American Chemistry Council

Please see the attached comments from the American Chemistry Council's Center for the Polyurethanes Industry.

March 25, 2020

Linda Kildahl
Air Quality Planner
Air Quality Program
Washington State Department of Ecology

Submitted electronic via E-Comment Portal

RE: Proposed Regulation Chapter 173-443 WAC - Hydrofluorocarbons (March 17, 2020 Draft)

Dear Ms. Kildahl,

The American Chemistry Council's Center for the Polyurethanes Industry[1] (CPI) appreciates the opportunity to comment on the Washington State Department of Ecology's (DoE) draft of the proposed Chapter 173-443 WAC - Hydrofluorocarbons (HFCs) – dated March 17, 2020 (draft regulations). We appreciate the proactive stakeholder engagement you have encouraged and your efforts to keep the regulatory development process as transparent as possible.

CPI supports consistency across all states that are regulating the use of HFCs in the polyurethane foam sector. CPI has been actively working with regulators in California (the only other state with fully implemented HFC regulations), Delaware, Maryland, New York, and several other states as well as the U.S Climate Alliance.

CPI acknowledges DoE's efforts to align its regulations with existing State HFC restrictions. CPI believes our additional recommendations will help further align the draft regulations with other state rules prohibiting the use of HFC foam blowing agents.

CPI's comments on the draft regulations are mainly technical and are intended to promote clarity to regulated entities and consistency among states regulating HFCs. We respectfully submit the following comments:

1. **Definitions:**

There are several inconsistencies in the definitions for polyurethane end uses in the draft regulations. These definitions reference various terms such as "polymers," "polyurethane polymers," "polyurethane," "urethane," and the raw materials used to form polyurethane polymers. CPI suggests developing a definition for "polyurethane," and then referencing this term in the definition of the different end uses. This builds a consistent approach to the end use definitions. We understand the definitions used in the draft regulations were included in the U.S. Climate Alliance model rule. CPI has encouraged the Climate Alliance to update the model rule.

[1] The Center for the Polyurethanes Industry's (CPI) mission is to promote the growth of the North American polyurethanes industry through effective advocacy, delivery of compelling benefits messages demonstrating how polyurethanes deliver sustainable outcomes, and creation of robust safety education and product stewardship programs.

Additionally, the draft regulations include a definition of "foam systems." CPI recommends referencing the definition of "foam" in the definition of "foam systems." This change further aligns the definition of "foam systems" with industry understanding of these terms.

Accordingly, CPI recommends the following changes:

- "Polyurethane" means a polymer formed principally by the reaction of an isocyanate and a polyol.

- "Foam system" means a multipart liquid product ~~material~~ that expands when mixed to form a foam ~~solid or flexible substance in which thin films of material separate pocket of gas~~.

- "Flexible Polyurethane" means a non-rigid ~~synthetic~~ polyurethane foam ~~containing polymers created by the reaction of isocyanate and polyol~~, including but not limited to that used in furniture, bedding, and chair cushions.

- "Integral Skin Polyurethane" means a ~~synthetic~~ self-skinning polyurethane foam ~~containing polyurethane polymers formed by the reaction of an isocyanate and a polyol~~, including but not limited to that used in car steering wheels and dashboards.

- "Rigid Polyurethane Appliance Foam" means polyurethane ~~insulation~~ foam in domestic appliances used for insulation.

- "Rigid Polyurethane Commercial Refrigeration and Sandwich Panels" means polyurethane foam used to provide insulation ~~for use~~ in walls and doors, including that used for commercial refrigeration equipment, and used in doors, including garage doors.

- "Rigid Polyurethane High-pressure Two-component Spray Foam" means a liquid polyurethane foam system sold as two parts (i.e., A-side and B-side) in non-pressurized containers; ~~product that is pressurized 800-1600 pounds per square inch (psi) during manufacture; sold in pressurized containers as two parts (i.e., A-side and B-side)~~; and is field or factory ~~blown~~ applied in situ using high-pressure proportioning pumps at 800-1600 pounds per square inch (psi) and an application gun to mix and dispense the chemical components. ~~to propel the foam components, and may use liquid blowing agents without an additional propellant~~.

