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ACC Testimony on S 295

Introduction

The chemical industry supports a comprehensive approach to managing per- and polyfluoroalkyl substances (PFAS) that helps to ensure protection of human health and the environment. This includes appropriate, science-based policies and regulations.

Opposition of S 295

S 295, as drafted, seeks to regulate or ban several different types of products containing PFAS. For the below reasons, we oppose S 295.

PFAS used in today's products are important to modern life and are a key enabling technology.

The strong fluorine-carbon bond allows PFAS to provide products with strength, durability, stability, and resilience. These properties are critical to the reliable and safe functioning of a broad range of products that are important for industry and consumers. PFAS play a vital role in everything from lowering emissions and improving safety, reliability and fuel-efficiency in automobiles, to manufacturing semiconductors, solar panels, and high performance electronics. Many other industries also depend on high-performance PFAS including aerospace, alternative energy, healthcare, building and construction, chemicals and pharmaceuticals, oil and gas, just to name a few.

Regulation or legislation should not group all PFAS together or take a one-size fits all regulatory approach.

PFAS are a diverse family of chemistry that includes a broad range of substances with different physical, chemical, and toxicological properties and uses. Hence, the hazard and risk profile of various PFAS are very different. It is neither scientifically-accurate nor appropriate to group all PFAS together or take a one-size-fits-all regulatory approach for this wide range of substances. This will deter innovation, undermine effective product design, and may even lead to the elimination of an entire chemistry that is an enabling technology for a broad array of vital products.

It is important to recognize that most of the attention to date on PFAS has focused on a handful of substances that are no longer produced in the U.S., Europe or Japan.

Additionally, significant regulations, including the Lautenberg Chemical Safety Act, are already in place for new and existing chemicals and specific actions have already been taken to help manage PFAS.

This includes U.S. EPA's comprehensive National PFAS Action Plan, as well as other actions initiated by various regulatory agencies. In addition, manufacturers and many users of PFAS are implementing a variety of practices and technologies to help minimize environmental emissions. These ongoing actions should be factored into any additional efforts to assess and regulate this broad class of chemistry.

The scientific and safety data on specific PFAS substances should guide public policy. Effective chemical regulation, regardless of the substance, includes consideration of a chemical's hazard characteristics, its use, and actual levels of exposure to assess the potential risk of a particular chemical and determine the most appropriate risk management measures. These fundamental principles have unfortunately been lost in the current debate about PFAS chemistries.

Taking an overly-broad and non-scientific approach to PFAS will make it difficult to implement effective regulatory policies.

It will also impact an extensive swath of the economy, including a broad range of industries and businesses, public entities like airports, hospitals, drinking water facilities, and municipalities. For these reasons, different PFAS require different regulatory approaches.

State actions should be conducted within or consistent with existing, appropriate regulatory frameworks.

Vermont has designed a robust regulatory system and established policies for managing chemicals within the state, including PFAS. These frameworks ensure consistent, science-based regulatory approaches and provide transparency, broad stakeholder input, and enforceable regulations. We support establishing clear timelines to ensure policy decisions and regulatory outcomes are completed and implemented in a timely fashion. But bypassing or ignoring established regulatory authorities and predetermining regulatory outcomes undermines the regulatory process, establishes a dangerous precedent for addressing other chemical issues in the future, and prevents policymakers from focusing on pressing issues of public concern.

Conclusion

- In conclusion, for all of the above reasons, as well as the below bill section-specific reasons, we ask you to oppose S 295.

Fire Fighting Foam

AFFFs remain the most effective foams currently available to fight high-hazard flammable liquid fires (Class B) in aviation, fuel depot/storage, industrial, chemical, military, and other applications.

- AFFF have proven effectiveness in large scale tank fires, fuel-in-depth fires and other high hazard Class B fires. Their unique film-forming and fuel repellency properties provide rapid extinguishment, critical burnback resistance and protection against vapor release, which help to prevent re-ignition and protect fire fighters working as part of rescue and recovery operations.
- Fluorine-free foams can and do provide an alternative to fluorinated foams in some applications such as spill fires and smaller tank fires. However, they are not currently able to provide the same level of fire suppression capability, efficiency, flexibility, and scope of usage.
- Fire test results presented at international fire protection conferences in 2011, 2013, 2015 and 2016, including some performed by the Naval Research Labs (NRL), all show that fluorinated foams are significantly more effective at extinguishing flammable liquid fires than fluorine-free foams. In a recent trade publication (Jan'19), an NRL scientist said fluorinated foams "outperform fluorine-free foams by a factor of four to five" by

containing the fire and suppressing vapors that can reignite. Similar conclusions were reached by a National Fire Protection Association report that was published this year.¹

AFFF helps to protect life and property in large scale high hazard class B fires and should be used responsibly.

