the Canine Health Board to develop and the Department to promulgate such regulations.

The question of tax losses is based on an assumption and can not be quantified or supported. This is a question that would require the Department to have authority to access the tax returns of all individual kennels and the ability to pre-determine which and how many kennels may decide to close solely as a result of the regulations. The Department has neither. Once again, much of the cost and much of the upgrades are required by the Act itself. Some of the comments fail to appreciate that fact, or seem determined to mix the costs and make them all inclusive. The regulations will impose only a portion of the total costs of all upgrades and changes necessary to commercial kennels. Much of the additional cost comes from the Act itself. In addition, the Department is required, by the Act, to promulgate the regulations. All regulations impose additional costs. The question is not the total cost, but whether the Department has consulted with appropriate experts and done research and taken steps to try to allow choices – where able – and minimize costs. The Department has done extensive research through its consultations with architects, engineers, animal scientists and veterinarians – including the expert veterinarians appointed by the General Assembly and the Governor. The Department has redrafted the final-form regulation to impose standards that, based on the information received, present the minimum level of regulation necessary to carry out its duty to set levels for ventilation, auxiliary ventilation, humidity, ammonia and lighting that will account for the welfare of dogs housed in commercial kennels. It has done so in a manner that it believes lowers the cost of compliance and gives kennel owners various choices in meeting those standards. Once again, many of the standards and “upgrades” – especially those associated with heating and proper temperature levels are standards already required for kennels that fall under the Federal Animal Welfare Act and the its associated regulations and those kennels should already be in compliance.

Comment: Agency cost

More staff and equipment will be required in the Department of Agriculture to monitor and enforce the regulations. With fewer licensed kennels and more work for enforcement, the Office of Dog Law will no longer be self-supporting from license fees.

RESPONSE

The commentator offers no information or proof to support the assertion set forth in this comment. The Department has analyzed the cost of the regulation to the agency and has set forth that cost in the final-form regulatory analysis form. The cost has been reduced because of the changes made to the final-form regulation, especially those made to the ventilation or air exchange provisions of the final-form regulation. As stated previously, the Department can not forgo its duty to regulate or establish regulations that do not meet the regulatory duties imposed by the Act, simply because of a projected cost to the agency.

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

Comment: One size fits all

“One size fits all” regulations will not work for all the various breeds of dogs. Some breeds cannot thrive in heated environments; some develop problems living on concrete; some need more space to exercise than others. Different types of dogs should be considered when formulating regulations.

RESPONSE

Formulating a regulation that set standards for every breed of dog would be impossible, onerous on the regulated community, nearly impossible for some kennels with many breeds to comply with and costly to the regulated community and the agency. The regulations as written set forth standards that are based on consultations with and research by experts, such as engineers (Learned Design and Paragon Engineering Services) and architects that design and build kennel housing facilities, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and Department. The experts consulted utilized their background, knowledge and experience to help the Department craft ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, and flooring parameters, that if implemented properly, will account for the welfare of all breeds of dogs housed in kennel housing facilities.

Comment: Lighting – Section 28a.3

The excessive lighting requirements will be detrimental to the animal's health rather than beneficial. If lighting must be required, it should be based on sound scientific evidence.

RESPONSE

The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

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

The final-form regulation allows lighting standards to be achieved through the use of either natural or artificial light or both.

Comment:

We hope that you will oppose the proposed rulemaking as excessive and unnecessary.

RESPONSE

The Department disagrees with this comment. The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

KENNEL OWNERS COMMENTS

I. COMMON THEME COMMENTS – The listed commentators made some or all of the following comments

Commentators:

Submitted by: See Addendum D – Kennel Owner Commentators – attached hereto and made a part hereof

(a)

Comment: General Opposition

I am opposed to the approval of the Section 28a Canine Health Board Standards for Commercial Kennels. Please consider the following points and consider voting against these proposals which are, at times, detrimental to the health of the animals in these facilities. I hope you will vote against these proposals based on the points set forth below. Please reevaluate the proposals because I believe many of them to be at the least unnecessary and at the greatest, detrimental to animals.

Dog breeders and kennel owners may be forced to give up their well maintained kennels due to the excessive requirements of these proposals. In today's economy it is difficult to keep businesses viable and only necessary and beneficial proposals should be considered.

When laws and regulations are not clear, it is possible that misinterpretation of the laws can be detrimental. Some of the proposed changes for Section 28a of the Canine Health Board Standards for Commercial Kennels are vague and perhaps impossible to achieve. For this reason, we encourage you to oppose the Section 28a proposed changes to the Canine Health Board Standards for Commercial Kennels. I believe they are vague at times and not always designed for the best environment of the housed animals. I believe that many of the suggested changes, although well intended, are extremely difficult, if not impossible, to achieve. These unnecessary requirements would cause expenditures that in some cases may close viable and well-maintained facilities.

RESPONSE

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also

consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comments: Ventilation – Section 28a.2

1. Section 28a.2 air changes - This section requires facilities to have between 8 - 20 air changes of 100% fresh air per hour in each room. This would require a facility of 40' x 100' to push 5,300 cubic feet per minute through the facility. After investigating needs and costs, I believe this would cost a kennel owner to spend approximately \$118,000 to bring their facility to code and then spend approximately \$34,000-\$35,000 in additional costs to operate the equipment. The reality of this proposed regulation is that it violates the Federal Law covering Animal Welfare mandating that dogs must be protected from drafts in their primary enclosure. Please consider this negative factor and consider voting against this proposal.

2. Section 28a.2 particulate matter - I also believe that in Section 28a.2 the requirement to ensure that particulate matter form such as dander, hair and food is below 10 milligrams per meter cubed is unrealistic. All dog breeders know that puppies love to play in their bedding which is typically wood shavings or shredded paper. It would be impossible to meet the strict requirements of less than 10 milligrams per meter cubed. Again, this is unnecessary stress on owners.

3. Section 28a.2 temperature for puppies - Young puppies are unable to maintain their own body heat and therefore require supplemental heat sources to achieve air temperatures between 91 and 96 degrees. And yet, the new proposal requires kennel owners to keep a kennel at less than 86 degrees. I believe that the Department exceeds their authority to create a law which would make it illegal to keep puppies at a safe temperature.

RESPONSE

1. First, engineers consulted (Learned Design and Paragon Engineering Services) on this comment have indicated the cubic foot calculation and the assertion that the air exchange rates originally required by the proposed regulation (8-20 per hour) would create an unreasonable “draft” through the kennel are not correct.

Second, it would not violate the Federal Act or the current Department regulations because it does not prevent primary enclosure from being placed or constructed in such a

manner that the dog has a draft free area.

Third, the final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

Fourth, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

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

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

The provisions of section 28.2(8)(i)(A)(I-V) of the proposed regulations have been either eliminated or extensively modified in the final-form regulation. The provisions were modified to account for the information needed to verify and calculate the cubic feet per minute (CFM) per dog standard of the final-form regulation, which replaced the air exchanges per hour standard. The information requested is based on

consultations with and approved by the kennel housing facility engineers consulted by the Department.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

2. The Department has removed this provision from the final-form regulation. The Department through its consultation with engineers, architects, veterinarians and animal scientists, has determined that regulation of particulate matter is not necessary or warranted. In particular, the engineers and architects opined that so long as the ventilation

requirements of the regulations were being met, particulate matter would not pose a problem in the kennel

3. The final-form regulation does not set a temperature cap or require a reduction in the air temperature in the kennel housing facility, but instead sets humidity levels, based on heat index values, that must be achieved when the air temperature in a kennel housing facility rises above 85 degrees Fahrenheit.

However, based on this and other similar comments related to neonates, which suggested the temperature for neonates should never fall below 90 degrees Fahrenheit, the Department consulted with veterinarians. The consensus among veterinarians was that normal animal husbandry practices dictate that the mother provides the necessary body heat to sustain the neonates/puppies and that no exception should be made to the 85 humidity index, because such an exception would be detrimental to the adult mother dog. Therefore, no changes have been made and the kennel must maintain a heat index value of 85 or below. The Department notes, that the Federal Animal Welfare Act regulations make no such exception for neonates and the Federal Animal Welfare Act regulations, unlike these regulations, does set an upward temperature cap of 85 degrees Fahrenheit.

Comment: Lighting – Section 28a.3

1. **Section 28a.3 foot candles** - Under Section 28a.3, requiring lighting in a kennel to be between 50 - 80 foot candles would be harmful to animals exposed to this high intensity. A typical home is between 12 - 20 foot candles and commercial properties are between 15 to 30 foot candles. Forcing dogs to endure this intensity of lighting would be inhumane.

2. **Section 28a.3 cost** - The proposal also calls for lighting to be 50 to 80 foot candles during the day and 1 - 5 foot candles on a night cycle. After researching the cost to achieve this level of lighting with a diurnal light cycle, I believe the costs could be over \$18,500. Besides the inhumanity to animals, the exorbitant cost may cause good kennels and breeders to give up their businesses.

3. **Section 28a.3 natural lighting** - The proposed standards require Natural Lighting. The proposed requirements could cause an expenditure of over \$32,000 for a facility of 40' x 100' for architectural design, zoning permitting and inspections window and installation costs, and glazing of windows for diffraction of direct sunlight. This requirement far exceeds the necessary lighting for healthy animals!

RESPONSE

1. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to

biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D. The lighting levels are not inhumane and are supported by research and animal husbandry practices.

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

The final-form regulation allows lighting standards to be achieved through the use of either natural or artificial light or both.

2. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

The nighttime lighting provision has been removed from the final-form regulation. However, for clarity purposes the nighttime lighting standard was consistent

with studies done that show dogs need a minimum level of nighttime lighting (1-5 footcandles) to allow a natural startle response. The nighttime lighting standard was for the welfare of the dogs. Kennel owners can turn on or add additional light at nighttime if there is a need for them to be in the kennel.

The Department has set forth the cost of lighting in the regulatory analysis form and the cost is based on information received from engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. In addition, the kennel owners should have already been incurring lighting expenses that were similar to those that will be incurred under the final-form regulation. The Department's current regulations, as well as, the Federal Animal Welfare Act regulations require lighting standards that allow for routine inspection and cleaning of the facility, and observation of the dogs. The lighting must be uniformly diffused throughout the animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animal and for the well-being of the animals (9 CFR §§ 3.2(c) and 3.3(c) and 7 Pa.Code §21.27).

3. The section of the proposed regulation containing the language commented on has been amended in the final-form regulation to read the same as the statutory language. The final-form regulation deletes the requirement for kennels to provide both artificial and natural light. The language now mirrors the language of the statute with regard to providing light through natural or artificial light. The final-form regulation sets general standards that apply to lighting whether provided by artificial or natural light and also sets forth standards that apply specifically to either natural or artificially provided light. The final-form regulation does require some natural lighting source in kennels that were provided an exemption from outdoor exercise. It requires the light to reach each dog, but does not require the window or skylight to be directly over or in front of the primary enclosure. The Department agrees, from its research into the heat index that such exposure may not only violate the provisions of the lighting section related to "excessive light", but would run the risk of increasing temperatures – on a hot day – within the primary enclosure to levels that would be detrimental to the dogs' health. However, research done by the Canine Health Board indicates the exposure to natural light is vital to the health and welfare of dogs. The need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight.

In addition, this requirement is congruent with the requirement that kennels buildings have operational windows, doors and other openings that can be opened in the event of a mechanical malfunction of the ventilation equipment.

Finally, the requirement that 8% of the floor space be utilized to provide natural light has been removed from the final-form regulation.

Comments: Flooring – Section 28a.4

1. **Section 28a.4** - In Section 28a.4, solid flooring is approved for use. I feel that this does not provide the most sanitary flooring environment for dogs. I would like to see this change eliminated from the proposal.

2. **Section 28a.4(6) and (8)** - I also believe that in the same part, numbers 6 and 8 may be in conflict with each other since it is possible that sealed concrete, painted concrete,

epoxy flooring, sealed wood, textured and sealed tile (which are coated materials) could potentially be toxic to some dogs.

3. Section 28a.4(7) - I would also like to point out that under Section 28a.4. 7, it is stated that a floor may be subject to microbial assessment. However, it is possible that even after it is sanitized, if a dog urinates or defecates on the flooring it will show positive for microbial assessment from the digestive tract of the dog. Therefore it might be impossible for the kennel owner to pass this assessment when in reality the kennel is sanitary.

4. Section 28a.4 drainage - In Section 28a.4 it is stated that "Solid flooring must be sloped to a drain that is free of debris." Again this is an unrealistic requirement.

5. Section 28a.4 debris free floors - It is impossible to maintain a totally debris free floor, as required by Section 28a.4, since dogs may track bedding particles, hair follicles, food particles, defecation, nose or mouth residue and naturally falling dander into the kennel and each would independently constitute as debris on the floor. Therefore this is an unrealistic requirement.

6. Section 28a.4 thermal conductance - Section 28a.4, the requirement states that flooring may not be metal or any other material with high thermal conductance. I believe the Department is exceeding its authority.

7. Section 28a.4 Research and Bio-Security Laboratory standards - Pennsylvania's Bio Security Labs and USDA's licensed inspected research labs would all fail these exorbitant and unreasonable standards set by these proposals. I do not believe these requirements are scientifically based and the Department has exceeded its authority.

RESPONSES

1. The Department first points out that solid flooring is not required, but is only an option available to the kennel owner.

Second, the Department disagrees that solid flooring is inherently unsanitary. There is no evidence to suggest that such a contention has any merit. Boarding kennels, humane society and other non-profit rescue kennels, as well as, standard breeding kennels currently house dogs on solid flooring with no ill effects. The commentator expresses a concern for sanitation. Solid flooring can be kept clean and sanitary as witnessed by a large number of kennels across the Commonwealth that currently utilize solid flooring in their kennels. The veterinarians consulted do not agree that sanitary flooring is inherently unsanitary or can not be kept clean and sanitary with normal maintenance and care.

Third, the statute does not ban solid flooring and the Department will not ban it in the regulation.

2. In the final-form regulation, the Department amended both subsection 28a.4(6) and subsection 28a.4(8) of the proposed regulations. With regard to subsection (6), the Department added language to define and clarify what was referred to in the proposed regulation as "good footing." That subsection now makes it clear that the flooring surface must not allow the dog to slip or loose traction, which could then result in injury to the dog and removes the examples of sealed concrete and tile. What was subsection (8) has been rewritten to set forth more objective criteria and does include examples of flooring. The two subsections are not in conflict as terrazzo flooring, porcelain tile or hard-troweled sealed concrete can all have their surfaces coated or textured in a manner to assure they are not slippery or slick. The veterinarians and engineers consulted did not believe the flooring would present a problem with toxicity.

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

4. The Canine Health Board and the Department in promulgating the regulation, is under a duty to assure any alternative flooring established for alternative flooring would be based on animal husbandry practices that account for the welfare of dogs housed in commercial kennels (3 P.S. § 459-221(f)). The standards established in the proposed regulations and again set forth in the final-form regulations effectuate and carry out that duty and authority. Requiring that drains be provided to eliminate waste and wash water to name a few and that those drains be properly functioning is certainly within that very duty. To state keeping the drain free of debris is unachievable is to state that no one can maintain a functioning drain. A large number of kennels employ drains in the kennel housing facility. They are able to keep those drains free of debris and functioning. The language of the final-form regulation has been modified for clarity purposes. It is also fully consistent with the standards established by section 3.1(f) of the Animal Welfare Act (9 CFR § 3.1(f)).

5. The proposed regulation did not require that flooring be free of debris and the final-form regulation does not require floors to be free of debris.

6. With regard to metal flooring and thermal conductivity comments, the Department, in response to these comments modified the language of that provision to establish a more objective standard in the final-form regulation. For instance, subsection 28a.8(c)(3) of the final-form regulation makes it clear the Department does not allow a flooring type that could be heated through mere exposure to direct sunlight or lighting source to a temperature that would be harmful to the dogs confined to that surface, but it does not ban any particular flooring type.

7. The commentator gives no basis for the contention in the comment and no citation to the provisions to which the commentator is referring. However, the standards established in the final-form regulation are based on and verified by consultations with engineers that design and build kennel housing facilities, animal scientists, veterinarians from the Canine Health Board and the Department and literature such as the documents attached to this comment and response document.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form

regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

INDIVIDUALIZED KENNEL COMMENTATORS

II. JUDITH COMSTOCK - Comments-General and Specific

Commentator:

Submitted by: Judith Comstock
Comstock's Country Kennel
Ulster, PA

Background:

I have read some of the public comments submitted by people and the fact that they want these proposed regulations to pass, so that dogs don't freeze, live in dark rooms or in poorly ventilated buildings that are commercial kennels in Pennsylvania. These statements are not even issues under the new dog law that was effective October 9th, 2009.

Let's take a look at some FACTS under the new dog law's provision for heating, ventilation, and lighting that was effective October 9, 2009 in commercial kennels in Pennsylvania.

Comment: Heating

207(h)(6) Housing facilities for dogs must be sufficiently heated and cooled to protect the dogs from temperature or humidity extremes and to provide for their health and well-being. If dogs are present, the ambient temperature in the facility must not fall below 50 degrees F. The ambient temperature must not rise above 85 degrees F when dogs are present, unless the requirements of paragraph (7) are met.

It must be at least 50 degrees.

RESPONSE

This is a general restatement of the Dog Law and the commentator is correct that the Dog Law requires the temperature in kennels to be maintained at 50 degrees Fahrenheit or higher.