- "Rigid Polyurethane Low-pressure Two-component Spray Foam" means a liquid polyurethane foam system ~~product~~ sold as two parts (i.e., A-side and B-side) in containers that are ~~is~~ pressurized to less than 250 psi during manufacture of the system for application without pumps; ~~sold in pressurized containers as two parts (i.e., A-side and B-side);~~ and are typically applied in situ relying upon a liquid blowing agent and/or gaseous foam blowing agent that also serves as a propellant ~~so pumps typically are not needed~~.

- "Rigid Polyurethane Marine Flotation Foam" means buoyancy or flotation polyurethane foam used in boat and ship manufacturing for both structural and flotation purposes.

- "Rigid Polyurethane One-component Foam Sealants" means ~~a~~ polyurethane foam generally packaged in aerosol cans that is applied in situ using a gaseous foam blowing agent that is also the propellant for the aerosol formulation.

- "Rigid Polyurethane Slabstock and Other" means a rigid closed-cell polyurethane foam ~~containing urethane polymers produced by the reaction of an isocyanate and a polyol and~~ formed into slabstock insulation for panels and fabricated shapes for pipes and vessels.

2. Sell-Through Period

CPI appreciates DoE's plan to implement an explicit sell-through provision outlined in section WAC 173-443-060 Prohibitions. (2). However, the sell-through provision does not explicitly allow products to be used after they are manufactured.

Further, CPI recommends clarifying the sell-through provision for polyurethane foam systems to include a statement that polyurethane systems are included in the scope of the sell-through provision. For context, the polyurethane industry refers to the liquid components of the "A-side" and "B-side" together as a system.

Liquid polyurethane foam systems, including spray foam systems, do not cleanly fit the traditional definition of manufacture, because the product is blended as a two part system and is not provided to downstream users as a final article. Therefore, CPI supports DoE's changes to WAC 173-443-060 Prohibitions. (4). CPI is recommending an additional change to clarify that all polyurethane systems have the same sell-through period.

CPI suggests the following changes:

WAC 173-443-060 Prohibitions. (2):

> Products and equipment manufactured prior to the applicable effective date of a prohibition in WAC 173-443-040 may be used, sold, leased, rented, or otherwise introduced into Washington commerce after the date of prohibition.

WAC 173-443-060 Prohibitions. (4)

> Polyurethane ~~Spray~~ foam systems manufactured (blended) ~~in the possession of a manufacturer~~ before an applicable prohibition date and ~~where the blowing agent~~ ~~has~~ not yet ~~been~~ applied on site may be used after the prohibition date.

3. Applicability

In section WAC 173-443-020 Applicability. (2) DoE exempts certain products produced by manufacturers that transitioned away from HFC technology before HB 1112 was effective. Most polyurethane foam manufacturers had low-GWP formulations available before July 28, 2019. Polyurethane manufacturers, like most product makers, have a complex distribution chain. It is difficult for manufacturers to verify whether products containing restricted HFCs were available in Washington State on July 28, 2019. CPI recommends two changes to the disclosure applicability. First, build the exemption on individual products, rather than an entire manufacturer's portfolio. Second, extend the exemption date to the effective date of restriction for each end use. CPI believes these changes will clarify the scope of the exemption and improve its utility.

Accordingly CPI suggests the following changes:

> The labeling requirements in WAC 173-443-070 and the notification requirements in WAC 173-443-080, WAC 173-443-090, and WAC 173-443-100 apply only to ~~manufacturers of~~ products or equipment that consist~~sed~~ of, or use~~d~~, HFCs on or after the date of restriction per end use

category ~~after July 28, 2019, or manufacturers of products or equipment that have initiated producing such products at any time after that date~~.

