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**Sent:** Monday, September 20, 2004 10:49 AM  
**Subject:** Cal/OSHA Comments on 6-2004 ARB Draft Report on Indoor Air Pollution

Thank you for the opportunity to review the draft Report to the California Legislature on Indoor Air Pollution in California. I am very sorry for the delay in getting these comments to you. It was a very interesting and thorough report. These comments focus on areas where Cal/OSHA is specifically addressed.

1. In the Glossary (page ix) Cal/OSHA is defined as the "*California Department of Industrial Relations, Division of Occupational Safety and Health.*" Although this is one usage of the term, in the report Cal/OSHA is used to refer to the entire program (including the California Occupational Safety and Health Standards Board). So the Glossary should be changed to something like "California Occupation Safety and Health Program, which consists of several agencies within the Department of Industrial Relations, including the Division of Occupational Safety and Health and the Occupational Safety and Health Standards Board."
2. On page 8, the statement is made that "*Radon levels in California are substantially lower than in most other states...*" While that is generally true there are certain areas with high radon levels, so it may be more accurate to say that they are lower on average, or that in most areas of California they are substantially lower.
3. On page 11, in discussing Cal/OSHA PELs, the statement is made, "*However, they do not protect vulnerable members of the population...*" I think the sentence should read, "However, they are not developed [or designed] to protect..."
4. On page 15, regarding air cleaning devices, the report states that "*The proper size and type of air cleaner may help control airborne particles for people with special sensitivities.... Who use them in confined spaces such as their bedrooms.*" The use of the term "confined space" may be confusing, as in occupational health and safety, at least, it means a space with limited egress etc. A typical bedroom would not be a confined space. Maybe this should read in "small rooms," or "enclosed spaces."
5. In the table on p. 17, the fourth entry, is *Air Cleaners, and the "Examples of Toxic Air Pollutants Emitted is "Ozone, particles."* I guess you are referring to filter efficiency, but this phrasing seems to say that air cleaners emit (rather than reduce) particles.
6. The section on *Options to Mitigate Indoor Air Pollution* does not specifically address the issue of ensuring that minimum ventilation rates are adequately specified, and that buildings maintain those ventilation rates.
7. On page 93, in the sentence "*Section 5142 requires employers to maintain and operate ventilation systems to provide at least the quantity of outdoor air required by the State Building Code (Title 24) at the time the building permit was issued.*" The requirement only applies to Heating, Ventilating and Air Conditioning systems.
8. On page 93, "*Section 3203, Illness and Injury Prevention Program, requires employers to have written plans for hazard identification, communication, prevention, and training.*" The term

"prevention," applies to injury and illness prevention, employers are required to have written plans for hazard evaluation and correction, so one or both of those terms would be appropriate, for example, "requires employers to have written plans for hazard identification, evaluation and correction, for communication with employees on health and safety issues, and employee training."

9. On page 94, you give the labor code citation for smoking in the workplace. The regulation is Section 5148. (to be consistent with other regulations you cite).

10 On page 95, it states that "Cal/OSHA responds to complaints of workplace cigarette smoke only after the employer has been found guilty at the local level..." Cal/OSHA is only required to respond after three local violations, but as I understand it we are not prohibited from responding sooner.

11. On page 109, it misstates the change in the energy code regarding natural ventilation. The lengthening of the distance from 20 to 25 feet only applies in high rise residential and hotels:

## **SECTION 121 - REQUIREMENTS FOR VENTILATION**

### **(a) General Requirements.**

1. All enclosed spaces in a building that are normally used by humans shall be ventilated in accordance with the

requirements of this section [and the CBC](#).

**NOTE:** In addition to meeting the requirements of this section, for those occupancies where unusual

contaminants are present or anticipated (such as commercial dry cleaners, coin-operated dry cleaners, bars and

cocktail lounges, auto repair workshops, smoking lounges, barber shops, beauty shops), it is recommended to use

local exhaust ventilation and enclosure to capture the contaminants and discharge them directly outdoors.

2. The outdoor air-ventilation rate and air-distribution assumptions made in the design of the ventilating system

shall be clearly identified on the plans required by Section 10-103 of Title 24, Part 1.

**(b) Design Requirements for Minimum Quantities of Outdoor Air.** Every space in a building shall be designed to

have outdoor air ventilation according to Item 1 or 2 below:

1. **Natural ventilation.** [Natural ventilation may be provided for spaces that:](#)

[A. Naturally ventilated spaces shall be permanently open to and within 20 feet of operable wall or roof openings to](#)

[the outdoors, the openable area of which is not less than 5% of the conditioned floor area of the](#)

naturally

ventilated space. Where openings are covered with louvers or otherwise obstructed, openable area shall be based

on the free unobstructed area through the opening.

**EXCEPTION to Section 121 (b) 1. A:** Naturally ventilated spaces in high-rise residential dwelling units

and hotel/motel guest rooms shall be open to and within 25 feet of operable wall or roof openings to the

outdoors.

12. On page 114, Section 4.5. there are a couple of typos in the first paragraph: dry cleaners not dry cleansers, and copy shops not copy shows. Does the second paragraph refer to Cal/OSHA regulations? Because any place that there are employees, our regulations are in effect, and don't specifically effect public housing. But maybe you mean other agencies in this paragraph, but then the last sentence goes back to Cal/OSHA. I think it would be good to clarify this.

13. On page 115, it says that Section 5142 was adopted in response to a labor union lawsuit. The rulemaking documents say that it was in response to a petition to the Standards Board, which is a pretty common source of rulemaking activity.

14. On page 116, 4.5.1.4. again, you might want to insert the regulation number for the prohibition on smoking, section 5148.

15. On page 119, you talk about two types of mechanical ventilation -- mixing and displacement. Then you talk about localized ventilation, which is a third type?

16. On page 130, you refer to Cal/OSHA "environmental health" requirements. We generally refer to them as occupational health regulations or requirements.

Please feel free to contact me if you have any questions about any of these comments. Thank you again for your patience.

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