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REVIEW COMMISSION

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We have reviewed the proposed regulation and provide the following comments. Ours is the leading firm in the country for animal care facility mechanical, electrical, plumbing, fire protection and noise control engineering.

**Proposed Regulation Title 7 Agriculture  
Section 28a.2 Ventilation**

1. 8 to 20 air changes per hour should be clarified as "fresh air changes per hour" or "total circulated air changes per hour".
2. 8 to 20 air changes per hour is too broad. A properly designed air system by our standards will have 12 to 18 air changes per hour total circulated air of which 4 to 6 air changes (or about one-third) is fresh air.
3. Humidity levels were properly specified
4. Temperature levels should be in a range from 60 deg F to 80 deg F

**Section 28a.3 Lighting**

5. Levels of 60 fc minimum at the floor is necessary for proper cleaning

**Section 28a.4 Flooring**

6. Flooring should be specified as impervious flooring with covered edges and proper drainage. The fact that flooring is solid does not make it impervious. Good flooring options such as epoxy, acrylic, sealed concrete, tile with epoxy grout and agricultural rubber flooring can all be chemically cleaned and sanitized.

**Annex A, Title 7, Part II, Chapter 28a.  
Section 28a.2 Ventilation**

1. Temperature range of 50 degrees is probably too low for some dogs.
2. Humidity ranges indicated are appropriate.
3. Paragraph (7) should be developed to include the type and location of filtration for recirculated air. Typically return grilles should have course filters and equipment filters should be MERV 8 (medium efficiency level) and impregnated with carbon for odor control. Finally some form of duct mounted ionization or UV-C with ionization/oxidation capability is essential.
4. Paragraph (8) is unrealistic. 8 to 20 air changes of 100% outside air is extremely expensive to heat and cool. Typically 30% outside air coupled with properly filtered and dehumidified return air will produce an odor free facility.

Finally, the regulations are silent on cleaning systems. Proper solid waste disposal and chemical cleaning systems (preferably pressure washing) are essential to cleanliness and the mitigation of odor and disease. There should be some requirement for cleaning systems and waste disposal.

Thank you,  
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