Sent via Electronic Mail

December 18, 2019

Attn: Holly Davies, PhD, Senior Toxicologist
Washington State Department of Health
Environmental Public Health Division
Office of Environmental Public Health Sciences
holly.davies@doh.wa.gov

RE: Safer Products for Washington
Public Comments on Draft Recommendations for Building Insulation

Dear Dr. Davies:

The Energy Efficient Foam Coalition (EEFC) of the American Chemistry Council appreciates the opportunity to provide public comment on the Washington State Department of Health’s recommendations for flame retardant uses under the 2019 Safer Products for Washington law. Our comments here focus specifically on the recommendations for building insulation and should be viewed as additive to the information previously presented to the Departments of Health and Ecology during the in-person meeting on February 6, 2019 as well as the additional materials provided by email to Barbara Morrissey. We look forward to remaining a productive stakeholder in the process and would like to schedule a second face-to-face meeting in 2020 to elaborate on our public comments and better understand your goals and objectives.

The EEFC’s members are manufacturers of foam insulation products, including polyurethane, polyisocyanurate and polystyrene products.\(^1\) We are in the business of providing energy-efficient foam insulation products that satisfy fire safety standards while supporting the health and safety of building occupants and workers.

I. Introduction

Foam insulation products are important components in modern, energy-efficient construction and the retrofit of homes and buildings throughout the State. Foam insulation products are selected for their excellent thermal performance and provide cost-effective solutions for meeting stringent building energy code standards. Washington State is a recognized leader in building energy efficiency. The State routinely adopts and enhances the stringency of the latest model building energy codes. Additionally, in 2019, the Washington State Legislature enacted House Bill 1257, the Clean Building for Washington Act, which established energy efficiency standards for existing commercial buildings over 50,000 square feet. As compliance

\(^1\) [https://eefc.americanchemistry.com/]
for this new law is phased in over the next several years, the building sector must have confidence that they will be able to rely on energy-efficient products like foam insulation in order to meet the new requirements and reduce the greenhouse gas emissions associated with the State’s existing building stock.

As the Departments work to implement the 2019 Safer Products for Washington law, the existing framework of building and fire safety codes that regulate the use of foam insulation products should not be minimized, rolled back, or lost. All organic products, including foam insulation, are combustible. Foam insulation products contain flame retardants as part of their chemistries in order to meet public safety standards for fire performance when used in homes and buildings. The fire standards applicable to building products like insulation are developed through consensus-based processes that rely on the expertise and experiences of a diverse group of stakeholders. Jurisdictions, including those within Washington State, adopt building codes that incorporate these standards in order to set a minimum level of fire safety.

Furthermore, today’s foam insulation solutions are well-understood and managed throughout the product life cycle. This includes regulations that govern the manufacture, use, and disposal of insulation products. The regulatory environment is managed by experts from relevant fields including chemical safety, workplace safety, and construction and engineering practices. Consequently, absent clear gaps in this regulatory framework, the EEFC is reluctant to endorse or support additional regulations.

We understand that the Departments are early in the process for assessing their responsibilities under the 2019 law. The recommendations presented for building insulation products are conceptual in nature and we remain ready and willing to engage with the Departments to provide our expertise and information as the recommendations are further refined.

With respect to the Departments’ recommendations for building insulation, the general nature of the recommendations makes it difficult to formulate specific responses. As a result, we have included below brief comments that can help guide this analysis and produce well-scoped outcomes, and can be expanded through an ongoing dialogue with the Departments.

II. Guiding Principles for Flame Retardants and Building Insulation

The following principles should be used to guide future analysis and development of recommendations related to building insulation.

- **Maintain or Increase Building Fire Safety**: Preserving (or improving) the existing standards for building fire safety is a primary objective for EEFC members. As stated earlier, today’s building standards are founded on decades of technical data, experience and the expertise of a diverse group of stakeholders that includes representatives beyond product manufacturers. The EEFC does not support any code modification that reduces building fire safety by creating unwarranted exemptions to fire testing requirements or other means designed for the sole purpose of eliminating flame retardants from products. We encourage the Departments to establish a clear
baseline for the meaning of “maintain or improve fire safety.” Using the State’s current building and fire codes would provide an appropriate baseline for measuring whether any future code modifications maintain or improve building fire safety.