Comment: Ventilation

207(h)(7) Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation. The Canine Health Board shall determine auxiliary ventilation to be provided if the ambient air temperature is 85 degrees F or higher. The relative humidity must be maintained at a level that ensures the health and well-being of the dogs housed therein. The appropriate ventilation, humidity and ammonia ranges shall be determined by the Canine Health Board. It is already in law that states "Housing facilities for dogs must be sufficiently ventilated at all times when dogs are present to provide for their health and well-being..."

RESPONSE

The Department agrees and the Canine Health Board and the Department are required by the statute to promulgated regulations that set forth the standards and ranges of sufficient ventilation, humidity and ammonia ranges that account for the dogs' health and well-being.

Comment: Lighting

207(h)(8) Housing facilities for dogs must be lighted well enough to permit routine inspection and cleaning of the facility and observation of the dogs. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs from excessive light. The appropriate lighting ranges shall be determined by the Canine Health Board. Dogs under the current law must have a regular diurnal lighting of either natural or artificial light.

RESPONSE

This is a general restatement of the Dog Law and the commentator is correct that the Dog Law requires that commercial kennels provide a diurnal lighting cycle by natural or artificial light and be sufficiently illuminated to maintain good housekeeping practices, adequate cleaning and observation of the animals at any time and for the well-being of animals. The final-form regulation promulgated by the Department sets forth the requirements of the Act and establishes general and specific standards for artificial and natural light, such as the level of the lighting required to meet the edict of the Act which requires appropriate lighting ranges to sufficiently illuminate the kennel housing facility and allow for good housekeeping practices, adequate cleaning and observation of the animals and to protect the dogs' health and well-being.

Comment:

So what then is the real concern with these proposed regulations? It is how the Canine Health Board (CHB) has not done the job that they were charged with: to implement reasonable standards as set forth within the law. Here is one example with regards to lighting where the CHB has gone outside the law.

This is what the law states:

207(h)(8) Housing facilities for dogs must be lighted well enough to permit routine inspection and cleaning of the facility and observation of the dogs. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout housing facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs from excessive light. The appropriate lighting ranges shall be determined by the Canine Health Board.

This is what the CHB has proposed:

Lighting. 28a.3. §

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

As you can see the CHB has taken "natural OR artificial light" and replaced it with "natural AND artificial light". I could see if one of the CHB members made this mistake and was then corrected by the remaining eight members, however when I see nine out of nine members changing something to that degree I do not see it as a mistake at all. I clearly see it as intent to change the law.

RESPONSE

The final-form regulation promulgated by the Department changes the language to mirror the language of the Act. The final-form regulation requires sufficient lighting be provided by natural or artificial means and sets general and specific standards for both types of lighting. There is one exception where some amount of natural light is still required. Kennels that have received a waiver under section 207(i)(6)(x)(B) of the Dog Law, allowing for indoor exercise are required to provide some natural light to the dogs

housed in the kennel building. The Department still requires those kennels to have some external openings and doors that provide sunlight and that can be opened in the case of a mechanical ventilation malfunction. In addition, the need for exposure to some natural sunlight was discussed with veterinarians from the Canine Health Board and the Department. Dogs, like all humans and most other animals need vitamin D. Food sources can not always provide an adequate amount of vitamin D. Dogs need exposure to natural sunlight in order to assure proper production of vitamin D and proper development of their eyesight.

Comment:

The PVMA (Pennsylvania Veterinary Medical Association) does not support these proposed regulations, however all nine members of the CHB, are members of the PVMA. That is a red flag to me and it says that these members have not done their job and are not even supported by their own colleagues.

RESPONSE

The Department believes this broad and general statement is incorrect. The PVMA may not agree with some aspects of the Guidelines established by the Canine Health Board and the proposed regulations promulgated by the Department, but they are not opposed to all of the standards established in the proposed regulation. The Canine Health Board did an extraordinary amount of research and work to put together the Guidelines that formed the basis of the Department's proposed regulation and the majority of the ideals and basic standards established form the underlying requirements of the final-form regulation.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

I also see somewhat of a hidden agenda in proposed regulations such as this one: Lighting sources may not have a visible flicker. (iv) I know of only one light source that continually flickers and that, to me, seems to be aimed at a certain people.

RESPONSE

The Department has modified the language of what was subsection 28a.3 (2)(iv) of the proposed regulation, in a manner to better clarify its intent. The word “flicker” is no longer set forth in the final-form regulation. The modified language appears in subsection 28a.7 (b)(2)(ii) of the final-form regulation. The focus is on the lighting being kept in good repair. The language will actually effectuate the intent of the Canine Health Board. In speaking to members of the Canine Health Board, it became clear the intent of the Canine Health Board was to assure the lighting fixtures were kept in good repair and were functioning properly. The reference to a “visible flicker” was important to the veterinarians on the Canine Health Board, because they assert that flickering lights – such as the flickering caused by defective ballast – can result in seizures in some dogs. Therefore, in order to assure the health, safety and welfare of the dogs through proper animal husbandry related to lighting, it is important that artificial lighting sources within the kennel building be kept in good repair and not result in problems such as a “flickering” light source. The revised language of the final-form regulation requires lighting to be kept in good repair and sets forth – among other examples - such as emitting irregular bursts of light, as when a ballast is in disrepair.

Comment:

I am not against regulations or laws that reasonably promote the health and well being of our canine companions, but I am totally against what I see happening here with these proposed regulations. I strongly recommend that these proposed regulations are not approved.

RESPONSE

The Department believes the final-form regulation with its modifications and deletions meets the duties imposed by the Act and the regulatory criteria and standards necessary for passage and that the final-form regulations should be approved and made law. The final-form regulations provide standards that are based on research and consultations with experts undertaken by the Department and address the basic standards necessary to assure the health and well-being of dogs housed in commercial kennels.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

III. TOTALLY PETS INCORPORATED - Comments-General and Specific

Commentator:

Submitted by: Thomas Oprendeck
President, Totally Pets Inc.
7618 city Ave.
Philadelphia, PA 19151

Comment: Oppose regulation

I am opposed to the approval of the Section 28a Canine Health board Standards for Commercial Kennels. Please consider the following points and consider voting against these proposals which are, at times, detrimental to the health of the animals in these facilities.

RESPONSE

The Department believes the final-form regulation with its modifications and deletions meets the duties imposed by the Act and the regulatory criteria and standards necessary for passage and that the final-form regulations should be approved and made law. The final-form regulations provide standards that are based on research and consultations with experts undertaken by the Department and address the basic standards necessary to assure the health and well-being of dogs housed in commercial kennels.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Lighting

Requiring lighting in an animal facility to be 50 to 80 foot candles is ridiculous when lighting in the average home is only 12 to 20 foot candles and even commercial properties are 15-30 foot candles. Actually requiring that high intensity lighting in a dog facility is inhumane.

RESPONSE

The Dog Law, at section 207(h)(8) requires that kennel housing facilities be "...lighted well enough to permit routine inspections and cleaning of the facility and observation of the dogs...and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of animals at any time and for the well-being of the animals..." The final-form regulation provides the range of lighting that is proper to carry out that duty.

With regard to the exact footcandle requirements of the final-form regulation, the Department did additional research and modified the standard in the final-form regulation. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers who design kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires

average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

Comment: Ventilation – Air Exchange

The requirement for what is referred to as proper ventilation would require breeders and owners to have 8-20 air changes of 100% fresh air per hour in each room of a facility that houses dogs. In order to achieve this level of ventilation, an owner would have to spend approximately \$118,000 to install the needed equipment. Then approximately an additional \$35,000 would be needed to fuel and maintain this additional equipment. These expenditures are outrageous and would in some cases put kennel owners out of business.

In addition to the expense of these changes, it is true that requiring 8-20 air changes would be excessive. This would actually be in violation to the Federal Law that mandates that dogs must be protected from drafts in the primary enclosure. In a 40" x 100" building the proposal would require that 5300 cubic feet of air per minute be pushed through a facility – certainly causing excessive drafting. And so, this is a cost item as well as an item for the best environment for the dogs.

RESPONSE

First, engineers consulted (Learned Design and Paragon Engineering Services) on this comment have indicated the cubic foot calculation and the assertion that the air exchange rates originally required by the proposed regulation (8-20 per hour) would create an unreasonable "draft" through the kennel are not correct.

Second, it would not violate the Federal Act or the current Department regulations because it does not prevent primary enclosure from being placed or constructed in such a manner that the dog has a draft free area.

Third, the final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

Fourth, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians.

As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

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

The provisions of section 28.2(8)(i)(A)(I-V) of the proposed regulations have been either eliminated or extensively modified in the final-form regulation. The provisions were modified to account for the information needed to verify and calculate the cubic feet per minute (CFM) per dog standard of the final-form regulation, which replaced the air exchanges per hour standard. The information requested is based on consultations with and approved by the kennel housing facility engineers consulted by the Department.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity

control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment: General

I strongly believe these proposals, although designed to improve conditions, have the potential to create unsafe and unhealthy environments for our animals. Please vote "no" to these proposals.

RESPONSE

The Department believes the final-form regulation with its modifications and deletions meets the duties imposed by the Act and the regulatory criteria and standards necessary for passage and that the final-form regulations should be approved and made law. The final-form regulations provide standards that are based on research and consultations with experts undertaken by the Department and address the basic standards necessary to assure the health and well-being of dogs housed in commercial kennels.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

IV. MARYANN RIESS

Commentator:

Submitted by: MaryAnn Riess
Vision Kennel

Comment:

I own and operate a kennel in PA. I do both boarding and breeding . I believe that my kennel is ok the way it is and resist the need to upgrade once again. I have put over \$300,000 into it in the last 5 years. I understand that there are "puppy mills" in Pa but also know that 90% of us are doing it right and being punished with the few that are doing it wrong. Pa is basically putting us out of business as a group. Law makers in PA as a group need to get realistic, when our dogs have it better then our kids in PA something needs to change. I would like you to make sure that the Kids in PA have heat and air equal to what you are going to make a requirement in dog kennels in PA. (my kennel is up to code in heating and air and has been since we opened) . I want kids in PA to have the quality of care, food, housing and heat and air that our dogs in PA will now have! Aren't we going about this a little wrong! I think if a realistic law was made we all would be happy. I wouldn't be breeding dogs if I didn't love them. I want them to be loved and care for but this is not the way.

RESPONSE

The Department agrees there are many good kennel owners in the Commonwealth of Pennsylvania. The standards imposed by the Pennsylvania General Assembly in Act 119 of 2008 were and are supported by the Department. The Department believes the standards of the Act do establish basic health and welfare requirements for dogs. In addition to the standards imposed by the statute, the Canine Health Board was given the task to produce Guidelines that set forth standards and requirements and the Department was given the authority and duty to promulgate standards and requirements regarding ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, as well as, standards for alternative flooring options.

The Department believes the final-form regulation with its modifications and deletions meets the duties imposed by the Act and the regulatory criteria and standards necessary for passage and that the final-form regulations should be approved and made law. The final-form regulations provide standards that are based on research and consultations with experts undertaken by the Department and address the basic standards necessary to assure the health and well-being of dogs housed in commercial kennels.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional

research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

Why not cover the things that really need to be changed. Why are we still allowing stacking at all in this new law? Why does anyone have to have a dog on wire for any reason? Why does anyone have to have 200 adult dogs? That's what a puppy mill is.

RESPONSE

The comment raises pertinent issues, but the standards and issues discussed in the comment can not be addressed in the regulation.

Comment:

Why isn't a good breeder on the board to help make realistic rules for us all to follow. I am willing to be on it **for free**.

RESPONSE

The Canine Health Board is comprised of licensed veterinarians. The General Assembly appointed such animal health experts to be able to assess the necessary animal husbandry and welfare standards that were proper to address ventilation, auxiliary

ventilation, humidity, ammonia and lighting levels and standards for alternative flooring options. The Board members are not paid for their services.

Comment:

Do you know that all the loser kennels are moving their dogs to Ohio right now! They aren't closing but just moving ! **That's sad..... That's not change.**

RESPONSE

The Pennsylvania General Assembly and the Department can only enact and effect legislation and regulation that addresses kennel conditions in the Commonwealth of Pennsylvania. However, in many cases legislative action in one state can alert another state as to problems and solutions it may want to address and effectuate.

V. SANDY REYNOLDS

Commentator:

Submitted by: Sandy Reynolds
Plantation Delight

Background:

My name is Sandy Reynolds, I have been a licensed breeder in Pa for many years. I sell over 60 dogs a year which makes me a commercial kennel. 60 dogs will be 6 litters in a given year since I breed large breed dogs that produce between 8-12 pups in a litter. Most of the new regulations are terrific and really don't effect me since I already had many of them in place. My kennels are old but they are large and well kept. I sell directly to the public and take back any dog that I sell no matter what in order to ensure that they have a good home.

Comment:

Since my dogs are large breed they enjoy the great outdoors and according to my vet if I close up my kennel I will have problems with upper respiratory problems. In 20 yrs of breeding I have never had kennel cough or any other upper respiratory problems with my dogs. We need some sanity with this. There are many children and elderly in this country that don't live in that perfect environment that you want to create.

RESPONSE

The final-form regulations do not require a kennel to be "closed up", and in fact require that a kennel be sufficiently ventilated and that humidity and ammonia levels within the kennel housing facility must be controlled and held at levels that will create an environment ensures the health and well-being of the dogs.

The commentator should know that the Department has reviewed every comment and has done research and made changes based on that research that make the standards more objective, flexible, measurable and enforceable and less costly. The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

My Bernese Mt. dogs will not be happy if they are penned up in a kennel and that is the only way for me to be able to meet these proposed regulations. They currently have a 1/4 acre of grass trees with an enclosure to get out of the weather (which they never use).

RESPONSE

The statute, not the regulations, sets the requirements for the size of the primary enclosure and outdoor exercise area. The statutory standards are the minimum standards and kennel owner, such as the commentator, is welcome to give their dogs unfettered

access to an exercise area that is larger than the required area established by the statute. The primary enclosure size may also be greater than the requirements of the statute. The statute sets minimum requirements.

Comment:

I have many repeat customers that tell me that my dogs are the best they have ever owned. Where are they to get puppies that are held and loved from the moment they are born? The only way that I can comply with these proposed regulations would be to mass produce puppies to cover the costs of the upgrades and then I would not have time to give each pup the love that they deserve.

RESPONSE

The commentator had expressed that she already complies with a majority of the standards that would have been imposed had the proposed regulation been promulgated as a final regulation. The Department appreciates that she has taken steps to provide such a good kennel environment for her dogs. The Department, as set forth in response to other comments, has made substantial and substantive changes to the final-form regulations that make the standards more objective, flexible, measurable and enforceable and less costly.

There is also the option of producing and selling less than 60 puppies in one year. In that case you may apply for a K-Class license. A K-Class license does not require you to make the changes necessary to comply with the Commercial Kennel provisions of the Dog Law and the regulations.

VETERINARIANS' COMMENTS

I. Dr. KATE HURLEY

Commentator:

Submitted by: Kate Hurley, DVM, MPVM
U.C. Davis, California

Comment: General

I am a veterinarian with over 20 years of experience working with animal shelters and advanced training in shelter medicine. I have consulted extensively with animal shelters and boarding facilities and have personally visited over 300 shelters. These regulations seem consistent with expectations and norms for animal shelters, in my experience. These guidelines also seem in line with generally recommended standards for animal housing. Smooth, sealed, cleanable surface such as sealed concrete are recommended both for ease of disinfection and to reduce the risk of injury to animals. Feces should be physically removed several times daily as needed to keep runs sanitary and runs should be thoroughly cleaned of urine at least daily. Waste should not be allowed to pile up beneath open flooring as these create pest and infectious disease hazards.

RESPONSE

The Department very much appreciates that the commentator has reviewed the proposed regulations and approves the general standards established in those regulation. The final-form regulation has made substantive and substantial changes to the proposed regulation, but all such changes have been based on research and consultation with experts, such as engineers that design and build kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department. The final-form regulation has retained the underlying health and welfare standards espoused in the proposed regulation but has made changes to comport with statutory authority, clarify and objectify the regulation and assure the levels are measurable, attainable, enforceable and necessary to assure the basic health and welfare needs of the dogs.

II. PENNSYLVANIA VETERINARY MEDICAL ASSOCIATION (PVMA)

Commentator:

Submitted by: Lisa A. Murphy, VMD, DABT, and President
Pennsylvania Veterinary Medical Association
12 Briar Crest Square
Hershey, PA 17033

Background:

On behalf of the Pennsylvania Veterinary Medical Association (PVMA). I thank you for the opportunity to provide our comments on the Canine Health Board's standards for commercial breeding kennels. As the state organization representing over 1,900 veterinarians, including the members of the Board, we extend our appreciation to the Board for the expertise they provided and the commitment they have shown to the arduous process of developing these regulations. We also thank the Department for their concern regarding the health and welfare of the dogs housed in commercial breeding facilities. As you know, the health and the welfare of the dogs impacted by these regulations are of utmost concern and are the sole reasons for our comments today.

Previously, we submitted comments during the temporary guidelines comment period earlier this year. However, because our concerns with the temporary guidelines remain unaddressed, the comments below echo earlier concerns now that the proposed rulemaking has been promulgated.

