

April 14, 2016

Suzanne Drake Senior Interior Designer, Associate Perkins+Will 2 Bryant Street, Suite 300 San Francisco, CA 94105 Brodie Stephens General Counsel Perkins+Will 2 Bryant Street, Suite 300 San Francisco, CA 94105

RE: Perkins+Will White Paper *Healthy Environments: Strategies for Avoiding Flame Retardants in the Built Environment*, October 15, 2014

Dear Ms. Drake and Mr. Stephens:

The Energy Efficient Foam Coalition (EEFC), representing manufacturers of foam plastic insulation, has fully evaluated the subject white paper and resulting conclusions on flame retardants used in building products, including foam insulation. We believe the white paper is significantly flawed and contains misleading information on foam insulation. We are writing to request that the white paper be removed from your website until the misinformation and inaccuracies are corrected. Our analysis is enclosed with this letter.

Since the publication of this white paper there have been five public building code hearings on proposals related to flame retardants used in foam insulation (all proposals were rejected), at least 12 face-to-face stakeholder meetings organized by the California Office of the State Fire Marshal related to California AB 127, and a number of presentations given in the U.S. and abroad on this particular subject, including governmental risk assessments of current flame retardants used in foam insulation. Additional presentations and peer reviewed reports have been provided on flame retardant alternatives for this industry.

We anticipated over the past year that all of these experiences, which surfaced a great deal of scientifically supported information on the specific use of flame retardants in foam insulation, would have served to inform a prompt revision of the white paper. However, it continues to remain full of erroneous and incorrect information, especially with respect to foam insulation.

While the white paper purports to address the use of flame retardants in all building products, we take particular issue with statements related to, or implied to, foam insulation as follows:

- Dismissal of the importance of fire safety in buildings;
- Classification of all flame retardants as hazardous;
- Lack of acknowledgement of the full spectrum of research conclusions on risk and exposure potential of flame retardants;



- Failure to acknowledge global governmental risk assessments on the specific flame retardants used in foam insulation; and
- Encouraging the use of insulation alternatives without considering the potential of adverse performance of those alternatives.

As you are aware, green building standards, codes, and rating systems have evolved from single attribute thinking to the importance of life cycle considerations in assessing the environmental and health impact of building products. The white paper rejects this important advancement to improve the built environment by targeting specific chemicals, substances, and products, without proper acknowledgment of all performance attributes and the potential for exposure.

After a careful analysis, we believe Perkins+Will has failed to employ two critical elements of due diligence in research: a full literature review and input from stakeholders, including the affected industry. For example, the white paper ignored detailed evaluations of flame retardants used in foam insulation, most notably within Europe, where substantial industry work was produced and submitted to European Union regulators for REACH Authorization analysis and conclusions. It also failed to acknowledge any information on new flame retardant technologies underway in the foam insulation industry and fully implemented in other geographic regions that are proving to be acceptable, sustainable, flame retardant alternatives for regulators, including findings by the U.S. Environmental Protection Agency's Design for the Environment Program.

As a result of these deficiencies, the white paper is significantly flawed and provides misleading advice as to foam insulation alternatives. Since it is in the best interest of the construction industry to technically inform on this important subject, we will be posting our analysis of the white paper online. We are writing to inform you of our intent so that corrections can be made to the white paper, as well as to emphasize important technical research and conclusions from regulatory agencies that were overlooked.

We would welcome an opportunity to meet with you to discuss our perspectives on building fire safety and the performance requirements of foam plastic insulation. We can be available for a meeting at a mutually agreeable time. Jay West at the American Chemistry Council (202-249-6407; Jay\_West@americanchemitry.com) is available to assist with scheduling a meeting.

John Ferracs

Sincerely,

Lee Salamone Center for the

Polyurethanes Industry

John Ferraro Extruded Polystyrene Foam Association Jared Blum Polyisocyanurate Insulation Manufacturers Association