- **Respect the Scope and Integrity of Building Codes:** Building codes - from fire safety standards to energy efficiency requirements - play an important role in regulating the design, construction, and operation of our buildings. The codes are developed by a body of experts within specific fields and are enforced by local officials with experience across key disciplines. The role of building codes and the roles of those individuals charged with their enforcement should be respected. We object to the idea that building codes can (or should) be repurposed to directly regulate product chemistries. The concept for chemical management via building codes has been rejected repeatedly by the authorities that comprise the International Code Council. In Washington State, EEFC recommends that chemicals management remain in the scope of regulations promulgated by the Departments of Health and Ecology, rather than addressing chemicals management in the State’s building code.

- **Science-Based Approach:** Any regulations that limit or impact the use of existing or future flame retardants should be based on the best available science. The flame retardants used in building insulation have been extensively studied from both a toxicity and exposure viewpoint. While some interests assign a belief that all flame retardants are alike, data and experience from other assessments show otherwise. As the process moves forward, we urge the Departments to consider critical factors such as assessments of meaningful hazards and exposure scenarios that correlate with real-world applications. Importantly, the flame-retardant chemistries should not be treated as a class of chemicals, but rather as subclasses or in certain cases individually. Additionally, EEFC recommends considering assessments conducted by U.S. EPA and other regulatory agencies when evaluating current flame-retardant technologies used in foam building insulation.

- **Avoid Picking Market Winners and Losers:** While foam insulation products offer an ideal solution for many building applications, the building code facilitates the use of a wide variety of insulation materials (assuming the products meet the minimum standards for required physical properties and fire performance). This material-neutral approach evident in the State’s current building codes is paramount to suitable design and construction. Architects, material specifiers, and other building professionals should have the opportunity to select the optimum material for the application. We again urge caution regarding any regulatory approach that unduly interferes with the proper role of building professionals in the design and construction of buildings, including public officials such as building code officials.

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III. Comments on Building Insulation Recommendations #7 and #8

Beyond the high-level concepts outlined above, we offer the following observations and responses to the Departments’ two recommendations specific to building insulation products.

A. Recommendation #7: State agencies should ensure existing insulation is managed to minimize exposure to people and releases to the environment, especially for PBTs.

Current foam insulation products do not utilize flame retardants classified as PBTs. While it is true that polystyrene insulation used HBCD (a known PBT) in the past, the chemical is no longer used in insulation products. Furthermore, upon requests by other regulatory agencies, the polystyrene foam insulation industry submitted data that showed HBCD in polystyrene foam is not readily released into the environment (air, water, soil), including end of life scenarios such as landfilling.³

In the United States, EPA is nearing completion of its Risk Evaluation for Cyclic Aliphatic Bromide Cluster (HBCD) under TSCA. In the June 2019 draft risk evaluation of HBCD, EPA made the following initial determinations on risk. These initial determinations may change in response to the public and peer review process. EPA determined:⁴

- **No unreasonable risks for the general population, including consumers and children.** HBCD is no longer domestically manufactured or imported in the U.S. and has been replaced by other chemicals and calculated risk estimates are below levels of concern.
- **No unreasonable risks to workers or occupational non-users.** Again, HBCD is no longer domestically manufactured or imported in the U.S. and has been replaced by other chemicals. The use of HBCD does not present unreasonable risks to workers and applies to both those workers who come in direct contact with HBCD, as well as those who use the chemical but do not come in direct contact.
- **No unreasonable risk to the environment.** For all the conditions of use included in the draft risk evaluation, EPA found no unreasonable risks to the environment from HBCD.

We encourage the Departments to examine data submitted to EPA that informed these draft conclusions before pursuing any further actions.

Finally, in North America, the polystyrene insulation industry has ceased using HBCD as a flame retardant and converted to more sustainable flame-retardant technologies, including a polymeric flame retardant. The polyurethane and polyisocyanurate insulation industries have no history of using flame retardants classified as PBTs.