Comment: Development of the Regulations

As you are aware, Section 221 of Act 119 of 2008 which establishes the Canine Health Board states that the Board's purpose is to determine the standards based on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7) and (8) and (i)(3) of the Act. In addition, the Board was charged with the development of temporary guidelines and regulations under this section. The temporary guidelines issued were created within 45 days of the Board's first meeting which, in accordance with the provisions of Act 119, had to take place within 30 days of the effective date of the Act.

The 45-day timeframe allotted for the development of temporary guidelines was unreasonable. A 45-day turnaround time would be a major accomplishment for individuals who are knowledgeable about the subject matter and about how to develop regulatory language. Veterinarians, including the nine individuals on the Board, are highly-qualified and skilled people. However, their knowledge and expertise is in animal health and well-being, not in establishing engineering standards for ventilation, relative humidity, ammonia ranges, and lighting ranges or in writing regulatory language.

RESPONSE

The Department agrees that the Canine Health Board is comprised of very knowledgeable and skilled individuals and that they did an extraordinary job in researching and completing very technical Guidelines within a 45 day time period.

The standards of the regulations do require the consultation and expertise of engineers and architects, as well as, veterinarians. The Department, in responding to comments and drafting the final-form regulations did consult with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities, as well as, architects, animal scientists and the veterinarians from the Canine Health Board and the Department. The Department had meetings with members of the Pennsylvania Professional Dog Breeders Association and the American Kennel Club and did additional research, which it had reviewed by the engineers and veterinarians.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also

consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Scope of Guidelines

The temporary guidelines to be established by the Canine Health Board were to: 1) determine auxiliary ventilation to be provided if the ambient air temperature is 85 degrees Fahrenheit or higher, 2) determine appropriate ventilation, relative humidity and ammonia ranges, and 3) appropriate lighting ranges.

However, in the currently regulatory proposal, the Canine Health Board makes the following recommendations as standards:

- 8-20 air changes per hour
- Ambient air temperature in excess of 86 Fahrenheit will exclude dogs from that portion of the facility
- Relative humidity shall be 1-50% when the temperature is above 75 Fahrenheit
- Carbon monoxide levels below detectable levels
- Particulate matter below 10 mg/meter cubed
- Glazed window area may not be less than 8% of the floor space
- Night time lighting 1-5 foot candles
- Daytime lighting 50-80 foot candles
- Specified canine behavior which kennelled dogs may not exhibit as these behaviors are presumed to be caused by unhealthy environmental conditions.

RESPONSE

Ventilation: The language of the statute is clear and confers absolute authority for the Department to regulate ventilation and humidity levels at all times. Section 207(h)(7) of the Dog Law, along with Section 221(f) provides the authority to regulate ventilation at all times that dogs are present in a kennel facility (3 P.S. §§ 459-207(h)(7) and 459-221(f)). The Canine Health Board and hence the Department as the promulgating agency has the absolute authority, under section 207(h)(7) of the Dog Law (3 P.S. § 459-207(h)(7)) to set and establish proper ventilation, humidity and ammonia levels. The express and specific language of section 207(h)(7) of the Dog Law – in its entirety – establishes the complete authority of the Canine Health Board and the Department to establish standards. Section 207(h)(7) reads, in pertinent part, “Housing

facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-221(f))

The language is very clear and precise. The Board and the Department have the authority to set "at all times" the proper ventilation, humidity and ammonia standards in commercial kennels. This authority is in addition too, not a modification of the auxiliary ventilation authority and makes it perfectly clear the Department has absolute and specific authority to address proper ventilation, at all times, in commercial kennels. Under the authority set forth at section 221(f) of the Dog Law (3 P.S. 459-221(f)) these standards have to be and are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels. As set forth in answers to previous comments, the Department researched and consulted with engineers and architects that build and design kennel buildings, animal scientists from the Pennsylvania State University and department and Canine Health Board veterinarians in establishing the proper ventilation, humidity and ammonia ranges

With regard to the specific ventilation standards established, the final-form regulation no longer measures air exchanges per hour or requires that measurements be taken at the height of 10% of the dogs. The ventilation standard is now set in cubic feet per minute per dog.

The final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

In response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates

and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

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

The provisions of section 28.2(8)(i)(A)(I-V) of the proposed regulations have been either eliminated or extensively modified in the final-form regulation. The provisions were modified to account for the information needed to verify and calculate the cubic feet per minute (CFM) per dog standard of the final-form regulation, which replaced the air exchanges per hour standard. The information requested is based on consultations with and approved by the kennel housing facility engineers consulted by the Department.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Ambient Air Temperature: With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement in the final-form regulations. Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

Humidity: However, since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. Instead, the final-form regulation utilizes the absolute authority conferred by section 207(h)(7) to establish proper humidity ranges at all times that dogs are present. The final-form regulation requires the kennel owner to utilize auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit

C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

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

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure

survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

With regard to ventilation standards, not only does the final-form regulation do away with air exchanges per hour and change to a more objective and defined standard of cubic feet per minute per dog, but the final-form regulation no longer requires 100% fresh air exchange. It now provides that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing facility. These standards will make the system easier to design and install, easier to assure compliance and less expensive to operate because a majority of the air can be re-circulated and the amount of air circulation is based on kennel volume and number of dogs.

In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

Carbon Monoxide: The final-form regulation no longer establishes a carbon monoxide level or standard. The final-form regulation only requires that kennel housing facilities utilizing any carbon monoxide emitting device, functioning carbon monoxide detectors shall be installed and maintained in each room or area of the kennel and kennel housing facility – excluding outdoor runs - in which dogs are housed, kept or present. The carbon monoxide detectors shall meet or exceed the UL standard 2034 or the IAS 6-96 standard, or its successor standards. This was done in consultation with animal scientists from the Pennsylvania State University and the Canine Health and Department veterinarians. The engineers consulted agreed that expulsion of carbon monoxide was part of ventilation and felt that carbon monoxide would not be a problem so long as the ventilation provisions of the final-form regulations were adhered to, but agreed having detectors was prudent in case of a system malfunction.

Particulate Matter; Glazed Lighting and Nighttime Lighting: The Department has deleted from the final-form regulation all provisions and language related to particulate matter, glazed lighting and nighttime lighting.

Daytime Lighting Ranges: The Dog Law, at section 207(h)(8) requires that kennel housing facilities be "...lighted well enough to permit routine inspections and cleaning of the facility and observation of the dogs...and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning and observation of

animals at any time and for the well-being of the animals..." The final-form regulation provides the range of lighting that is proper to carry out that duty.

With regard to the exact footcandle requirements of the final-form regulation, the Department did additional research and modified the standard in the final-form regulation. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers who design kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. The veterinarians and animal husbandry scientists consulted felt the range of 40-60 footcandles, which translates to 430-650 lux, was appropriate for both the dogs and the humans that had to care for those dogs. This level is further supported by the NIH standards for office and administration areas and Penn State University's standards for class room lighting, which are also 50 footcandles (as set forth in Dr. Kephart's comments). This level will provide for the health and welfare needs of the dogs housed in the facilities and will allow for proper inspection of the facilities and animal husbandry practices, such as cleaning and sanitizing and monitoring the dogs for health issues. The NIH standards are attached to this document as Exhibit D.

Illness and Stress: The Department considered the concerns expressed by this and other commentators and has modified the language of that section to carry out the intent. The language that appeared in subsection 28a.2 (9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress, has been substantially modified in the final-form regulations and is now subsection 28a.2(h) in the final form regulation. First, based on discussions with animal scientists, at the Pennsylvania State University and Department and Canine Health Board veterinarians, the number and type of conditions in dogs that may denote poor ventilation has been reduced. Second, and significantly for purposes of authority, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that animal scientists and veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that are too high, as well as, insufficient air circulation or auxiliary ventilation. Paragraph (2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part

of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

Comment: Scientific Basis and Data

There is little relevant scientific basis for the measurements and parameters discussed in the regulations. It appears that most of the scientific data which was used came from resources for research facilities and shelters and was subjectively applied to "fit" a commercial breeding environment. Research facilities are incredibly controlled environments out of necessity for disease management, purity of the dog colony, etc. Commercial breeding facilities cannot be fairly regulated using the same standards because the dogs have access to outdoors at all times and the environment does not need to be as controlled for raising companion animals.

RESPONSE

First the Department disagrees with the general assertion that disease management should not be a concern in commercial kennels. In addition, the Department disagrees that successful animal husbandry standards established by the National Institute of Health (NIH) or utilized by animal research facilities or kennels other than commercial kennels should not be considered and utilized in forming standards for canine health and well-fare in commercial kennels.

However, the final-form regulation does not establish standards that are as strict as those followed in animal research kennels. According to the engineers consulted the standards are not as strict as those utilized in designing other kennel types, such as boarding kennels or animal shelters. As set forth in the responses to other comments, although there are not many studies on dogs or dog housing environments outside institutional standards, the standards established in the final-form regulation are based on scientific studies done conducted on dogs and animal husbandry practices related to dogs or research, data and studies related to other animals, such as swine, cattle, poultry and humans. In addition, the final-form regulations are based on consultations with and verifications from experts such as engineers and architects that build and design kennel housing facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

The PVMA is in a unique position to provide any additional studies or data the Department or the Canine Health Board may have failed to find or consult. The PVMA was welcome to send such supporting documentation with its comments.

Comment: Justification of Standards

The proposed standards need to be justified in order to make it clear how these standards were arrived at and what authoritative source was used to reach these values. Otherwise, the standards seem arbitrary and designed to make it difficult to conduct business as a Class C kennel and not in the best interest of the dogs in the kennel. The methods of measuring these standards also need to be defined. There should be standardization of the methods and tools used by both kennel operators and dog wardens so the assessments are accurate and everyone is using the same tools and units of measurement. This will allow for less subjectivity, easier compliance, and more accurate enforcement.

RESPONSE

The Department has engaged experts in the field of kennel housing facility engineering and design, animal scientists, veterinarians from the Department and the Canine Health Board, met with members of the Pennsylvania Professional Dog Breeders Association and an AKC Senior Field Representative, reviewed research and minutes of the Canine Health Board, done additional research and consulted engineers and veterinarians with regard to that research and met with representatives of the General Assembly and IRRC in responding to the comments and making substantial and substantive changes to the final-form regulation. Any person that requested a meeting was engaged by the Department. In short, the Department has not been silent, nor has it stood pat on the information and research that led to the promulgation of the Guidelines and the proposed regulations. The PVMA did not request a meeting with Department and did not provide any literature with their comments, however, the Department has done research and elicited expert opinion and advice with regard to their comments. The Department has met all of the requirements of the Regulatory Review Process in its deliberations and promulgation of this regulation.

The assertions made in the comment are very general nature and point to no specific provisions within the proposed regulations. However, in drafting and reformulating the final-form regulations, the Department did go back to sources utilized by the Canine Health Board and to literature utilized by the Canine Health Board for the purpose of asking questions and verifying information. Some of the information and research was utilized and some of the information and research was set aside. In addition, the Department consulted engineers, architects and a regulated group to request input. The Department consulted with engineers from the private sector (Learned Design and Paragon Engineering Services) and an engineer from the Pennsylvania State University, as well as animal scientists from the Pennsylvania State University and Department veterinarians and also did additional research of its own so that it had a better understanding of ventilation standards and measurement criteria, humidity, ammonia and lighting levels and requirements, as well as, the interrelationship and interaction between these ventilation, humidity, temperature and auxiliary ventilation and their relationship to animal health and welfare. The majority of the questions asked and issues raised and reviewed were based on the comments received from the general public, the General Assembly and the Independent Regulatory Review Commission. In addition, the Department reviewed the statutory authority behind the criteria established in the proposed regulation.

As a result of the information gained, the Department has made substantial and substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act, are attainable, comport with science, animal husbandry practices and expertise and experience of people in the field of kennel design and dog health issues and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels.

The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable. In addition, the Department had the engineers consulted review the final-form regulatory standards to assure those standards were objective enough to allow them to design a kennel, could be designed and implemented in new kennel construction or a retrofit of an existing kennel and would not be overly expensive to design, install and operate. The engineers provided the verifications and set forth cost estimates of between \$10 per square foot and \$25 per square foot.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

Comment: Lack of Data Related to Dogs In Commercial Breeding Kennels

Because there is little to no scientifically-based data available for dogs in commercial breeding kennels, it is suggested that this data be collected prior to imposing ventilation, relative humidity, ammonia and lighting range standards on the regulated community. We are aware that the Canine Health Board did have individuals with agricultural engineering expertise address the group about standards. However, as stated by these agricultural experts, there is no scientifically-based data available for dogs in this environment. Therefore, it would

make sense to survey commercial kennels rated as excellent, compliant, well-run operations with a track record of housing and breeding healthy dogs and assess their ventilation, relative humidity, ammonia and lighting ranges, and population and kennel sizes. This would provide baseline information to be used by the Board. With the assistance of kennel inspectors, breeders, and agricultural engineering, animal facility engineering, and ventilation experts familiar with animal husbandry practices and measurements used in large groups of animals (such as the standards established for swine, cattle, and other agricultural animals), the Board could develop accurate measurements and acceptable ranges.

RESPONSE

First, in drafting the final-form regulations the Department did consult kennel inspectors, such as the AKC Senior Field representative and utilized the expertise and experience of the Bureau of Dog Law Enforcement, the Department met with members of a breeding organization and consulted an agricultural engineer and animal scientists from the Pennsylvania State University whose background and expertise is in practices utilized in large animal groups, swine, cattle and other agricultural animals. In addition, the Department consulted and received ideas and verification from private engineers that build and design kennel housing facilities and consulted a private architect that design kennel buildings. The Department also continued to use the experience, knowledge and skill of the members of the Canine Health Board and the Department veterinarians in crafting the language of the final-form regulation. The measurements and ranges in the final-form regulation have been verified by the engineers as being accurate, measureable and attainable through design and both the engineers that design kennel buildings and the veterinarians, as well as, the animal scientists consulted believe the ranges established are acceptable.

With regard to doing studies in commercial kennels, the Department is required by the statute to establish regulation based on animal husbandry practices that account for the welfare of the dogs. While it would be nice to have the time, resources and funding necessary to carry on large scale studies of commercial kennel environments to determine what levels of ventilation, humidity, ammonia and lighting are optimal (or perhaps minimal) to protect dog health, it is simply not practical. This is especially true when the regulated industry itself is waiting to find out what the standards will be and is perhaps even wasteful when one considers the knowledge already available, such as the knowledge gleaned from the engineers and architects that design and build kennel housing facilities. They have the data and knowledge to know what works and how to utilize the minimum design to assure animal health and welfare. The animal scientists and veterinarians that work with dogs or other large group or confined animals have a wealth of knowledge that was also utilized to formulate the final-form regulatory standards.

Comments: Authority of Board

In addition, most of these standards were not placed within the authority of the Canine Health Board by the Dog Law and represent an attempt to rewrite the law without authority. Examples are listed below:

1. Section 28a.2. Ventilation - General

In paragraph (1), the proposed regulation requires a mechanical ventilation system be used when the ambient temperature is 85 degrees Fahrenheit to reduce the temperature. This goes beyond the authority in the law. The only type of ventilation that should be addressed by the Canine Health Board is "auxiliary ventilation" and only "If the ambient air temperature is 85 degrees or higher." The responsibility of the Canine Health Board is to determine an acceptable ventilation range. These requirements mandate mechanical ventilation even though kennels may function successfully with passive ventilation. The Dog Law, as passed by the Pennsylvania House and Senate, did not mandate mechanical ventilation and this was inserted by the Canine Health Board as an attempt to rewrite the law, exceeding their charter which was to set standards for the amount of ventilation, not how it was accomplished.

2. Section 28a.2 , Paragraph (1)

This language limits the temperature in a commercial kennel to a maximum of 86 degrees Fahrenheit and appears to go beyond the authority of the Canine Health Board. In Section 207(h) (6) of the law, a temperature range for commercial kennels of 50 to 85 degrees Fahrenheit is established, unless auxiliary ventilation is provided when the air temperature rises above 85 degrees Fahrenheit. The proposed standard suggests that dogs cannot be inside when the temperature is 86 Fahrenheit or higher, even though the next sentence says that this restriction does not apply to outside areas. If a dog could be in air that is 86 Fahrenheit outside, the restriction for inside air seems arbitrary, especially in light of the ventilation requirement of 8-20 air changes per hour. The ambient air in Pennsylvania in the summer can exceed 86 Fahrenheit and is not considered unhealthy for animals or people as long as shade, ventilation, and access to water are provided.

3. Section 28a.2, Paragraph (3)

This provisions states, "when the temperature is above 75 Fahrenheit the relative humidity shall be 1%-50%". This is not possible in Pennsylvania except in a hermetically sealed kennel. It is unreasonable to expect the humidity to be this low in any home or kennel without air conditioning. Also, it is well-recognized that humidity 30% or below dries out a dog's coat and skin and is not healthy.

4. Section 28a.2, Paragraphs (5) and (7)

This paragraph requires a commercial kennel to install and maintain carbon monoxide detectors. The Canine Health Board has no authority to address carbon monoxide levels. Similarly, paragraph (7) establishes a limit for particulate matter. The limited scope of authority of the Canine Health Board does not cover particulate matter.

5. Section 28a.2, Paragraph (9)

This paragraph identifies signs of illness associated with poor ventilation. This list of adverse clinical signs is not necessarily associated with poor ventilation and needs to be interpreted in light of breed, age, reproductive status, chronic disease, etc. It is unreasonable to state that dogs may not exhibit these signs in a kennel. There are many reasons why a dog may vomit. pant. or have nasal discharge that

have nothing to do with ventilation.