4. Product labeling and disclosure requirements

CPI acknowledges DoE's efforts to build flexibility into the disclosure requirements. Given that HB 1112 (2019) is somewhat restrictive, CPI appreciates that DoE's proposed disclosure requirements provide options to leverage disclosure requirements in other states regulating HFCs and online disclosures.

CPI has developed a recommended disclosure statement for polyurethane foam products, which states: "Where sold, compliant with State HFC regulations." CPI anticipates that this language will be included in final rules in Delaware and Maryland and is supporting its use in other states with pending HFC regulations such as New York. The current draft regulations require DoE to approve of the label disclosure language before it is used. CPI requests DoE approve this language by including it as an option in the final regulations. Finally, CPI suggests providing this disclosure option for all uses of foam products.

CPI recommends the following changes to section WAC 173-443-070:

WAC 173-443-070 (3)

(b) For the foam blown in or installed by the manufacturer of household refrigerators and freezers, household refrigerators and freezers – compact, and household refrigerators and freezers – built-in:

(i) New dedicated label;
(ii) UL or equivalent safety label;
(iii) Owner's manual; ~~or~~
(iv) On-product or on-equipment symbol or code; and online disclosure, or~~.~~
(v) The following statement on the product or product packaging "Where sold, compliant with State HFC regulations." and online disclosure.

(d) For the foam blown in or installed by the manufacturer of commercial refrigeration equipment:

(i) New dedicated label;
(ii) UL or equivalent safety label;
(iii) Owner's manual; ~~or~~
(iv) On-product or on-equipment symbol or code; and online disclosure, or~~.~~
(v) The following statement on the product or product packaging "Where sold, compliant with State HFC regulations" and online disclosure.

WAC 173-443-070 (4)

(b) For the foam blown in or installed by the manufacturer of centrifugal and positive displacement chillers:

(i) New dedicated label;
(ii) UL or equivalent safety label;
(iii) Owner's manual; or
(iv) The following statement on the product or product packaging "Where sold, compliant with State HFC regulations" and online disclosure.

WAC 173-443-070 (5)

(a) For foam non-retail products:
(i) Unit label; or
(ii) One of the following methods for each individual product within a unit:
(A) New dedicated label;
(B) Existing product label;
(C) The following statement on the product or product packaging "Where sold, compliant with State HFC regulations" ~~A label required by another jurisdiction with sufficient HFC disclosure requirements~~ and online disclosure; or
(D) On-product symbol or code; and online disclosure.

(b) For foam retail products:
(i) New dedicated label;
(ii) Existing product label;
(iii) On-packaging label;
(iv) The following statement on the product or product packaging "Where sold, compliant with State HFC regulations" ~~A label required by another jurisdiction with sufficient HFC disclosure requirements~~ and online disclosure;
(v) On-product symbol or code; and online disclosure; or
(vi) On-packaging symbol or code; and online disclosure.

(c) For ~~the foam blowing agent used in~~ polyurethane foam systems, including spray foam systems:
(i) New dedicated label on the canister or cylinders;
(ii) Existing product label on the canister or cylinders;
(iii) The following statement on the product or product packaging "Where sold, compliant with State HFC regulations" and online disclosure ~~On-packaging label~~; or
(iv) On-packaging symbol or code; and online disclosure.

The current requirement for the disclosure of substitutes is vague. HB 1112 requires manufacturers to "disclose the substitutes used in its products or equipment." CPI recommends DoE allow manufacturers to include generic chemical names, such as "hydrofluoroolefin" or "HFO," as opposed to including the specific chemical name in online or on product disclosures. CPI requests that DoE include language in the final rule that affirms the use of generic chemical names in the disclosure. Allowing on product disclosures, online disclosures, and generic chemical names in the disclosure will provide polyurethane manufactures the necessary flexibility to comply with multiple disclosure requirements without the need to produce specific labels for Washington.

If you have any questions or need additional information, please contact me at Stephen_wieroniey@americanchemistry.com, or (202) 249-6617.

Sincerely,

Stephen Wieroniey
Director