³ Please see XPSA attachments.
B. **Recommendation #8: Health and Ecology should work with stakeholders and the State Building Code Council to identify and promote the use of safer alternatives in new insulation.**

First and foremost, EEFC members value innovation and have been using Green Chemistry principles in improving their products. On this basis, we take issue with the implication that current flame retardants used in foam insulation products are not safe. Rather than publish recommendations that indicate a predetermined outcome, the Departments should rely upon the best available science to determine an acceptable level of risk that can be used to develop and analyze policy recommendations. Predetermined outcomes lead to ineffective policy, limit innovation, and lead to unintended consequences. As a first step, the Health and Ecology Departments need to examine toxicity and exposure data on the specific flame retardants used in foam insulation, rather than relying upon opinions contained in the referenced “six flame retardants to avoid regrettable substitutes.”

Additional evidence of a predetermination that current flame retardants are not safe is supported by the following two statements:

- Insulation is a high-volume use of flame retardants with the potential for continuous exposure to building occupants.
- The identification and use of safer alternatives would prevent the use of the *most hazardous flame retardants* [emphasis added] in new insulation and avoid those exposures and releases.

The first statement is not substantiated. Health and Ecology should revisit this assertion and provide additional clarity. EEFC provided a literature review to the Departments that demonstrated that no scientific data was available linking indoor concentrations of TCPP to exposures from building insulation. The second statement implies that current flame retardants are unsafe. As previously stated, the Departments need to formulate a transparent, science-based approach to characterize the health and environmental risks of flame retardants based both on individual hazard and exposure assessments. Without developing a risk-based finding, the Departments cannot reasonably define “safe.”

Additionally, EEFC would like to correct the statement that foam insulation products are “highly flammable.” All organic materials are combustible - this category includes common building products from wood to foam plastic insulation. And all building products are engineered to meet specific building standards or performance requirements. The fact that foam insulation is designed to meet building safety standards makes the products indistinguishable from other building products, including alternative insulations. Furthermore, formulating policy decisions based on a single product characteristic may lead to unintended consequences related to building performance. We suggest that the Departments assess products that contain certain flame retardants using risk-based principles; not on the mere fact that alternative products may be available in the marketplace.

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5 *Potential Exposure to Flame Retardants such as TCPP Emitted from Polyurethane and Polyisocyanurate Foam Insulation: Literature Evaluation Results*, February 14, 2014.

Finally, in response to the reference about changes to the California building standard, the Department should note that these changes were enabled by eliminating the fire safety standards from the State Fire Code for certain below-grade insulation applications. It is therefore incorrect to conclude that flame retardants are unnecessary to meet fire safety standards (as said standards were deleted). The EEFC has previously provided the Departments with comprehensive information regarding the California building standard decision. Portions of this information address how the (extremely limited) fire testing relied on by California actually demonstrates the effectiveness of flame-retarded insulation in preventing the spread of fire even where the product is located below grade. The California testing was also incomplete, lacked baseline characteristics for credible testing procedures like reproducibility and repeatability, and only examined a single product type. Lastly, code modifications that would have deleted the fire safety standards for foam insulation products used below grade were rejected by public safety officials from around the country during at least seven (7) International Code Council sponsored public hearings since 2013. Most recently, governmental representatives at the October 2019 International Code Council’s public hearings voted to disapprove a code change (RB131-19) that would have resulted in California-like amendments to the International Building Code. This result was only the latest in a series of votes by code officials that represent a rejection of code modifications that reduce fire safety.

IV. Conclusion

We appreciate the opportunity to provide public comment on the recommendations for flame retardant end-uses within the building insulation sector. Please contact Jay West (jay_west@americanchemistry.com) should you have questions and we look forward to continuing our dialogue with the Departments in 2020.

Sincerely,

Jay West
Senior Director, Chemical Products and Technology
American Chemistry Council
On behalf of the Energy Efficient Foam Coalition

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7 The October 2019 International Code Council’s in-person public hearings are followed by a two-week online vote. The results from this online voting component of the process will be available in late December 2019 or January 2020.