6. Section 28a.2, Paragraphs (10) and (11)

The standards are subjective and vague as written. In addition, paragraph (11) requires air filters. The limited authority of the Canine Health Board to establish appropriate ventilation ranges does not include the authority to require air filters.

7. Section 28a.2, Paragraph (12)

This paragraph states that all ventilation systems must comply with the latest edition of applicable codes. The Canine Health Board does not have the authority to establish the provision related to ventilation systems being compliant with the latest applicable codes. Their authority is to establish ventilation ranges.

8. Section 28a.3. Lighting - General

Section 207(h) (8) of the Act establishes lighting requirements for commercial kennels, which authorizes either natural or artificial light. The only responsibility of the Canine Health Board is to establish appropriate lighting ranges for housing facilities of dogs. The provisions in this section appear to go beyond the authority of the Canine Health Board.

9. Section 28a.1

The definition of "Excessive Light" is vague, suggesting that direct light shining, either from the sun or a light fixture, is prohibited. In contrast, in Section 28a.3, (1) "Natural Light," each dog is required to have exposure to natural light. Does this mean that the sun cannot shine on an indoor dog but can only reach an indoor dog by reflecting off of some surface? This seems arbitrary and designed to confuse kennel owners and kennel inspectors.

10. Section 28a.3, Paragraph (1)(ii).

"The minimum combined total of net glazed area of external windows, external sky light or area of other external openings through which natural light passes within each room where dogs are housed may not be less than 8% of the floor space". This seems excessive. The number seems arbitrary and does not seem to hinge on the health of the dog.

11. Section 28a.3, Paragraphs (1)(i)(ii).

The requirement of 50-80 foot candles of light during the day seems arbitrary, especially when these proposed regulations prohibit direct sunlight or direct artificial light on the dog. In addition, the requirement of 1-5 foot candles of light at night time means that the dogs cannot sleep in the dark. This is unreasonable. Dogs should be allowed to have complete darkness for good rest, just like people.

RESPONSE

1. The Department disagrees with the premise that the Canine Health Board and the Department as the promulgating agency can only regulate auxiliary ventilation. Auxiliary ventilation is just that – additional ventilation techniques available if the temperature in the kennel rises above 85 degrees. Section 207(h)(6) of the Dog Law

(3 P.S. § 459-207(h)(6)) is the provision of the statute that requires the regulation of auxiliary ventilation. Section 207(h)(7) establishes the authority and duty of the Canine Health Board to address and the Department to regulate ventilation, humidity and ammonia levels **at all times** when dogs are present in the kennel facility. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation... The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." Section 221(f) requires the Canine Health Board to address and set those standards and the Department to promulgate regulations based "...on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-221(f)). The final-form regulations carry out that very duty and set standards for ventilation based on cubic feet per minute per dog. The regulation then addresses how the standard will be measured, the standards to assure animal welfare, compliance and the duty of the kennel owner to meet that standards at all times. All of this is well within the authority conferred by the Act.

The language is very clear and precise. The Board and the Department have the authority to set "at all times" the proper ventilation, humidity and ammonia standards in commercial kennels. This authority is in addition too, not a modification of the auxiliary ventilation authority and makes it perfectly clear the Department has absolute and specific authority to address proper ventilation, at all times, in commercial kennels. Under the authority set forth at section 221(f) of the Dog Law (3 P.S. 459-221(f)) these standards have to be and are based on animal husbandry practices that assure the welfare of dogs housed in commercial kennels. As set forth in answers to previous comments, the Department researched and consulted with engineers and architects that build and design kennel buildings, animal scientists from the Pennsylvania State University and department and Canine Health Board veterinarians in establishing the proper ventilation, humidity and ammonia ranges. It was determined by the engineers (Learned Design and Paragon Engineering Services) and architects consulted, that the proper rates of ventilation could not be achieved or properly maintained without a mechanical means of air circulation. Various factors, including wind, wind direction and inverse convection to name a few, make it impossible for any kennel building to be designed in a manner that would allow it to obtain the proper ventilation levels, on a consistent and necessary basis, without mechanical means.

A holistic approach or one that incorporates kennel housing facility location and natural wind or convection will not work and will not achieve the levels of ventilation necessary to assure the welfare of the dogs housed in commercial kennel housing facilities. There is no other technology that the engineers or architects are aware of, or this Department for that matter, that will achieve the appropriate ventilation rates. If a new technology becomes available the Department can amend the regulation to add that technology. Until then, in order to properly clarify the standards established by the regulation, stating that a mechanical ventilation system must be utilized is necessary.

2. The final-form regulation deletes the language that is the concern of this comment. The final-form regulation does not regulated ambient air temperature in a kennel housing facility. With regard to standards once ambient air temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement in the final-form regulations. Although not enforced by

the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

However, since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. Instead, the final-form regulation utilizes the absolute authority conferred by section 207(h)(7) to establish proper humidity ranges at all times that dogs are present. The final-form regulation requires the kennel owner to utilize auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

With regard to the humidity levels when temperatures are greater than 85 degrees Fahrenheit, the Department, with the assistance of consultations with the engineers listed above, Department and Canine Health Board veterinarians and research provided by Dr. Overall of the Canine Health Board, reviewed heat index values for cattle, swine, poultry and humans. Those values show that all of those animals are in a danger zone once temperatures rise above 85 degrees Fahrenheit, if there is no correlated reduction in humidity levels. The reason for this is supported by the physiology of cooling. Humans, cattle, equine and swine cool internal body temperatures by perspiring, which is the most efficient cooling mechanism. Dogs cool their internal body temperatures mostly through panting, with a minimum amount of cooling provided by perspiring through the pads on

their feet. However, perspiring or panting in and of itself does not result in the cooling of the body. In order for the cooling effect to occur the perspiration or moisture, whether it be a human, swine or cow or on the tongue of the dog, has to be evaporated. On a humid day or in a humid environment there is already a lot of moisture in the air and therefore the evaporative process is either less efficient or does not take place and the internal body temperature continues to rise. In sum, you can not provide a cooling effect by simply increasing the amount of humid air flowing over the body of a dog or any other animal. Pulling already moist and humid air over the body does not and will not allow for the evaporation of perspiration and therefore will not provide a cooling of the body. The result is that when temperatures rise above 85 degrees, humidity levels must be controlled in order to attain a heat index value that will assure the health, safety and welfare of dogs confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

With regard to ventilation standards, not only does the final-form regulation do away with air exchanges per hour and change to a more objective and defined standard of cubic feet per minute per dog, but the final-form regulation no longer requires 100% fresh air exchange. It now provides that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing facility. These standards will make the system easier to design and install, easier to assure compliance and less expensive to operate because a majority of the air can be re-circulated and the amount of air circulation is based on kennel volume and number of dogs.

In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool

themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

3. As set forth in the response to comment 2 above. The Department has modified the humidity requirements in the final-form regulation. With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

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The Department has confirmed with the engineers consulted (Learned Design and Paragon Engineering Services) that the humidity and heat index values established can be achieved in commercial kennels – even with the unfettered access to outdoor exercise - and can be achieved through dehumidification, without temperature reducing air conditioning. The statement may be true of tunnel ventilation, which no matter how employed or utilized can not control air temperature or humidity, but is not true of a system that allows for air re-circulation as is allowed by the final-form regulation.

4. The final-form regulation no longer establishes a carbon monoxide level or standard. The final-form regulation only requires that kennel housing facilities utilizing any carbon monoxide emitting device, functioning carbon monoxide detectors shall be installed and maintained in each room or area of the kennel and kennel housing facility – excluding outdoor runs - in which dogs are housed, kept or present. The carbon monoxide detectors shall meet or exceed the UL standard 2034 or the IAS 6-96 standard, or its successor standards. This was done in consultation with animal scientists from the Pennsylvania State University and the Canine Health and Department veterinarians. The engineers consulted agreed that expulsion of carbon monoxide was part of ventilation and felt that carbon monoxide would not be a problem so long as the ventilation provisions of the final-form regulations were adhered to, but agreed having detectors was prudent in case of a system malfunction.

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

5. The Department considered the concerns expressed by this and other commentators and has modified the language of that section to carry out the intent. The language that appeared in subsection 28a.2 (9) of the proposed regulations, which related to conditions in dogs that were signs of illness and stress, has been substantially modified in the final-form regulations and is now subsection 28a.2(h) in the final form regulation. First, based on discussions with animal scientists, at the Pennsylvania State University and Department and Canine Health Board veterinarians, the number and type of conditions in dogs that may denote poor ventilation has been reduced. Second, and significantly for purposes of authority, the signs of stress or illness trigger an investigation of the ventilation, air circulation, humidity levels, heat index values, ammonia and carbon monoxide levels in the area or room of the kennel where those signs exist in dogs. If the investigation reveals problems in those areas, then proper

enforcement action may be taken by the Department. The mere existence of the signs of stress or illness does not in and of constitute a violation of these regulations. The type of conditions in dogs and the illnesses or signs of stress listed are all associated with conditions that animal scientists and veterinarians have asserted can result from poor ventilation, air circulation, humidity, heat stress or ammonia or carbon monoxide levels that are not within the ranges established by the regulations. For instance, respiratory distress can be associated with humidity and temperature levels or ammonia levels that are too high, as well as, insufficient air circulation or auxiliary ventilation. Section 28a.2(h)(2) sets forth all the signs associated with heat distress or heat stroke, which again denotes insufficient air circulation, auxiliary ventilation and/or humidity level controls in that part of the kennel facility. Matted, puffy, red or crusted eyes and listlessness can be associated with high ammonia or high carbon monoxide levels. Fungal and skin disease can denote improper humidity control in the kennel facility.

6. Subsections (10) through (12) of section 28a.2 of the proposed regulations have been deleted from the final-form regulation. The final-form regulation does require air filtration of re-circulated air. The Canine Health Board and the Department have the authority under section 207(h)(7) and 221(f) to assure sufficient ventilation that accounts for the welfare of the dogs. Section 207(h)(7) reads, in pertinent part, "Housing facilities for dogs **must be sufficiently ventilated at all times when dogs are present** to provide for their health and well-being and to minimize odors, drafts, ammonia levels and to prevent moisture condensation..." The Canine Health Board is given the duty to determine those levels in the same section, which states, "...The appropriate ventilation, humidity and ammonia levels shall be determined by the Canine Health Board." (3 P.S. § 459-207(h)(7)) In addition, the language of section 221(f) directs that the very purpose of the Board is to "...determine the standards bases on animal husbandry practices to provide for the welfare of dogs under section 207(h)(7)...." (3 P.S. § 459-221(f))

7. All language in the proposed regulation regarding "applicable codes" has been removed from the final-form regulation.

8. The Department has modified the language of the lighting provisions in the final-form regulation. Much of the language in the lighting section now reiterates the lighting standards set forth at section 207(h)(8) of the Dog Law (3 P.S. § 459-207(h)(8)). Such reiteration of the standards of the Act is absolutely appropriate and it is within the authority of the Department as the promulgating agency to restate the statutory language in the regulation. The statutory language applies and is enforceable whether or not it is in the regulation. Inserting the statutory language into the regulation adds clarity and is informative to the regulated community with regard to the standards with which the must comply.

With regard to requiring natural and artificial light, the final-form regulation now allows for either type of lighting source or a combination of both to be utilized to meet the lighting requirements of the regulation. The final-form regulation no longer contains the language of what was section 28a.3(1) of the proposed regulation (now section 28a.7 of the final-form regulation). The final-form regulation now allows for either natural or artificial light or for a combination of both. It sets general standards for all lighting and establishes specific standards that in addition to the general standards,

apply to specifically to either natural or artificial lighting. What was subparagraph (1) of the proposed regulation is now contained in a provision that relates only to natural light. Natural light is no longer required. What were subparagraphs (1)(ii)-(1)(vi), have been removed from the final-form regulation. The new language, regarding general lighting standards, mirrors the language of the Act and is also consistent with existing United States Department of Agriculture, Animal Welfare Act regulation standards.

9. The term and the requirement that dogs in commercial kennels not be exposed "excessive light" comes from section 207(h)(8) of the Dog Law (3 P.S. S 459-207(h)(8) and is also set forth in the Federal Animal Welfare Act regulations (9 CFR §§ 3.2(c) and 3.3(c)) and is applicable to kennels whether or not the Department sets it forth in these regulations. The Department however, has provided a more objective definition of "excessive light" in the final-form regulation. The definition is based on research done by Dr. Overall of the Canine Health Board.

With regard to direct exposure to natural light, as stated, previously the lighting provisions of the final-form regulation allow for natural or artificial light and does not require that each dog have exposure to direct natural light. The animal scientists and kennel engineers the Department consulted either expressed concerns or had actually witnessed instances where dogs primary enclosures were exposed to direct sunlight and the dog could not escape the light or the heat generated, thereby putting the dogs health in jeopardy. The dogs in the majority of these kennels have either unfettered access to outdoor exercise or the kennel owner must adhere to an adjudication issued by the Canine Health Board setting forth the amount of time the dogs must be placed in an outdoor exercise area, thus providing access to natural sunlight. Therefore, the Department felt it was prudent to remove this provision.

10. The language related to total net glazed area, that was in section 28a.3(i)(ii) of the proposed regulation, has been removed from the final-form regulation.

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

With regard to the nighttime lighting standard, although removed from the final-form regulation, it was not an arbitrary standard. The standard was based on research that showed dogs need 1-5 footcandles of light in order to allow for their normal startle response. Complete darkness is not optimal for dogs.

Comments: Fiscal Impact

1. Cost to Department:

Financial feasibility is not our main concern but is interrelated to our overriding concern for the welfare of the dogs. As written, these regulations would result in the Department having to purchase the equipment used in the measurement of temperature, humidity levels, ammonia levels, carbon monoxide levels, particulate matter, air velocity and lighting. In addition, there would be costs associated with training dog wardens to properly use the equipment and regularly maintain and certify it for accurate measurements. Because of the additional time involved in each kennel inspection, more dog wardens may also be needed.

2. Cost to Regulated Community:

The regulated community will also need to purchase this equipment and be trained on proper use and maintenance. There will be significant costs associated with installation of mechanical ventilation systems, additional windows, and utility costs. These costs are in addition to the significant financial investments that kennel operators need to make to comply with the new provisions of the Dog Law such as creating unfettered access to outdoor exercise areas and larger primary enclosure spaces.

3. Cost of Compliance:

Another concern is whether or not compliance could even be possible and, if so, how costly compliance would be to have a ventilation system that works according to the guidelines when a facility has multiple, uncovered openings to outside exercise areas. Fairness should be used in the expectations of kennel operators if they are adhering to standards that ensure the health and welfare of the dogs and are acting responsibly.

If a person looks at the "big picture", fiscal feasibility, ability to comply with regulations, and proper enforcement are all crucial elements to the welfare of the dogs we are all seeking to protect. If responsible commercial kennel operators find it impossible to comply with these regulations and the other requirements of the law, it could result in commercial kennel operations ceasing altogether in the Commonwealth. In fact, this is already occurring. While some may argue that this would be a good result, the kennels will simply take residence in states with far fewer regulatory standards than Pennsylvania, a scenario that is likely to seriously impede and endanger the health and welfare of the dogs that Act 119 of 2008 and these regulations seek to protect.

RESPONSE

1. 2. and 3. The regulations, which have not yet been promulgated, have not been the driving force with regard to kennels that have either gone out of business either on their own or because of enforcement action by the Department. The driving force to date has been the cost of compliance with the standards imposed by Act 119 of 2008 and kennel owners failure to take action to comply with those standards.

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

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

The final-form regulation contains no requirement for temperature reduction. Air conditioning or HVAC is allowed but not required. The final form regulation focuses on humidity levels in kennel housing facilities, and expands the range of the humidity level to 30%-70% when temperatures are between 50 and 85 degrees Fahrenheit. The final form regulation requires additional humidity reduction when temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, but allow the kennel owner four hours to reach the humidity level necessary to assure a 85 Heat Index value in the facility. The humidity ranges are based on expert analysis and opinion provided by the engineers consulted (Learned Design, Paragon Engineering Services), animal scientists and Canine Health Board and Department veterinarians. The Department with the assistance of Dr. Overall from the Canine Health Board found and utilized a dog survivability study that pinpoints the upper most range of the heat index that would allow for survival of dogs. The Heat Index value is based on the results and recommendations of a survivability study conducted on beagles. The study entitled "A Temperature/Humidity Tolerance Index for Transporting Beagle dogs in Hot Weather", was sponsored by the Federal Aviation Administration and authored by Gerald D. Hanneman and James L. Sershon. The document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.

The Heat Index Value is also based on the Tufts Animal Condition and Care (TACC) criteria, specifically the TACC Weather Safety Scale, authored by in 1998 by Dr. Gary Patronek, then-Director of the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine and first published in "Recognizing and Reporting Animal Abuse: A Veterinarian's Guide." This widely-used scale, one of several canine assessment tools focused on consequences for the dog, indicates that, even with water and shade available as in a commercial kennel setting, a potentially unsafe situation develops above a 90 degree F temperature, especially for brachycephalic, obese

or elderly dogs, as well as dogs under 6 months of age. Although the regulation is based on heat index, regulates relative humidity rather than temperature, and a temperature of over 90 degrees F would be permitted if combined with a relative humidity that would result in a HI of no more than 90, the inclusion of the TACC Weather Safety Scale as a basis for the regulation emphasizes that the standard being set goes beyond survivability to minimize adverse heat-related consequences for dogs in commercial kennels. The survivability study and the TACC Weather Safety Scale are generally acknowledged to be the only two scholarly resources that give specific heat-related guidance applicable to canines.