- Current best practice calls for the containment and treatment of foam discharges and the use of non-fluorinated fluids and methods for testing, training and calibration.
- As large scale high hazard Class B fires are actually rare, requiring best management practices for all foam users has the potential to significantly reduce discharges of PFAS to the environment from foam. Legislation requiring these best practices has been passed in other states, banning the release of PFAS-based foams to the environment except in the case of emergencies. We believe that this a responsible and sound approach that protects society from catastrophic fires while at the same minimizing the environmental impact from foam use.
- While this bill includes three significant exceptions (chemical plants, terminals, and oil refineries) for the continued use of PFAS-based foams in emergencies, these facilities may not be inclusive of all locations within the state that may require AFFF to appropriately ensure adequate life and property safety and fire protection are available to address the risks of high-hazard fire emergencies associated with having large amounts of flammable liquids on-site.

Food Packaging

The use of PFAS in food packaging is already thoroughly regulated by the U.S. Food and Drug Administration (FDA).

- The use of PFAS in all food packaging is already thoroughly regulated at the federal level by FDA because the safety of our food supply is not a state-specific issue. Before a chemical used in food packaging can be sold or distributed in commerce, it must be reviewed and authorized by FDA based on a conclusion that there is sufficient scientific data to demonstrate the substance is safe for its intended use in packaging.²
- In order to demonstrate that a food packaging is safe for its intended use, FDA requires upfront submission of extensive test data and scientific information regarding chemical composition, migration levels, and toxicity.³
- FDA can withdraw its approval for a food packaging chemical at any time if available data no longer demonstrate that the substance is safe for its intended use.⁴
- Importantly, any alternative would be subject to the same FDA regulatory scrutiny.

This section of the bill is overly broad.

- The universe of PFAS chemistry includes a broad range of products with differing characteristics, structures and intended uses. Importantly, only a handful of PFAS chemistries are authorized for use in food packaging.

¹ National Fire Protection Association Research Foundation. *Evaluation of the fire protection effectiveness of fluorine free firefighting foams*, January 2020.

² See 21 U.S.C. § 348(h)(1).

³ See 21 C.F.R. §170.101; FDA Form 3480 (available at: <http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/ucm076880.pdf>).

⁴ See 21 C.F.R. §170.105(a).

- A small number of PFAS chemistries are used in certain paper and paperboard packaging applications to protect the packaging integrity and prevent oil and grease from leaking through the packaging material onto clothing, bare skin, furniture or car interiors. However, the bill as written may negatively impact a much broader range of packaging types and users.
- While concerns have been raised regarding environmental contamination issues related to certain PFAS, these chemicals are neither used in nor relevant to the handful of PFAS chemistries authorized for use in food packaging.

It is unnecessary and premature to consider any legislation regarding PFAS in food packaging because the FDA is currently reviewing these specific applications.

- Because of recent increased attention to the family of PFAS and the use of certain PFAS chemistries in food packaging, FDA is currently reviewing these applications. (See <https://www.fda.gov/food/chemicals/and-polyfluoroalkyl-substances-pfas>) Rather than imposing new and potentially unnecessary legislation, Vermont should allow the career scientists at FDA, who specialize in assessing the safety of food packaging, to complete their work, which will inform the entire nation about the safety of PFAS in these applications.

Rugs and Carpets

Effective chemical regulation, regardless of the substance, includes consideration of a chemical's hazard characteristics, its use, and actual levels of exposure to assess the potential risk of a particular chemical and determine the most appropriate risk management measures. These fundamental principles would be undermined with the proposed blanket ban of chemistries in this product sector.

Chemicals of High Concern to Children

Vermont currently has regulations in place to determine whether a chemical meets the criteria to be listed as a Chemical of High Concern in Children's Products.⁵ PFAS are a diverse family of chemistries that includes a broad range of substances with different physical, chemical, and toxicological properties and uses. Hence, the hazard and risk profile of various PFAS are very different. It is neither scientifically-accurate nor appropriate to group all PFAS together or take a one-size-fits-all regulatory approach for this wide range of substances. Consequently, if Vermont would like to consider specific PFAS for addition to its Chemicals of High Concern to Children list, it should utilize its existing regulatory framework to determine whether any meet the outlined criteria.

⁵ <https://www.healthvermont.gov/environment/children/chemical-disclosure-program-childrens-products-manufacturers>