Tell California to Drop Anti-Halogen, Anti-PVC Credits From High-Performance Schools Guideline - *Comments due July 31!*

A proposed 2009 "high-performance schools" construction manual for California includes the same proposed anti-halogen (anti-PVC) credit as proposed late last year in the LEED for Healthcare draft rating system.

Your help is needed to oppose this biased, unfair credit. Comments must be filed by July 31. They can be filed electronically at http://www.chps.net/review/2009edition.

The proposed anti-halogen credit appears in the draft "Criteria for California" manual of the Collaborative for High-Performance Schools (CHPS), a non-profit organization that sets guidelines for building healthy, energy- and resource-efficient schools. The guidelines are updated every three years, in step with updates to the state's energy efficiency standards. They have been adopted by eight states, and proposed federal legislation would reference the program, among others, to qualify for federal funding for school construction.

The credit language is essentially identical to that proposed in LEED for Healthcare, and was inserted in the draft CHPS manual by the same anti-vinyl, anti-chemical activists that developed LEED for Healthcare and the Green Guides for Healthcare.

Please oppose the following credit:
- EQ 2.3: PBT Chemical Reduction -- This credit aims to "reduce the release of persistent, bioaccumulative toxic (PBT's) chemicals associated with the life cycle of building materials in schools." One to three points would be available depending on how many of the following strategies were adopted:
o Avoid using cement from kilns fired with hazardous waste
o For exterior products, "use only materials containing no halogenated organic compounds" (that are also 100% lead-free).
o For interior products, "use only materials containing no halogenated organic compounds"
o For piping, conduit, and electrical boxes, "use only materials containing no halogenated organic compounds"
o For electric cables and wire jacketing, "use only materials containing no halogenated organic compounds" (that are also100% lead-free).
o (Using a lead/cadmium-free, low-VOC paint also helps qualify for credits.)

Why is EQ 2.3 inappropriate, according to the Vinyl Institute (VI)?
This credit claims to be aimed at reducing dioxin and other PBTs, but it only addresses building materials, and not even all the materials associated with production of dioxin and PBTs. (Iron ore sintering, and secondary aluminum and copper smelting are associated with dioxin production, as is cement produced in kilns fired with non-hazardous waste). It also misses the large number of non-material/manufacturing sources of dioxin. According to U.S. EPA's database of dioxin sources, these include coal-and oil-fired utilities, vehicles, wastewater treatment sludge, production of other materials, and many more. (NCEA-EPA 2005), (American Chemistry Council 2007)

PBT reduction strategies based on sound science have already been widely and effectively implemented, showing significant progress, and this credit could be counter-productive, actually slowing progress. For example:

- Dioxin emissions to the environment have declined by more than 90 percent since the mid-to-late 1900s, even as production and use of PVC have risen sharply. (Hagenmaier and Walczok 1996); (Alcock and Jones 1996).

- An overwhelming number of studies have shown that the presence of chlorine in a product or waste does not correlate with production of dioxin during modern incineration. Additionally, the presence of significant quantities of salt in the environment makes it virtually impossible to starve the chloride out of waste. No governmental authority in the developed world that regulates incinerators for dioxins and furans has a policy to do so by controlling the amount of chlorine in waste.
- In its Dioxin Reassessment, EPA concluded: Although chlorine is an essential component for the formation of CDD/CDFs in combustion systems, the empirical evidence indicates that, for commercial-scale incinerators, chlorine levels in feed are not the dominant controlling factor for rates of CDD/CDF stack emissions. (NCEA-EPA 2000)
- Binational Toxics Strategy Burn Barrel Work Group concluded: There is always enough chlorine in the waste stream, even from natural materials such as salt and wood, to generate dioxins when garbage is burned. Burn conditions, such as operating temperature, seem to be a better indicator of dioxin emissions than chlorine content of waste. The smoldering, high particulate combustion of open burning offers ideal conditions for dioxin formation. (GLBTS 2004)
- US EPA in 1997 stated: [T]he effectiveness of a pollution prevention program directed at reducing dioxin emissions through shifting of waste composition from chlorinated plastics to nonchlorinated polymers would be questionable. (USEPA 1997)

Some anti-PVC advocates cite the U.S. Green Building Council's review of PVC (TSAC report) as finding that PVC accounts for a large percentage of dioxin generated in from landfill fires, but this allegation is not supported by data.

- The TSAC report (Altschuler, Horst et al. US Green Building Council 2007) makes no case for whether the materials it studied---flooring, pipe, siding and windows---are regularly burned in uncontrolled backyard garbage fires. On the contrary, it is difficult to imagine many fully assembled windows, framed with PVC, being burned in back yards.
- TSAC inserted the section on landfill fires after closing the public comment period, and that section had no public review prior to publication. This remains a major flaw in the USGBC process, which emphasized transparency. In addition, the study itself contains major flaws that can only call its relevance into question.
- The US Fire Administration published one of the few studies attempting to quantify landfill fires (FEMA 2001). This study estimates 8300 fires annually; 64% are said to have originated in "trash or rubbish containers" and are more likely small burn-barrel-type fires. They also note that many "landfill fires" are "tire fires" and not germane to the TSAC analysis. It is unknown how many landfill fires in this study are, in fact, brush or biomass fires, but they certainly comprise a significant number.
- The rarity of landfill fires is confirmed in research done by the California Integrated Waste Management Bureau. CIWMB estimated that there were 25 underground landfill fires in California in the past 15 years---approximately one per year for one-eighth of the US population. (CIWMB).
- The U.S. Environmental Protection Agency acknowledges the high uncertainty in data on dioxin from landfill fires: *Because no data could be located on characterization of landfill fires in the United States (i.e., number, type, mass of waste involved), the limited data available were judged inadequate for developing national emission estimates that could be included in the national inventory (NCEA-EPA 2006).*

PVC products are recognized for their energy and environmental benefits:

- Since the late 1980s, more than 20 life-cycle evaluations have been completed on PVC building products, many of them comparing those products to similar products made of other materials. PVC products were found to perform favorably in terms of energy efficiency, thermal-insulating value, low contribution to greenhouse gases and product durability, which means using fewer resources.
- A little more than a year ago, the California Building Standards Commission approved a final environmental impact report prepared by the state's Housing and Community Development Dept. and put its stamp of approval on the use of chlorinated polyvinyl chloride (CPVC) pipes for hot

and cold potable water distribution in houses, apartments, hotels and motels anywhere in the state of California.

- PVC roofing and windows commonly qualify for ENERGY STAR designation
- PVC takes less energy to produce than other major plastics.

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