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

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

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

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

The cost of the mechanical ventilation system will vary according to the sophistication and complexity of the system the kennel owner decides to install. However, the Department has consulted several engineers and engineering companies that build kennel buildings and asked them to assess the cost of designing and installing a

ventilation system that would meet all the ventilation requirements – including auxiliary ventilation and humidity levels - of the final-form regulation. The costs are based on a kennel owner having to retrofit or build from the ground up and include the cost of installing all of the equipment, even though most kennel owners, especially those subject to United States Department of Agriculture regulations, should already have some form of mechanical ventilation, auxiliary ventilation and – in the case of USDA – temperature control devices already installed in the kennel.

The Federal Animal Welfare Regulations, at section 3.1(d)(related to housing facilities, general) require, “The housing facility must have reliable electric power adequate for heating, cooling, ventilation, and lighting and for carrying out other husbandry requirements in accordance with the regulations in this subpart...” (9 CFR § 3.1(d)). The Federal Animal Welfare Act Regulations further require that temperatures in enclosed or partially enclosed housing structures be maintained between 50-85 degrees Fahrenheit (9 CFR §§ 3.2(a) and 3.3(a)) and that proper ventilation and lighting be provided (9 CFR §§ 3.2(b) and (c) and 3.3(b) and (c)). Therefore, the costs estimates, which are set forth in the regulatory analysis form that accompanies the final-form regulation will necessarily be higher than those incurred by such kennel owners, because they should already have systems in place. The regulatory analysis form will set forth the greatest cost that could be incurred for a system that would meet the standards of the regulations.

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

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

The Federal Animal Welfare Act regulations in fact require the kennel to reduce the temperature to 85 degrees Fahrenheit.

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

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

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

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

Comment: Canine Health Board Member Concerns

Finally, a majority of the members of the Canine Health Board have expressed sincere concerns with the final work product that was developed and serious flaws with the process used to develop the current proposed rulemaking. Their concerns are based on the final regulatory proposal exceeding their scope of authority and the lack of relevant scientific basis for the facilities in question. The regulations as proposed may result in major difficulties in complying with the regulations and in

enforcing them. These concerns and other administrative process concerns have been shared with the Department in writing as you are aware. Those concerned members of the Canine Health Board, and we as an association, are very apprehensive that if the proposed rulemaking moves forward, it may not be in the best interest of the dogs it aims to protect, may result in kennels being unable to comply, wardens unable to enforce the regulations, the closing of legitimate kennels, and dogs being moved and bred in states that have far worse conditions and substandard laws (or no laws at all) to ensure the welfare of the dogs. It would be much better for the dogs, for which we all share concern, if Pennsylvania kennels can comply with reasonable requirements that still provide a suitable, healthy environment for the dogs housed in commercial kennels. The Canine Health Board members who have expressed concerns have recommended that the current regulatory process be halted and that the Board be reconvened. The Board members also expressed a desire to develop a new regulatory proposal in concert with experts in the areas of agricultural engineering and ventilation, kennel inspectors and in consultation with owners of model kennels. We support their recommendations.

RESPONSE

The Department is now the promulgating agency and has moved forward through the regulatory process. The Department under its authority at sections 902 and 221(g) of the Dog law is the promulgating authority (3 P.S. §§ 459-902 and 459-221(g)). The Department reviewed the "Guidelines" drafted by the Canine Health Board and with some changes to account for form and legality drafted the Guidelines as proposed regulations. The Department held the public hearing required by section 902 of the Dog Law. The Department also drafted the preamble to the proposed regulations and the regulatory analysis form. The Department then received, reviewed and formatted all comments submitted by the public, House and Senate Committees and the Independent Regulatory Commission. The Department consulted with the Canine Health Board members, as well as, with Department veterinarians, architects, engineers, a regulated community group and animal scientists, as well as doing its own research with regard to questions and issues that arose from the comments. The Department utilized all of these resources in making changes to the final-form regulations, drafting the comment and response document and putting together the preamble and regulatory analysis form that accompanies the final-form regulations.

The Department followed all of the mandates of the Act and the regulatory process in promulgating the regulation. The Department, during the actual regulatory review process and in the promulgation of the final-form regulations, has made a legitimate effort to address the concerns of all commentators, including the persons to be regulated and has made substantive changes to the proposed regulations, so that the final-form regulation provides standards that are not unduly vague and provide a genuine opportunity for the regulated community to comply.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received

during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

In closing we sincerely appreciate the time, effort and expertise given by each member of the Canine Health Board especially in light of their own personal and professional commitments outside of their voluntary service on this Board. However, as an organization we are concerned that the final decisions made were: 1) largely outside the scope of authority of the Board and 2) subjective and not based on animal husbandry practices nor relevant scientifically-based data or measurements. Because of this we ask that serious consideration to be given to delaying promulgation of the regulations until more scientifically-based information can be established for dogs housed in commercial breeding kennels.

We would be willing to assist the Board in development of scientifically-supportable kennel standards that are responsive to the welfare needs of dogs in kennels.

RESPONSE

The Department in response to the other general and specific comments set forth by this commentator has delineated the extensive consultation and research undertaken in drafting the final-form regulation. The Department consulted experts in the field of kennel engineering, design and construction, animal scientists, persons in the field that inspect kennels, Department and Canine Health Board veterinarians and found and utilized animal husbandry practices suggested by such experts and scientific data related specifically to dogs. Although the standards may not be exactly the standards that would have been established by PVMA, they are based on solid expert advice, opinion and experience, as well as, animal husbandry practices and scientific research that has been supported and verified by the experts consulted.

As evidenced by the responses to comments received and the substantial and substantive changes to the final-form regulation, the Department did not blindly, arbitrarily or capriciously adopt any standard set forth in the Canine Health Board Guidelines or the proposed regulations. The Department consulted engineers (Learned Design, Paragon Engineering Services, Pennsylvania State University), animal scientists from the Pennsylvania State University, had meetings with members of the Canine Health Board and conferred with Department veterinarians to address ventilation, auxiliary ventilation, humidity and ammonia level and lighting standards. The Department did its own research and eventually had the engineers verify that the standards established were congruent, attainable, minimal, objective, measurable and comported with animal husbandry practices and science and design incorporated in the kennel buildings they design, build and retrofit.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

III. NADIRA WILLIAMS, VMD

Commentator:

Submitted by: Nadira Williams, VMD

Background:

As part of this comment the Commentator set forth selected regulations pertaining to dogs and cats from the 9 CFR Part 3 – Standards from the Animal Welfare Act. Those regulatory provisions are set forth in italics below.

Comment: General Reasons Supporting the CHB Regulations

We remind our licensees that these AWA regulations are the minimum standards that are required by the USDA's Animal Care agency. However, we encourage them to go above and beyond these minimum standards to ensure the health and well-being of the animals and to prevent or decrease the likelihood of non-compliances.

The proposed regulation from the PA Canine Health Board is definitely in line with our AWA regulations. I also feel that they put into practice the higher standards that we promote among our licensees. In my experience with numerous research facilities, I have noted that solid and slat-flooring is the standard for all dog enclosures. They provide a safe and comfortable surface that can be easily cleaned. I would also like to stress the importance of enrichment for these dogs. Increasing the enclosure size, does not necessarily mean that the animals will receive sufficient exercise. Nor does it guarantee that they are adequately utilizing the extra space. Implementing an enrichment plan, that includes things such as appropriate enrichment toys/ items and/ or compatible pair-housing or group exercise, will help ensure that the dogs are healthier and well-

socialized. The descriptions and parameters set forth in the proposed regulation will assist in setting a better standard of care for the dogs and ensure that their health and well-being becomes more of a priority, as opposed to simply making a profit.

Animal Welfare Act – Selected Standards

Sec. 3.1 Housing facilities, general.

Facilities and Operating Standards

(c) Surfaces--

(1) General requirements. The surfaces of housing facilities--including houses, dens, and other furniture-type fixtures and objects within the facility--must be constructed in a manner and made of materials that allow them to be readily cleaned and sanitized, or removed or replaced when worn or soiled. Interior surfaces and any surfaces that come in contact with dogs or cats must:

(i) Be free of excessive rust that prevents the required cleaning and sanitization, or that affects the structural strength of the surface; and

(ii) Be free of jagged edges or sharp points that might injure the animals.

(2) Maintenance and replacement of surfaces. All surfaces must be maintained on a regular basis. Surfaces of housing facilities--including houses, dens, and other furniture-type fixtures and objects within the facility--that cannot be readily cleaned and sanitized, must be replaced when worn or soiled.

(3) Cleaning. Hard surfaces with which the dogs or cats come in contact must be spot-cleaned daily and sanitized in accordance with Sec. 3.11(b) of this subpart to prevent accumulation of excreta and reduce disease hazards. Floors made of dirt, absorbent bedding, sand, gravel, grass, or other similar material must be raked or spot-cleaned with sufficient frequency to ensure all animals the freedom to avoid contact with excreta. Contaminated material must be replaced whenever this raking and spot-cleaning is not sufficient to prevent or eliminate odors, insects, pests, or vermin infestation. All other surfaces of housing facilities must be cleaned and sanitized when necessary to satisfy generally accepted husbandry standards and practices. Sanitization may be done using any of the methods provided in Sec. 3.11(b)(3) for primary enclosures.

.....

(f) Drainage and waste disposal. Housing facility operators must provide for regular and frequent collection, removal, and disposal of animal and food wastes, bedding, debris, garbage, water, other fluids and wastes, and dead animals, in a manner that minimizes contamination and disease risks. Housing facilities must be equipped with disposal facilities and drainage systems that are constructed and operated so that animal waste and water are rapidly eliminated and animals stay dry. Disposal and drainage systems must minimize vermin and pest infestation, insects, odors, and disease hazards. All drains must be properly constructed, installed, and maintained. If closed drainage systems are used, they must be equipped with traps and prevent the backflow of gases and the backup of sewage onto the floor. If the facility uses sump or settlement ponds, or other similar systems for drainage and animal waste disposal, the system must be located far enough away from the animal area of the housing facility to prevent odors, diseases, pests, and vermin infestation. Standing puddles of water in animal enclosures must be drained or mopped up so that the animals stay dry.

Sec. 3.2 Indoor housing facilities.

(a) *Heating, cooling, and temperature.* Indoor housing facilities for dogs and cats must be sufficiently heated and cooled when necessary to protect the dogs and cats from temperature or humidity extremes and to provide for their health and well-being. When dogs or cats are present, the ambient temperature in the facility must not fall below 50 deg. F (10 deg. C) for dogs and cats not acclimated to lower temperatures, for those breeds that cannot tolerate lower temperatures without stress or discomfort (such as short-haired breeds), and for sick, aged, young, or infirm dogs and cats, except as approved by the attending veterinarian. Dry bedding, solid resting boards, or other methods of conserving body heat must be provided when temperatures are below 50 deg. F (10 deg. C). The ambient temperature must not fall below 45 deg. F (7.2 deg. C) for more than 4 consecutive hours when dogs or cats are present, and must not rise above 85 deg. F (29.5 deg. C) for more than 4 consecutive hours when dogs or cats are present. The preceding requirements are in addition to, not in place of, all other requirements pertaining to climatic conditions in parts 2 and 3 of this chapter.

(b) *Ventilation.* Indoor housing facilities for dogs and cats must be sufficiently ventilated at all times when dogs or cats are present to provide for their health and well-being, and to minimize odors, drafts, ammonia levels, and moisture condensation. Ventilation must be provided by windows, vents, fans, or air conditioning. Auxiliary ventilation, such as fans, blowers, or air conditioning must be provided when the ambient temperature is 85 deg. F (29.5 deg. C) or higher. The relative humidity must be maintained at a level that ensures the health and well-being of the dogs or cats housed therein, in accordance with the directions of the attending veterinarian and generally accepted professional and husbandry practices.

(c) *Lighting.* Indoor housing facilities for dogs and cats must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs and cats. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animals, and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs and cats from excessive light.

(d) *Interior surfaces.* The floors and walls of indoor housing facilities, and any other surfaces in contact with the animals, must be impervious to moisture. The ceilings of indoor housing facilities must be impervious to moisture or be replaceable (e.g., a suspended ceiling with replaceable panels).

Sec. 3.3 Sheltered housing facilities.

(a) *Heating, cooling, and temperature.* The sheltered part of sheltered housing facilities for dogs and cats must be sufficiently heated and cooled when necessary to protect the dogs and cats from temperature or humidity extremes and to provide for their health and well-being. The ambient temperature in the sheltered part of the facility must not fall below 50 deg. F (10 deg. C) for dogs and cats not acclimated to lower temperatures, for those breeds that cannot tolerate lower temperatures without stress and discomfort (such as short-haired breeds), and for sick, aged, young, or infirm dogs or cats, except as approved by the attending veterinarian. Dry bedding, solid resting boards, or other methods of conserving body heat must be provided when temperatures are below 50 deg. F (10 deg. C). The ambient temperature must not fall below 45 deg. F (7.2 deg. C) for

more than 4 consecutive hours when dogs or cats are present, and must not rise above 85 deg. F (29.5 deg. C) for more than 4 consecutive hours when dogs or cats are present. The preceding requirements are in addition to, not in place of, all other requirements pertaining to climatic conditions in parts 2 and 3 of this chapter.

(b) *Ventilation.* The enclosed or sheltered part of sheltered housing facilities for dogs and cats must be sufficiently ventilated when dogs or cats are present to provide for their health and well-being, and to minimize odors, drafts, ammonia levels, and moisture condensation. Ventilation must be provided by windows, doors, vents, fans, or air conditioning. Auxiliary ventilation, such as fans, blowers, or air-conditioning, must be provided when the ambient temperature is 85 deg. F (29.5 deg. C) or higher.

(c) *Lighting.* Sheltered housing facilities for dogs and cats must be lighted well enough to permit routine inspection and cleaning of the facility, and observation of the dogs and cats. Animal areas must be provided a regular diurnal lighting cycle of either natural or artificial light. Lighting must be uniformly diffused throughout animal facilities and provide sufficient illumination to aid in maintaining good housekeeping practices, adequate cleaning, adequate inspection of animals, and for the well-being of the animals. Primary enclosures must be placed so as to protect the dogs and cats from excessive light.

(d) *Shelter from the elements.* Dogs and cats must be provided with adequate shelter from the elements at all times to protect their health and well-being. The shelter structures must be large enough to allow each animal to sit, stand, and lie in a normal manner and to turn about freely.

(e) *Surfaces.*

(1) *The following areas in sheltered housing facilities must be impervious to moisture:*

(i) *Indoor floor areas in contact with the animals;*

(ii) *Outdoor floor areas in contact with the animals, when the floor areas are not exposed to the direct sun, or are made of a hard material such as wire, wood, metal, or concrete; and*

(iii) *All walls, boxes, houses, dens, and other surfaces in contact with the animals.*

(2) *Outside floor areas in contact with the animals and exposed to the direct sun may consist of compacted earth, absorbent bedding, sand, gravel, or grass.*

RESPONSE

The Department appreciates the support of this commentator and agrees that the final-form regulation is consistent with and utilizes the minimum standards established by the Federal Welfare Act as a basis for the standards. The final-form regulation drafted by the Department, as required by the Dog Law, sets very specific ventilation, auxiliary ventilation, humidity, ammonia, lighting and flooring standards for dogs housed in commercial kennels. The Department appreciates that the commentator took the time to set forth the provisions of the Federal Animal Welfare Act that are congruent to and supportive of the standards established in the Department's regulation.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the

comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

IV. HUMANE SOCIETY VETERINARY MEDICAL ASSOCIATION (HSVMA)

Commentator:

Submitted by: Barbara Hodges, DVM, MBA, HSVMA Veterinary Consultant
Humane Society Veterinary Medical Association
2100 L Street, NW
Washington, DC 20037

Background:

On behalf of The Humane Society Veterinary Medical Association (HSVMA), I am writing to offer comments on the proposed Canine Health Board Standards for Commercial Kennel Regulations in Pennsylvania (IRRC Number 2785). HSVMA is a professional organization, representing more than 1,300 veterinary professionals

nationwide, with a focus on the welfare of all animals, including canine companions. We wish to acknowledge the expertise of and express our appreciation for the diligent efforts of our nine veterinarian colleagues on the Canine Health Board.

Comment: Commercial Kennel Health Issues

Any environment, such as a commercial dog kennel, in which large numbers of animals are housed in close proximity, presents significant herd health challenges. Infectious viral and bacterial agents such as canine distemper virus, canine parvovirus, bordatella bronchiseptica and canine parainfluenza virus (both common agents of kennel cough), as well as protozoal parasitic agents such as giardia and coccidia, are all relatively easily transmitted under such conditions. In addition to physical concerns such as housing materials, ventilation, and routine cleaning and disinfection programs, efforts to minimize animals' stress levels are important factors in protecting animal health and comfort. We believe the proposed regulations take these factors into consideration and are based on sound animal health data and research. In particular, we want to emphasize our strong support of the standards proposed for kennel temperature, ventilation and flooring.

