



Center for the  
Polyurethanes Industry

May 29, 2020

Ajo Rabemiarisoa  
Environmental Engineer  
Department of Natural Resources and Environmental Control  
Division of Air Quality

Submitted via email to: [DNRECHearingComments@delaware.gov](mailto:DNRECHearingComments@delaware.gov)

**RE: 7 DE Admin Code 1151 Prohibitions on Use of Certain Hydrofluorocarbons in Specific End-Uses (SAN # 2019-08)**

Ms. Rabemiarisoa,

The American Chemistry Council's Center for the Polyurethanes Industry<sup>1</sup> (CPI) appreciates the opportunity to comment on the Delaware Department of Natural Resources and Environmental Control's (Department) draft Rule 1151 – Prohibitions on use of certain hydrofluorocarbons in specific end-uses (draft regulations).

CPI members operate manufacturing facilities and sell polyurethane foam products across the United States. CPI advocates for consistency across all states that are regulating the use of HFC foam blowing agents to help reduce the regulatory burden on polyurethane companies. CPI advocates for consistency in four areas: definitions, disclosure, recordkeeping, and sell-through periods. CPI supports the Department's approach to product disclosures. CPI is suggesting technical changes to the definitions and the sell-through period. We believe these changes align with the Department's intent and provide additional clarity for regulated entities. CPI supports the Department's decision to not require recordkeeping. CPI believes disclosures on products or product packaging provide more meaningful information for users and the Department.

Accordingly, 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 referencing this term in the definition of the different polyurethane end uses. This builds a consistent approach to the end use definitions.

---

<sup>1</sup> 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.



We believe the definitions used in the draft regulations were included in the U.S. Climate Alliance model rule. CPI has recommended that the Climate Alliance update the model rule to include these technical changes as well.

Additionally, CPI has slightly changed the definition of “foam blowing agent” that the Department has previously accepted based on comments previously submitted by CPI. The updated definition is more technically accurate. The previous definition was too broad and included other additives in foam formulations, such as surfactants.

CPI recommends the following changes to section 3.0:

- “Polyurethane” means a polymer formed principally by the reaction of an isocyanate and a polyol.
- “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.
- “Foam Blowing Agent” means a substance used to produce the product with a cellular structure foam via a foaming process in a variety of materials that undergo hardening via chemical reaction or phase transition that functions as a source of gas to generate bubbles in the mixture during the formation of foam.
- “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 household 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) that is field or factory blown and applied in situ using high-pressure proportioning pumps ~~to propel the foam components~~ at 800-1600 pounds per square inch (psi) and an application gun to mix and dispense the chemical components. 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. Disclosure Statement:**

CPI supports the disclosure requirements in section 4.2.1.3. Specifically, CPI supports the disclosure language in section 4.2.1.3.2 – Alternative 2. The Department’s approach to product disclosures allows manufacturers the necessary flexibility to comply with Delaware’s disclosure requirements and the disclosure requirements of other states without additional disclosure statements or separate product labels. CPI believes that disclosures focused on a product’s compliance status will provide users and regulators the necessary information to ensure low global warming potential (GWP) products are used and installed in Delaware.

## **3. Recordkeeping Requirements:**

CPI supports the Department’s decision to not require recordkeeping. Recordkeeping requirements add additional burden to manufacturers that comply with the HFC regulations without providing a meaningful benefit if the product contains an explicit written disclosure on the product or product label, as required by section 4.2.

## **4. Sell-Through Period:**

CPI supports the sell-through period in section 4.1.4. of the draft regulations. The explicit sell-through period will facilitate stakeholders’ regulatory compliance and promote consistency with other states. CPI believes that the term “on site” may be too limiting and may not include factory uses of polyurethane systems. CPI suggests that the following changes:

Products or equipment manufactured prior to the applicable effective date of the restrictions specified in Table 1 of subsection 6.1.1 (including foam systems not yet applied on-site) may be sold, imported, exported, distributed, installed, and used after the specified date of prohibition.

If you have any questions or need additional information, please contact me at [Stephen\\_wieroniey@americanchemistry.com](mailto:Stephen_wieroniey@americanchemistry.com), or (202) 249-6617.

Sincerely,



Stephen Wieroniey  
Director