RESPONSE

The Department appreciates the support expressed by this commentator and the specific rationale for that support. The Department agrees that proper ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, as well as, proper flooring standards are essential to dog health and welfare in commercial kennels. The Department has endeavored, within the bounds of its statutory authority and utilizing the research, knowledge, experience and expertise of engineers, architects, animal scientists and veterinarians to draft a final-form regulation that does utilize animal husbandry practices and scientific evidence and practices that will account for and assure the health and welfare of dogs in commercial kennels.

The language of the final-form regulation, although based on and still retaining many of the overall ideas and standards of the proposed regulation, has been significantly modified to provide additional clarity, more objective standards and provisions which allow for more effective and uniform enforcement. The final-form regulation contains additional sections that break the regulation down into the basic elements set forth in the statute (ventilation, humidity, auxiliary ventilation, ammonia levels, carbon monoxide, lighting and flooring. In addition, the ventilation provisions measure air circulation in cubic feet per minute per dog (CFM) not in exchanges per hour. This measurement is much easier to check, assess and enforce and allows kennel owners to adjust air circulation levels dependent on the number of dogs housed in the kennel housing facility. The ventilation section also sets forth clear standards and guidance for what constitutes a violation and clear standards and guidance with regard to a kennel owner's duty if a mechanical failure should occur. The humidity section sets forth clear humidity standards that are based on scientific research, data and practices. The auxiliary ventilation provisions make it clear that air conditioning to reduce temperatures may be utilized when temperatures rise above 85 degrees Fahrenheit, but is not required. It also sets forth examples of other techniques that are currently being utilized in kennels. The ammonia provisions set forth clear levels and measurement standards, all of which are based on consultation with and research by experts (engineers, animal scientist and veterinarians). The lighting provisions now establish clear levels and standards for either natural or

artificial lighting or both. Finally, the flooring section is broken down into three subsections. The first two subsections set forth the flooring standards contained in section 207(i)(3)(i) and section 207(i)(3)(ii) of the Dog Law (3 P.S. §§ 459-207(i)(3)(i) and (i)(3)(ii)). The third section delineates the legal authority and the standards for alternative flooring. These changes all incorporate language that is clear and establishes more objective standards.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment: Temperature

The Board's recommendation regarding a maximum ambient temperature of 85 degrees Fahrenheit is sufficient to generally guard against discomfort and potential hyperthermia in most healthy adult dogs. The commentator cited the Animal Welfare Act (AWA) as support for the 85 degree cap on temperature in commercial kennels. Title 9 Animals and Animal Products: Chapter 1-Animal and Plant Health Inspection Service, Department of Agriculture; Subchapter A-Animal Welfare; Part 3 Standards; Subpart A- Specifications for the Humane Handling, Care, Treatment and Transportation of Dogs and Cats. Section 3.2, Indoor Housing Facilities, p. 54.

RESPONSE

The Department agrees that the Animal Welfare Act sets a temperature cap of 85 degree Fahrenheit and kennels that fall under the jurisdiction of the United States Department of Agriculture should already have ventilation and temperature equipment in place to comply with that standard.

Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

That said, the final-form regulations no longer sets a temperature cap of 86 degrees Fahrenheit, nor does it require a reduction in the ambient air temperature in the kennel housing facility. Since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from numerous commentators, including the Independent Regulatory Review, the Honorable Senator Brubaker and the Honorable Members of the Pennsylvania House of Representatives.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six

hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

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

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure

survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

With regard to ventilation standards, not only does the final-form regulation do away with air exchanges per hour and change to a more objective and defined standard of cubic feet per minute per dog, but the final-form regulation no longer requires 100% fresh air exchange. It now provides that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing facility. These standards will make the system easier to design and install, easier to assure compliance and less expensive to operate because a majority of the air can be re-circulated and the amount of air circulation is based on kennel volume and number of dogs.

In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

Comment: Ventilation

The Board's recommendation regarding ventilation, stipulating an air exchange rate range of 8-20 exchanges per hour is adequate to reasonably minimize the presence of air-borne pathogens." We understand others have noted that a minimum air exchange rate of 10-15 exchanges per hour would provide even greater protection for the animals' health, and we would support this narrower range as an improvement. The commentator cited the following as support for the ventilation requirements - Environmental Enrichment Information Resources for Laboratory Animals (1995). *Dog and Dog Housing* chapter, by Robert Hubrecht, Universities Federation for Animal Welfare, p. 43.

RESPONSE

The Department did change the measurement standards for the ventilation requirements in the final-form regulation. In response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form

regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

The final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

In addition, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

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

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been

deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment: Flooring

The Board's recommendation requiring solid flooring is the best flooring option to insure the health, safety and comfort of kenneled dogs. Indeed, solid flooring is the industry standard among shelter medicine practitioners and in animal shelters nationwide, where flooring must be safe and easily cleaned and disinfected." The commentator provided the following citation supporting the comment - University of California at Davis, School of Veterinary Medicine, Koret Shelter Medicine Program website FAQs.
<http://NWIN.sheltermedicine.com/portal/fag.php?zoomget-774>. Accessed Oct. 27, 2009.

RESPONSE

The Department agrees with the comment and appreciates the supporting documentation. The Department also supports solid flooring. The final-form regulation however, at the suggestion of the Independent Regulatory Review Commission sets forth the standards of the Act and then establishes the additional animal husbandry and welfare factors the Board must consider when approving optional flooring requirements.

Comment: General Support

The HSVMA is dedicated to promoting the humane treatment of all animals, both for the sake of the animals themselves and for the benefit of the public, including the future owner-guardians of dogs confined at commercial kennels. We support the application of veterinary medicine for the betterment of animal welfare and we are pleased the Board utilized its considerable expertise to recommend standards that will enhance animal well-being in Pennsylvania kennels. For these reasons, the HSVMA supports implementation of the proposed regulations.

RESPONSE

First, the Department very much appreciates the support offered by this commentator. The Department agrees that the Canine Health Board is comprised of very knowledgeable and skilled individuals and that they did an extraordinary job in researching and completing very technical Guidelines within a 45 day time period.

In addressing comments made with regard to the Guidelines published by the Board and the proposed regulation promulgated by the Department, the Department did consult the Canine Health Board, as well as, the numerous other experts, including engineers with expertise in kennel design and construction, architects, animal scientists and Department veterinarians. The final-form regulation has been scrutinized by those experts and the engineers believe the standards are attainable and consistent with standards and criteria followed and utilized in other kennel facilities they design and construct. The standards are also based on the input of animal scientists and veterinarians.

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

is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

V. Dr. ROBERT A. WHITNEY, DVM, DACLAM

Commentator:

Submitted by: Robert A. Whitney, DVM, DACLAM
RADM (08), USPHS (ret.)
314 2nd Street
Steilacoom, WA 98388

Background:

My veterinary medical credentials include over 20 years with the U.S. Army working in research with dogs and other animals, and with the National Institutes of Health, U.S. Public Health Service (PHS). At NIH, I directed programs at Branch and Division level in which dogs and other species were bred and used. We also set standards for those dogs obtained from breeders. I attained the rank of Rear Admiral (08) in the PHS, highest of any veterinarian in history, and the only veterinarian as the Surgeon General of the United States. I am currently a member of a National Research Council committee preparing a report on dogs. The National Academy Press will release a report from this committee, and another ILAR committee currently revising the *Guide for the Care and Use of Laboratory Animals*, within a few weeks. Both documents address many of the issues contained in the Proposed Regulations.

Comment:

This letter is in support of the Proposed Regulations: Canine Health Board Standards for Commercial Kennels. The science of animal care, like that of human medicine, is not absolute. It evolves with time as new discoveries are made and new equipment provides a measure of heretofore-immeasurable parameters. Nevertheless, animal care is not in the dark ages. For decades studies have been published and reports of the NRC and other reputable agencies and scientists have served to provide solid groundwork for the development of standards by which dogs are bred, reared, and cared for. The report of the Canine Health Board continues along these lines, reflecting the fine work and recommendations made by former individuals and committees who have struggled with these same issues. Their recommendations may conflict with the desires of some professional associations and breeders (such as those characterized as "puppy mills"), whose financial interests obscure their better judgment, but the Canine Health Board's research and recommendation cannot be disparaged.

RESPONSE

The Department agrees with this comment and very much appreciates the support for the parameters developed by the Canine Health Board and published as Guidelines and the standards that were delineated in the proposed regulation promulgated by the Department. The Department agrees that the Canine Health Board is comprised of very knowledgeable and skilled individuals and that they did in extraordinary job in researching and completing very technical Guidelines within a 45 day time period.

In addressing comments made with regard to the Guidelines published by the Board and the proposed regulation promulgated by the Department, the Department did consult the Canine Health Board, as well as, the numerous other experts, including engineers with expertise in kennel design and construction, architects, animal scientists and Department veterinarians. The final-form regulation has been scrutinized by those experts and the engineers believe the standards are attainable and consistent with standards and criteria followed and utilized in other kennel facilities they design and construct. The standards are also based on the input of animal scientists and veterinarians.

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

specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

The Canine Health Board sought guidance from informed individuals and from a wealth of published literature by the US Department of Agriculture, NIH, PHS, NRC, animal welfare organizations, scientific journals, state and local government and institute standards, the UK's Universities Federation for Animal Welfare, and many others. They clearly did their homework as demonstrated by their recommendations for the physical and environmental (heat, humidity, lighting, temperature, sanitation, air flow and quality, types of flooring) conditions. I sincerely urge that these regulations be accepted and become the law of Pennsylvania.

RESPONSE

The Department agrees that the Canine Health Board did a wonderful job of consulting experts and gathering published literature and then condensing that into Guidelines. The Department has pointed that out to commentators who have sought to assert that the Board did not do its duty in collecting information and that the standards established in the Guidelines and those set forth in the proposed regulations were arbitrary in nature. As set forth in the answer to many comments, however, the Department, with the assistance of Canine Health Board members did additional research, consulted additional experts and found additional studies upon which the final-form regulations are based. There should no longer be any question of underlying engineering, animal husbandry and scientific support for the standards established in the final-form regulation.

VI. Dr. WILLARD STOLTZFUS, VMD

Commentator:

Submitted by: Willard Stoltzfus, VMD
Black Horse Animal Hospital
5081 Lincoln Highway
Kinzers, PA 17535

Background:

This letter is to offer public comments to the proposed regulations of the Canine Health Board. Let me start by letting you know who I am and why I am qualified to comment on this matter. I am a licensed veterinarian from Lancaster County, PA. and my name is Willard L. Stoltzfus, VMD. I am a 1993 graduate of the University of Pennsylvania and I have been in private practice since then. For almost that entire time I have been involved with dog breeders and the industry in general. This includes not just medical care, but housing and other canine husbandry issues as well. There are only a handful of veterinarians who have this level of experience in this field in Pennsylvania, so I believe I am uniquely qualified to address the proposed regulations.

Comment:

For the past 16 years I have observed what works and what does not in the best interest of the health of these animals, and I have consistently pushed for and recommended the husbandry practices which are best. I can tell you without a shadow of a doubt that promulgating the current guidelines into law would be a huge step backwards for the overall health of the dog.

1. Flooring: The first issue is that of flooring. When I first entered the profession, many dogs in kennels were at ground level on solid flooring. It quickly became obvious that this was a disaster medically. Dogs routinely were lying in their urine and feces and cleanliness was difficult to achieve and maintain. Even more importantly parasites were much more difficult to control as the dogs immediately re-infected themselves. Diarrhea and weight loss were commonplace. In every case without exception the health of the dogs improved dramatically after being moved off the floor and away from their own feces. Current guidelines call for solid or slatted flooring which puts the dogs right back where they were when I first found them 16 years ago.

2. Outdoor Exercise: The second issue is that of "outdoor exercise areas." Again, when I first started many dogs were outside on the ground, and flea and tick infestations were common, as well as skin infections from mud and dirt. Moving the dogs indoors is what I recommended, and it improved the health of the dogs. Now once again government interference and senseless regulations are dictating that these dogs must be sent back outside where they will again be at risk for ectoparasite infestations. And I may also add that forcing dogs to move outside also significantly increases their chance of exposure to rabies through contact with wild animals, primarily skunks and raccoons.

3. Heating and Ventilation: The third area of major concern is with the proposed heating and ventilation requirements. Not only do these requirements lack any scientific or real evidence basis they are also practically impossible to achieve, both from a practical application and financial standpoint. Even more important than that is the

complete lack of real benefit to the dogs medically. There is no evidence whatsoever that this kind of micro-management of the environment provides any health benefits to the dogs. Medical logic would even suggest that air flows of the proposed magnitude (20 air exchanges per hour) could actually be detrimental to the animals allegedly being helped. It is clear to this experienced veterinarian that this regulation provides no benefits and is in reality detrimental.

RESPONSES

1. The Department first points out that solid flooring is not required, but is only an option available to the kennel owner. So long as the solid flooring meets the criteria of section 207(i)(3)(i) of the Act and the additional flooring requirements of the regulations, as well as, the approval of the Canine Health Board, it may be utilized.

Second, the Department disagrees that solid flooring is inherently unsanitary. There is no evidence to suggest that such a contention has any merit. Boarding kennels, humane society and other non-profit rescue kennels, as well as, standard breeding kennels currently house dogs on solid flooring with no ill effects. The commentator expresses a concern for sanitation. Solid flooring can be kept clean and sanitary as witnessed by a large number of kennels across the Commonwealth that currently utilize solid flooring in their kennels. As asserted by veterinarians from the Canine Health Board and the Department, a flat, solid surface causes fewer medical problems, such as splaying of the feet or ulceration of the pads of the dog, and is a much more natural surface for dogs to walk on or be housed on than is a metal strand, wire or even slatted flooring.

Finally, the Canine Health Board, a Board comprised of nine veterinarians believes that solid flooring is a proper flooring material upon which to house dogs.

2. Outdoor exercise is a requirement imposed by the Act itself. The regulations do not address, nor does the Canine Health Board or the Department have the authority to address the outdoor exercise provisions of the Act in this regulation.

3. The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

The final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

In addition, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and

consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

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

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with

engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment: Summary Objection

In summary, the regulations proposed by the Canine Health Board are impractical, extremely difficult to achieve, and medically detrimental to the animals. It should be thrown out completely and re-evaluated from a scientific point of view instead of political and emotional avenues.

RESPONSE

The Department disagrees with this comment in full. In drafting the final-form regulations the Department consulted kennel inspectors, such as the AKC Senior Field representative and utilized the expertise and experience of the Bureau of Dog Law Enforcement, the Department met with members of a breeding organization and consulted an agricultural engineer and animal scientists from the Pennsylvania State University whose background and expertise is in practices utilized in large animal groups, swine, cattle and other agricultural animals. In addition, the Department consulted and received ideas and verification from private engineers that build and design kennel housing facilities and consulted a private architect that design kennel buildings. The Department also continued to use the experience, knowledge and skill of the members of the Canine Health Board and the Department veterinarians in crafting the language of the final-form regulation. The measurements and ranges in the final-form regulation have been verified by the

engineers as being accurate, measureable and attainable through design and both the engineers that design kennel buildings and the veterinarians, as well as, the animal scientists consulted believe the ranges established are acceptable and will provide for the health and welfare of dogs housed in commercial kennels.

VII. Dr. THOMAS L. WOLFLE, MS, DVM, PhD

Commentator:

Submitted by: Thomas L. Wolfle, MS, DVM, PhD
Public Health Service (ret) Captain (06)
Diplomat American College of Laboratory Animal Medicine
Founding Diplomat, American College of Veterinary Behavior.

As a clinical and research veterinarian, retired from service in the Air Force and NASA; National Institutes of Health; and the National Academy of Sciences, National Research Council (NRC) I have over forty years experience dealing with suppliers of dogs and others animals. At NIH, I ran a colony of American Fox Hounds in which we had an average annual inventory of about 1,000 dogs. These dogs were for research, not as family pets, but the National Heart, Lung, and Blood Institute, the major user of these dogs, was adamant that their temperament be no different from those bred for life in homes with children and household activities. I would think that Pennsylvania would do no less for its citizens. I helped initiate and directed the NIH Animal Care and Use Committee and the Interagency Research Animal Committee. Both committees established standards for all animals used in any federal government program—and for all institutions that receive federal funding of any type. These federal agencies include the NIH, U.S. Dept. of Agriculture, National Science Foundation, NASA, and all other agencies in which animals are used. I have published broadly in the scientific literature and spoken to local, national and international scientific audiences on this subject. I come to this issue with some degree of experience.

Comment: General Support

I am writing in support of the Proposed Regulations: Canine Health Board Standards for Commercial Kennels (Board).

RESPONSE

The Department appreciates the support of this commentator.

Comment: Support and Documentation

The Regulations, as drafted by Governor Rendell's Canine Health Board (Board), are absolutely on the mark; no changes must be allowed. As Director of the NRC's Institute of Laboratory Animal Medicine (ILAR), I worked with numerous committees composed of subject matter experts from around the world, similar to the Board. We developed the 1996 Guide for the Care and Use of Laboratory Animals, Laboratory Animal Management: Dogs, and reports on their housing, husbandry, pain, and nutrition. The Guide and a new document on dogs are currently being written by ILAR with new data, ferreted from the scientific literature. On that account, make no mistake of the scientific backing of these reports! Such environmental issues as temperature, sanitation, air flow and quality, lighting, types of flooring and rest areas, social interactions and exposure,

housing density, nutrition, and many other details are well researched and the data— buttressed by decades of professional judgment—supporting these areas emphasize the importance of each. The Board is aware of these data and accurately reflected it in their report.

RESPONSE

The Department very much appreciates the support for the parameters developed by the Canine Health Board and published as Guidelines and the standards that were delineated in the proposed regulation promulgated by the Department. The Department agrees that the Canine Health Board is comprised of very knowledgeable and skilled individuals and that they did in extraordinary job in researching and completing very technical Guidelines within a 45 day time period.

In addressing comments made with regard to the Guidelines published by the Board and the proposed regulation promulgated by the Department, the Department did consult the Canine Health Board, as well as, the numerous other experts, including engineers with expertise in kennel design and construction, architects, animal scientists and Department veterinarians. The final-form regulation has been scrutinized by those experts and the engineers believe the standards are attainable and consistent with standards and criteria followed and utilized in other kennel facilities they design and construct. The standards are also based on the input of animal scientists and veterinarians.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the

final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

The perceived images of “puppy mills” rampant in Pennsylvania is of no credit to your fine state. Dogs of high quality, recognized by their state of health and behavior—clear bright eyes; healthy hair coats; and species-typical behaviors, physiology and nutrition—results *only* from high quality care such as these regulations propose. Pennsylvania must take the high ground on this issue and resist the pleas of those conflicted by financial or facility issues.

RESPONSE

The Department appreciates the comment and under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

VIII. Dr. M. ROSSET

Commentator:
Submitted by: Dr. M. Rosset

Comment:

These ordinances are overly restrictive and exceedingly expensive.

RESPONSE

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to

assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

The regulations include temperature ranges that do not include breed variety or what a particular breed of dog was intended to do with regard to the work it was bred to do.

RESPONSE

Formulating a regulation that set standards for every breed of dog would be impossible, onerous on the regulated community, nearly impossible for some kennels with many breeds to comply with and costly to the regulated community and the agency. The regulations as written set forth standards that are based on consultations with and research by experts, such as engineers (Learned Design and Paragon Engineering Services) and architects that design and build kennel housing facilities, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and Department. The experts consulted utilized their background, knowledge and experience to help the Department craft ventilation, auxiliary ventilation, humidity, ammonia and lighting levels, and flooring parameters, that if implemented properly, will account for the welfare of all breeds of dogs housed in kennel housing facilities.

Comment:

It is clear the board has exceeded what the law requires or demands.

RESPONSE

The comment is quite broad in its allegation and sets forth no specific provision that exceeds the Board's authority. However, the Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comment:

It is clear that whoever compiled these restrictions are intending to do away with all breeding of dogs by making it too expensive and too costly to raise, buy or sell a dog.

RESPONSE

The Department disagrees with this unsupported comment. This comment does not address any substantive provision of the current regulations and is merely the commentators own opinion. Nothing in the proposed or final-form regulation is intended to close or shut down a commercial kennel. The standards are based on research, science and expert advice from engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians. The final-form regulation is within the scope of the authority established by the Dog Law and effectuates standards that will carry out the duty imposed on the Department to account for the welfare of the dogs.

Comment:

Sensible restrictions are warranted but one size does not fit all and the air exchanges rules are greater than what is required for any animal husbandry facility including medical labs, hospitals and other animal care facilities.

RESPONSE

The Department disagrees with this comment and in contrast to the unsupported opinion sets forth the following response. The final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

First, engineers consulted (Learned Design and Paragon Engineering Services) on this comment have indicated the cubic foot calculation and the assertion that the air exchange rates originally required by the proposed regulation (8-20 per hour) would create an unreasonable "draft" through the kennel are not correct.

Second, it would not violate the Federal Act or the current Department regulations because it does not prevent primary enclosure from being placed or constructed in such a manner that the dog has a draft free area.

Third, the final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

Fourth, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

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

professional third party, trained in to make such evaluations to assure the system installed or retrofitted to the kennel meets the requirements of the regulations.

The provisions of section 28.2(8)(i)(A)(I-V) of the proposed regulations have been either eliminated or extensively modified in the final-form regulation. The provisions were modified to account for the information needed to verify and calculate the cubic feet per minute (CFM) per dog standard of the final-form regulation, which replaced the air exchanges per hour standard. The information requested is based on consultations with and approved by the kennel housing facility engineers consulted by the Department.

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and

decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

Comment:

Extreme limits and use of materials down to the details can only be intended to force people out of breeding dogs. Even the most responsible breeder cannot operate under these draconian restrictions. And the cost for implementing them will be expensive to the state and the people who raise dogs.

RESPONSE

As set forth above, nothing in the proposed or final-form regulation is intended to close or shut down a commercial kennel. The standards are based on research, science and expert advice from engineers and architects that design and build kennel housing facilities, animal scientists and veterinarians. The final-form regulation is within the scope of the authority established by the Dog Law and effectuates standards that will carry out the duty imposed on the Department to account for the welfare of the dogs.

In drafting the final-form regulations the Department consulted kennel inspectors, such as the AKC Senior Field representative and utilized the expertise and experience of the Bureau of Dog Law Enforcement, the Department met with members of a breeding organization and consulted an agricultural engineer and animal scientists from the Pennsylvania State University whose background and expertise is in practices utilized in large animal groups, swine, cattle and other agricultural animals. In addition, the Department consulted and received ideas and verification from private engineers that build and design kennel housing facilities and consulted a private architect that design kennel buildings. The Department also continued to use the experience, knowledge and skill of the members of the Canine Health Board and the Department veterinarians in crafting the language of the final-form regulation. The measurements and ranges in the final-form regulation have been verified by the engineers as being accurate, measureable and attainable through design and both the engineers that design kennel buildings and the veterinarians, as well as, the animal scientists consulted believe the ranges established are acceptable and will provide for the health and welfare of dogs housed in commercial kennels.

Comment:

HSUS and PETA at work again, not good common sense rules, but excessive rules that are only intended to force people to quit raising dogs altogether. You could take the best kennel and under these rules shut them down. No one can operate under these rules.

RESPONSE

Neither HSUS or PETA were involved in the drafting or consulted with regard to the Guidelines established by the Canine Health Board or the proposed regulations drafted by the Department. In addition, neither HSUS nor PETA had any input with regard to the final-form regulation.

Comment:

Dogs are dogs and the rules you are putting in place are greater than the rules for daycare for our own children.

RESPONSE

The Act requires the Canine Health Board and the Department to address and establish standards for ventilation, auxiliary ventilation, humidity, ammonia and lighting levels and allows the regulations to address flooring options. The Department in promulgating the final-form regulation consulted experts in such as engineers and architects that design and build kennel housing facilities, animal scientists from the Pennsylvania State University and veterinarians from the Canine Health Board and the Department. The measurements and ranges contained in the final-form regulation have been verified by the engineers as being accurate, measureable and attainable through design and both the engineers that design kennel buildings and the veterinarians, as well as, the animal scientists consulted believe the ranges established are acceptable and will provide for the health and welfare of dogs housed in commercial kennels.

FORM LETTER COMMENTS AND COMMENTATORS

I. AMERICAN SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS (ASPCA)

Commentators: See attached spreadsheet of all commentators attached hereto as Addendum A and made a part hereof

Background:

The Bureau of Dog Law Enforcement within the Department of Agriculture is charged with implementing and enforcing the Dog Law, which was passed to ensure the humane care and treatment of dogs in the Commonwealth. In 2008, the Pennsylvania General Assembly passed significant amendments to the Dog Law and created the Canine Health Board to establish appropriate ventilation, humidity, ammonia, and lighting ranges for commercial kennels, as well as consider alternative flooring options to those set forth in the law. The proposed regulations are the result of the Canine Health Board's recommendations for those standards.

Comments:

1. General Support:

As a concerned Pennsylvania citizen, I respectfully submit the following comments in support of the Department of Agriculture's proposed rulemaking regarding standards for commercial kennels. Based on the following comments, I fully support the proposed regulatory package presented by the Department of Agriculture and the Canine Health Board with the recommended changes, and encourage promulgation of the new regulations as expeditiously as possible. Thank you for your time and consideration.

2. Ventilation: Section 28a.2

a. The proposed regulations require that "ventilation be achieved through a mechanical system that will allow for 8 to 20 air changes per hour, keep consistent moderate humidity, keep the kennel from becoming too hot, keep ammonia levels and particulate matter low, and to keep odor minimized...". While generally I support these standards, it is well established that a minimum of 10 air changes per hour should be required in all animal spaces. As a result, I recommend that the required air changes per hour be changed to reflect this standard.

b. I commend the Department of Agriculture and the Canine Health Board for proposing a requirement that kennels use a mechanical ventilation system that provides ventilation, heating, and cooling. Such a system is imperative to ensure the health and comfort of dogs housed in kennel facilities.

3. Lighting: Section 28a.3

I commend the Department of Agriculture and the Canine Health Board for acknowledging the importance of exposure to natural light and a diurnal cycle for dogs housed in a kennel environment. I fully support the lighting requirements proposed in these regulations.

Flooring:

4. Flooring: Section 28a.4

I fully support the flooring requirements proposed in these regulations.

RESPONSES

1. The Department appreciates the support of this commentator. The final-form regulation drafted by the Department, as required by the Dog Law, sets very specific ventilation, auxiliary ventilation, humidity, ammonia, lighting and flooring standards for dogs housed in commercial kennels.

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

specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

2.a. and b. The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog.

First, engineers consulted (Learned Design and Paragon Engineering Services) on this comment have indicated the cubic foot calculation and the assertion that the air exchange rates originally required by the proposed regulation (8-20 per hour) would create an unreasonable "draft" through the kennel are not correct.

Second, it would not violate the Federal Act or the current Department regulations because it does not prevent primary enclosure from being placed or constructed in such a manner that the dog has a draft free area.

Third, the final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

Fourth, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities, Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations

with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

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

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with

engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

With regard to cooling or temperature reduction, the Department agrees that the Animal Welfare Act sets a temperature cap of 85 degree Fahrenheit and kennels that fall under the jurisdiction of the United States Department of Agriculture should already have ventilation and temperature equipment in place to comply with that standard.

Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

That said, the final-form regulations no longer sets a temperature cap of 86 degrees Fahrenheit, nor does it require a reduction in the ambient air temperature in the kennel housing facility. Since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from numerous commentators, including the

Independent Regulatory Review, the Honorable Senator Brubaker and the Honorable Members of the Pennsylvania House of Representatives.

The final-form regulation does not require the reduction of “ambient air temperature”, but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

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

confined in kennels. The heat index values referred to earlier, and attached hereto as Exhibit B, all evidence that value should be set at a heat index of 85 (85 HI).

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4-hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value to ensure survivability and safety, the latter requiring the recommended 20% reduction in humidity levels from the study's maximum values of 95-98 HI, and consideration of the TACC Weather Safety Scale.

- In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advice and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

3. The Department appreciates the support expressed by the commentator, but notes that changes, including mimicking the language of the statute which allows either natural or artificial light.

In addition, as set forth previously, the level of light provided has been modified in the final-form regulation. The Department, with the assistance of members of the Canine Health Board and Department veterinarians did additional research into the issue of the proper illumination levels in kennels. In addition, the Department spoke with animal husbandry scientists at the Pennsylvania State University and with engineers (Learned Design and Paragon Engineering Services) who designs kennel buildings. The consensus was that forty to sixty (40-60) foot candles of light is necessary to assure proper animal husbandry practices, including the ability to monitor the dogs, assure sanitation and cleanliness of the kennel (compliance with statutory and regulatory standards) and provide for the proper health and welfare of the dogs. In addition, the Department researched and reviewed the National Institutes of Health (NIH), policies and

guidelines related to biomedical and animal research facility design. The NIH requires average lighting levels in animal facilities to be between twenty-five to seventy-five (25-75) footcandles, which translates to two-hundred seventy to eight-hundred (279-800) lux. The guidelines state the exact lighting levels should be based on species. 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.

With regard to the nighttime lighting standard, although removed from the final-form regulation, it was not an arbitrary standard. The standard was based on research that showed dogs need 1-5 footcandles of light in order to allow for their normal startle response. Complete darkness is not optimal for dogs.

4. The Department appreciates the support expressed by the commentator. At the recommendation of the Independent Regulatory Review Commission, the Department has added language to the final-form regulation that sets forth the general flooring parameters of the statute. In addition, the Department, following many of the standards established by the Canine Health Board in the Guidelines, has established provisions that must be met in order for optional flooring to be approved.

II. DOGPAC

Commentators: See attached spreadsheet of all commentators attached hereto as Addendum B and made a part hereof

Patricia Faller, 1115 Fleetwood Drive, Carlisle, PA 17013; Nancy Tarlini, 4615 Millett street, Philadelphia, PA 19136; Erin Tharp, 1351 Perry Valley Road, Liverpool, PA 17045; Lawrence A Huff, 1608 Walnut Street, Suite 501, Philadelphia, PA 19103

Comment: General Support

I am writing to voice my support for the new commercial kennel regulations that have been proposed by the Canine Health Board. I hope they will be approved and implemented as soon as possible in order to protect dogs.

RESPONSE

The Department appreciates the support of this commentator. The final-form regulation drafted by the Department, as required by the Dog Law, sets very specific ventilation, auxiliary ventilation, humidity, ammonia, lighting and flooring standards for dogs housed in commercial kennels.

The Department has made substantive changes to the final-form regulation, including deleting and restructuring language that was in the proposed regulation, which the Department believes may have either been outside the statutory authority granted by the statute or was unclear or too subjective in nature. A majority of the overall changes made to the final-form regulations were based upon the comments and the input received during the rulemaking process. As stated previously, the Department has taken the

comments and concerns expressed in all of the submitted comments very seriously. This should be evident in the responses to the comments and in the language of the final-form regulation. As stated in answers to similar comments from other commentators, the Department scrutinized all of the comments, consulted with engineers, architects, Departmental and Canine Health Board veterinarians, experts in auxiliary ventilation utilized in kennels, members of a commercial kennel group and did its own additional research in order to assure the final-form regulation meets the mandates of the Act. The final-form regulation is intended to and does set standards that are within the scope of authority granted by the Act and that meet the Department's statutory duty to protect the health and welfare of the dogs housed in commercial kennels. The final-form regulation is drafted in a manner – breaking the regulation into sections that set standards for the specific provisions required to be addressed by the regulation - intended to provide additional clarity and contains language and standards that are objective and measurable.

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

Comments: Specific

I support the proposed regulations because they will:

1. Implement new standards to provide auxiliary ventilation so that the temperature does not exceed 85 degrees. Currently under state law there is no requirement and this leads to dogs suffering in intolerable heat during the summer months. There will be a minimum temperature of 50 degrees.
2. Require that solid floors are used in all commercial kennels, replacing the cruel wire floors that can be used today and constantly cause debilitating injuries to dogs.
3. Implement ventilation requirements that will ensure that fresh air is continually passed throughout the kennels to reduce disease.

RESPONSES

1. The Department no longer sets a temperature cap in the final-form regulation. While the Department believes that such a cap would be consistent with the Animal Welfare Act regulations, which set a temperature cap of 85 degree Fahrenheit, the language of the statute and comments from the Office of Attorney General and members of the Senate and House Agricultural and Rural Affairs Committees have led the Department to utilize humidity levels, which it has absolute authority to establish, to control the kennel environment.

Although not enforced by the Department some kennels, regulated by the Federal Animal Welfare Act, will still have to achieve temperature reduction to meet the Federal standards. The Federal Code of Regulations, which would apply to kennels selling dogs at wholesale, at sections 3.2 and 3.3 establish even more stringent standards, which absolutely require temperature reductions within the kennel facility to 85 degrees Fahrenheit (with a 4 hour window). Many of the kennels affected by the commercial kennel standards and these regulations must also comply with the Federal Code of Regulations.

That said, the final-form regulations no longer sets a temperature cap of 86 degrees Fahrenheit, nor does it require a reduction in the ambient air temperature in the kennel housing facility. Since the Department's authority to require air temperature reduction under the provisions of the Pennsylvania Dog Law has been questioned by the Office of Attorney General, and it has been asserted by the General Assembly and the Independent Regulatory Review Commission, that the Department can not require air temperature within a kennel or kennel housing facility to be reduced to or held at 85 degrees Fahrenheit there is no such set standard in the final-form regulation. With regard to standards once temperatures inside the kennel housing facility rise above 85 degrees Fahrenheit, the Department does not set a temperature cap or requirement. The Department explains its regulatory approach and the reasons for that regulatory approach in previous responses to similar comments from numerous commentators, including the Independent Regulatory Review, the Honorable Senator Brubaker and the Honorable Members of the Pennsylvania House of Representatives.

The final-form regulation does not require the reduction of "ambient air temperature", but instead requires the kennel owner to employ auxiliary ventilation and reduce the heat index to 85 HI, through the use of humidity reduction, when temperatures within the kennel and kennel housing facility rise above 85 degrees Fahrenheit. There is scientific evidence – related to heat studies and heat index values – which support the humidity requirements set forth in the final-form regulations. The attached heat index charts for various species of animals, including humans, evidences that 85 degrees Fahrenheit is where the danger zone begins. A heat index value of 85 HI or less will protect the health and welfare of dogs and other animals. Dogs, other than healthy, short haired breeds, can not survive heat index values in excess of 95-98 HI for more than six hours (See Exhibit C). The final-form regulation sets standards for humidity based on heat index values and the regulation of humidity levels.

With regard to the general humidity standard established by the final-form regulation of 30%-70% when temperatures in a kennel housing facility are under 85 degrees Fahrenheit that standard is supported by, the standards established by the United States Department of Agriculture in the Animal Welfare Act regulations (9 CFR § 1.1), which establishes a humidity range of 30-70% as a standard for animals housed in an

indoor housing facility. In addition, the Department, consulted with animal scientists from the Pennsylvania State University and veterinarians from the Department and the Canine Health Board, along with additional conversations with engineers (Learned Design and Paragon Engineering Services) that design and build kennel housing facilities. Those consultations confirmed that a broad humidity range of 30-70% is appropriate and constitutes normal animal husbandry practices for animals, including dogs, when temperatures are between 50 degrees Fahrenheit and 85 degrees Fahrenheit.

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

Finally the Department with the assistance of Canine Health Board member Dr. Karen Overall found - and along with Department veterinarians reviewed - a dog study that established "survivability" levels for confined dogs. The study, which is attached hereto as Exhibit C, sets forth evidence that beagle dogs can not survive for more than six hours at maximum heat index values of between 100-106 degrees Fahrenheit. The study goes further, to conclude the relative humidity values in the study should be reduced by twenty percent (20%) to assure safety. The final-form regulation therefore allows a 4 hour window (consistent with Federal Animal Welfare regulations standards) for kennel owners to reduce the humidity levels in their kennels to attain the required heat index value of 85 (85 HI). However, during that 4 hour window, the heat index value must never go above 90 (90 HI), which is the maximum heat index value - with the recommended 20% reduction in humidity levels - under which dogs confined in the kennels can survive.

With regard to ventilation standards, not only does the final-form regulation do away with air exchanges per hour and change to a more objective and defined standard of cubic feet per minute per dog, but the final-form regulation no longer requires 100% fresh air exchange. It now provides that a minimum of 30 cubic feet per minute per dog must be fresh air and the rest of the air may be re-circulated in the kennel housing

facility. These standards will make the system easier to design and install, easier to assure compliance and less expensive to operate because a majority of the air can be re-circulated and the amount of air circulation is based on kennel volume and number of dogs.

In short, the Department consulted with the engineers to assure the humidity levels and ventilation levels contained in the final-form regulation are attainable. The consensus was such levels are attainable and the regulatory analysis form accompanying the final-form regulation sets forth the cost of design and installation of a system that would allow compliance with the established standards. The Department has the absolute authority and the duty to regulate ventilation and humidity in such a manner as to protect and assure the health and welfare of the dogs housed in commercial kennels. Therefore, the final-form regulations set very precise humidity levels and auxiliary ventilation measures to be employed in the kennel housing facility when temperatures inside the kennel go above 85 degrees Fahrenheit. These measures are attainable and based on scientific studies related to dog survivability and safety and heat index values established for other animals such as swine, cattle, poultry and humans. These animals cool themselves more efficiently than dogs, therefore, following those standards certainly set a minimum level for dog health and it can not be reasonably argued the standards are too extreme or burdensome. Instead, the standards simply set a base level of animal husbandry practices, based on expert advise and scientific standards, which must be adhered to in order to assure dog health in commercial kennels.

2. The Department appreciates the support expressed by the commentator. At the recommendation of the Independent Regulatory Review Commission, the Department has added language to the final-form regulation that sets forth the general flooring parameters of the statute. In addition, the Department, following many of the standards established by the Canine Health Board in the Guidelines, has established provisions that must be met in order for optional flooring to be approved.

3. The Department appreciates the support of the commentator. Mechanical ventilation is required and must be operated at all times. The final-form regulation requires 100 cubic feet per minute per dog of air circulation. The engineers consulted where of the opinion that air exchanges per hour were not able to be properly calculated or measured, but cubic feet per minute per dog could be certified, verified and enforced. The circulation must be at the height of the dogs. The air may be re-circulated, which allows for better control of humidity, temperature, ammonia levels and pathogens. The ventilated air must be filtered.

The Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The final-form regulation does not require 8-20 fresh air exchanges per hour nor does it require 100% fresh air. One of the reasons the Department changed the ventilation and auxiliary ventilation standards from air exchanges per hour to cubic feet per minute per dog, was to assure a more objective and measurable standard. The change was suggested in the comments submitted by Dr. Kephart of the Pennsylvania State University and in consultations with engineers from Learned Design and Paragon Engineering Services.

In addition, in response to the comments submitted the Department did additional research and consulted animal scientists from the Pennsylvania State University, engineers and architects that design and build kennel housing facilities,

Department veterinarians and had additional discussions with Canine Health Board veterinarians. As a result, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. The change to CFM per dog is consistent with comments submitted by Dr. Kephart of the Pennsylvania State University and discussions and consultations with Dr. Mikesell and Dr. Kephart, as well as, discussions and consultations with engineers from Learned Design and Paragon Engineering Services.

Therefore, the Department, in the final-form regulation, no longer requires a measurement of "air changes per hour", but instead requires a measurement of cubic feet per minute per dog. Generally, the provisions of paragraph (8) of section 28a.2 the proposed regulations has been either deleted or extensively modified in the final-form regulation. Air changes have been replaced by cubic feet per minute (CFM) per dog and standards and measuring tools for the CFM per dog standard are quite specific and have been set forth in subsection (f)(1) through (6) of section 28a.2 of the final form regulation. Specific standards related to circulation of the air, minimum fresh air rates and filtration are established in subsection 28a.2(f)(3)-(6) of the final-form regulation. The provisions of subsection 28a.2(b) of the final-form regulation now entail information the Department requires of the kennel owner, including certification from a professional engineer. The information requested is directly related to and provides verification of compliance with the ventilation and air circulation standards established by the final-form regulation.

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

Because of the restructuring of the section all of the provisions of section 28a.2(8)(iii) have been deleted from the final-form regulation. In addition, fresh air is now defined and the provisions of section 28a.2(i) requiring 100% fresh air has been deleted from the final-form regulation. While not prohibited by the regulation itself, it is no longer required. Instead, commercial kennel housing facilities are required to provide a "minimum" amount of "fresh air" circulation at thirty percent (30%), with seventy percent (70%) of the air being re-circulated through filters. This rate allows for pathogens to be removed and filtered, reduces heating costs in the winter and cooling and humidity control costs in the summer and allows for better control of the dog kennel environment. The standard was set based on the expert advice of the engineers, animal scientists and veterinarians consulted. This was done after consultations with the engineers and architects that design kennel buildings revealed that a 100% fresh air exchange rate in Pennsylvania would make it too expensive to heat or cool the kennel housing facility, would not allow for recapture of heated or cooled air and would not allow for proper

humidity control in the kennel housing facility. The provisions of the final-form regulation no longer require a measurement of "air exchanges", but are instead based on the cubic feet of the kennel, the number of dogs housed in the kennel and the CFM ratings on the ventilation equipment creating air circulation in the kennel building. The change to CFM per dog was based on the comments and then consultations with engineers from Learned Design and Paragon Engineering Services, as well as, Animal Scientists, Dr. Kephart and Dr. Mikesell of the Pennsylvania State University.

The culmination of the conversations and consultations was to measure ventilation rates in cubic feet per minute (CFM) per dog, as opposed to air changes per hour. There are two general reasons behind this change. CFM per dog is much more easily measured and verified and is more objective in nature. As set forth in the final-form regulations, compliance will be based on CFM information on the ventilation equipment, certification by a professional engineer and information supplied by the kennel owner and verified by a professional engineer, such as the cubic feet of each area of the kennel housing facility in which dogs are housed and the number of dogs housed or able to be housed in each area of the kennel housing facility. Second, CFM per dog will allow kennel owners to design their ventilation systems to have only that total capacity required to circulate the minimum amount of air for the total number of dogs able to be housed in the kennel housing facility. It will then allow the kennel operator to utilize only that capacity necessary to achieve the required circulation for the number of dogs present. In other words, the system will be easier to design, will only have to be designed to account for the maximum number of dogs the kennel owner will have in the kennel housing facility and will allow the kennel owner to utilize less of the total capacity of the system if dog numbers decrease. It is a more objective standard, easier to measure and verify and fairer and less costly to operate, as the total CFM rate will increase and decrease based on the number of dogs. Neither the Department nor the kennel owner will have to be an engineer to figure out the required ventilation rates in the kennel housing facility.

III. UNITED AGAINST PUPPY MILLS (UAPM)

Commentators: See attached spreadsheet of all commentators attached hereto as Addendum C and made a part hereof

Comment:

In the spirit of Act 119 and the power it grants to the Canine Health Board, I wish to voice my support of the CHB's recommended regulations pertaining to lighting, temperature control, ventilation, control of humidity and ammonia levels and exercise. The regulation of each of these environmental factors will significantly impact the health and welfare of the breeder dogs kept in Pennsylvania's large scale commercial breeding facilities in a positive way and serves to finalize the Act and the work of the General Assembly. Please do not further delay the relief the dogs have waited so long to receive, and expedite the passage of these regulations as soon as possible.

RESPONSE

The Department appreciates the support expressed by this commentator and has worked diligently to draft a final-form regulation in a timely manner. The final-form regulation drafted by the Department, as required by the Dog Law, sets very specific

ventilation, auxiliary ventilation, humidity, ammonia, lighting and flooring standards for dogs housed in commercial kennels.

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

The Department, under the constraints of the statute, has endeavored to draft a final-form regulation that comports with the statutory mandates and still establishes ventilation, auxiliary ventilation, humidity, ammonia level, lighting and flooring standards that protect the health and welfare of dogs housed in commercial kennels. In doing so, the Department contacted and consulted with many of the engineers, architects, animal scientists that commented on the proposed regulation. The Department also consulted veterinarians from the Canine Health Board and Department veterinarians with regard to the final standards established in the final-form regulation. The standards in the final-form regulation are within the statutory mandate of the Act, are objective and measurable and will be enforceable.

The final-form regulations establish a basic level of care that is within the authority of the parameters of sections 207(h)(6)(7)(8) and 221(f) of the Dog Law and which are based on input and consultations with experts such as engineers and architects who design and build kennel facilities, animal scientists and veterinarians from the Canine Health Board and the Department.

The final-form regulation is drafted to comply with not only the authority, but the duty imposed by the statute and the Pennsylvania General Assembly. The final-form regulation is within the statutory authority imposed by the Act and carries out the duty to assure that ventilation, auxiliary ventilation, humidity, ammonia, lighting and alternative flooring standards in commercial kennels are based on animal husbandry practices and account for the health and welfare of dogs housed in commercial kennels.

IV. ADDITIONAL INDIVIDUAL COMMENTS SUBMITTED BY DOGPAC COMMENTATORS

Commentators:

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Comments:

1. I strongly endorse and support the regulations created and proposed by the Canine Health Board and the Department. I hope they will be approved and implemented as soon as possible in order to protect dogs.
2. People shouldn't be allowed to profit from the suffering of helpless animals . I am a firm believer that we should treat every living being the way we would want to be treated. Please base your decision on morals, not profits.
3. Pennsylvania's reputation has been tarnished by being branded a "puppy mill" capital which allows dogs to be raised in inhumane conditions.
4. Pennsylvania Commercial Kennel bred and raised dogs and puppies often are sold to neighboring states where medical professionals and trainers see the results of poor kennel conditions on the mental and physical well being of the animals.
5. These regulations are based in scientific research and on advice provided by scientific experts.
6. These regulations will ensure that any dog who is commercially bred will be given adequate light, heat, ventilation, air quality, flooring, and social exposure and interaction - all essential factors that were OMITTED from the recently enacted dog law. For the first time, commercially bred puppies and dogs will have a guarantee of an environment that will promote - not hinder - behavioral and physical health.
7. It is time that Pennsylvania was a leader in humane care of animals, rather than always appearing in the news for the numerous abuses that occur here. This regulation will ensure humane care.
8. As a taxpayer in the Commonwealth of Pennsylvania I am sickened when I see that we are known as the "puppy mill state." We can and should do better!!
9. As a concerned American, I cannot sit silently while lobbyists for those who have selfish financial interests lobby to oppose the reasonable regulations. It is too bad that

responsible breeders, who respect the lives that they bring into the world are tainted by those who are too greedy to understand that they could provide quality care and still make a profit for themselves. Think of your actions in approving the regulation as tantamount to passing a child labor law. These are intelligent creatures who, when grown are equivalent to a child of 2 to 3 years old.

RESPONSES

1.-9. The Department appreciates the support expressed by this commentator and has worked diligently to draft a final-form regulation in a timely manner. The final-form regulation drafted by the Department, as required by the Dog Law, sets very specific ventilation, auxiliary ventilation, humidity, ammonia, lighting and flooring standards for dogs housed in commercial kennels.

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

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gaseous filtration (such as with activated-charcoal filters) can be used but only in limited applications, provided that

- Room air is mixed with at least 50% fresh air (that is, the supply air does not exceed 50% recycled air).
- Husbandry practices, such as bedding-change and cage-washing frequency, and the preparation of recycled air used are sufficient to minimize toxic gases and odors.
- Recycled air is returned only to the room or area from which it was generated, except if it comes from other than animal-housing areas.
- Recycled air is appropriately conditioned and mixed with sufficient fresh air to address the thermal and humidity requirements of animals in that space.

Frequent bedding changes and cage-cleaning coupled with husbandry practices, such as low animal density within the room and lower environmental temperature and humidity, can also reduce the concentration of toxic or odor-causing gases in animal-room air. Treatment of recycled air for either particulate or gaseous contaminants is expensive and can be rendered ineffective by improper or insufficient maintenance of filtration systems. These systems should be properly maintained and monitored appropriately to maximize their effectiveness.

The successful operation of any HVAC system requires regular maintenance and evaluation, including measurement of its function at the level of the secondary enclosure. Such measurements should include supply- and exhaust-air volumes, as well as static-pressure differentials, where applicable.

Illumination

Light can affect the physiology, morphology, and behavior of various animals (Brainard and others 1986; Erkert and Grober 1986; Newbold and others 1991; Tucker and others 1984). Potential photostressors include inappropriate photoperiod, photointensity, and spectral quality of the light (Stoskopf 1983). Numerous factors can affect animals' needs for light and should be considered when an appropriate illumination level is being established for an animal holding room. These include light intensity, duration of exposure, wavelength of light, light history of the animal, pigmentation of the animal, time of light exposure during the circadian cycle, body temperature, hormonal status, age, species, sex, and stock or strain of animal (Brainard 1989; Duncan and O'Steen 1985; O'Steen 1980; Saltarelli and Coppola 1979; Semple-Rowland and Dawson 1987; Wax 1977).

In general, lighting should be diffused throughout an animal holding area and provide sufficient illumination for the well-being of the animals and to allow good housekeeping practices, adequate inspection of animals—including the bottom-most cages in racks—and safe working conditions for personnel. Light in

animal holding rooms should provide for adequate vision and for neuroendocrine regulation of diurnal and circadian cycles (Brainard 1989).

Photoperiod is a critical regulator of reproductive behavior in many species of animals (Brittard and others 1986; Cherry 1987) and can also alter body-weight gain and feed intake (Tucker and others 1984). Inadvertent light exposure during the dark cycle should be minimized or avoided. Because some species will not eat in low light or darkness, such illumination schedules should be limited to a duration that will not compromise the well-being of the animals. A time-controlled lighting system should be used to ensure a regular diurnal cycle, and timer performance should be checked periodically to ensure proper cycling.

The most commonly used laboratory animals are nocturnal. Because the albino rat is more susceptible to phototoxic retinopathy than other species, it has been used as a basis for establishing room illumination levels (Latham 1979). Data for room light intensities for other animals, based on scientific studies, are not available. Light levels of about 325 lux (30 ft-candles) about 1.0 m (3.3 ft) above the floor appear to be sufficient for animal care and do not cause clinical signs of phototoxic retinopathy in albino rats (Bellhorn 1980), and levels up to 400 lux (37 ft-candles) as measured in an empty room 1 m from the floor have been found to be satisfactory for rodents if management practices are used to prevent retinal damage in albinos (Clough 1982). However, the light experience of an individual animal can affect its sensitivity to phototoxicity; light of 130-220 lux above the light intensity under which it was raised has been reported to be near the threshold of retinal damage in some individual albino rats according to histologic, morphometric, and electrophysiologic evidence (Semple-Rowland and Dawson 1987). Some guidelines recommend a light intensity as low as 40 lux at the position of the animal in midday (NASA 1988). Young albino and pigmented mice prefer much lower illumination than adults (Wax 1977), although potential retinal damage associated with housing these rodents at higher light levels is mostly reversible. Thus, for animals that have been shown to be susceptible to phototoxic retinopathy, light at the cage level should be between 130 and 325 lux.

Management practices, such as rotating cage position relative to the light source (Greenman and others 1982) or providing animals with ways to modify their own light exposure by behavioral means (e.g., via tunneling or hiding in a structure), can be used to reduce inappropriate light stimulation of animals. Provision of variable-intensity light controls might be considered as a means of ensuring that light intensities are consistent with the needs of animals and personnel working in animal rooms and with energy conservation. Such controls should have some form of vernier scale and a lockable setting and should not be used merely to turn room lighting on and off. The Illuminating Engineering Society of North America (IESNA) handbook (Kaufman 1984, 1987) can assist in decisions concerning lighting uniformity, color-rendering index, shielding, glare control, reflection, lifetime, heat generation, and ballast selection.