Jason Sloan

Who is commenting? *(choose the best fit)*
Representative of a product manufacturer(s)

If you are commenting as a representative, what is the name of the entity you are commenting on behalf of?
The Center for the Polyurethanes Industry (CPI) of the American Chemistry Council (ACC)

If you represent a product manufacturer or industry group, what industry(ies) do you represent?
CPI represents the polyurethanes industry in North America. Its members include companies that manufacture and supply raw materials, additives, and equipment used in the production of polyurethane products, as well as companies engaged in polyurethane processing and end-use applications. CPI also supports research and initiatives that advance the industry and serve its customers and communities.

If you represent a product manufacturer, what types of components, products, or product categories do you manufacture that you will be requesting a CUU determination for?
Polyurethane foam products manufactured using hydrofluoroolefin (HFO) and hydrochlorofluoroolefin (HCFO) blowing agents.

Examples include spray polyurethane foam (SPF) used to insulate buildings as well as poured foam insulation used for refrigerators, freezers, water heaters, refrigerated trailers, entry doors, garage doors, insulated metal building panels, walk-in cooler panels, reach-in coolers, and picnic coolers, among other products.

Do you have any recommended changes or other considerations that you think the MPCA should take into account when defining the term "essential for health, safety, or the functioning of society"? *(Please review the proposed definitions in the rule concept document prior to answering)*
MPCA's definition of "essential for health, safety, or the functioning of society" should additionally consider alignment with applicable federal and state codes, and performance standards, and avoid creating a prohibition that creates access, availability, and/or compliance gaps due to lack of feasible alternatives.

For example, the polyurethanes industry currently uses HFO and HCFO blowing agents in the manufacture of foam insulation. HFOs and HCFOs have an ultra-low global warming potential (GWP) and were adopted to replace higher-GWP hydrofluorocarbon (HFC) and ozone-depleting substances (ODS), supporting international efforts under the Montreal Protocol. The U.S. Environmental Protection Agency's (U.S. EPA) Significant New Alternatives Policy (SNAP) program evaluated and listed certain HFO and HCFO blowing agents as acceptable

substitutes for specific foam end-uses following comprehensive technical and environmental review. These blowing agents are not classified as persistent, bioaccumulative, or toxic (PBT).

Recognizing substances that are approved under federal programs such as SNAP as eligible for CUU determinations would promote regulatory consistency and avoid conflicting requirements, as well as support Minnesota's climate and greenhouse-gas reduction objectives.

Do you have any recommended changes or other considerations that you think the MPCA should take into account when defining the term "alternative"? *(Please review the proposed definitions in the rule concept document prior to answering)*
MPCA's definition of "alternative" should align with established federal programs, such as U.S. EPA's SNAP program, which identifies acceptable substitutes for substances being phased out or prohibited. Under SNAP, substitutes are deemed "acceptable" after rigorous testing by U.S. EPA technical staff and considered by the Agency to "reduce overall risk to human health and the environment compared to other substitutes for the particular end-use." Aligning with these determinations would promote regulatory consistency and avoid conflicting requirements for manufacturers and end users.

In addition, MPCA should define "alternative" to require demonstrable functional equivalence, including comparable performance, safety, and compliance with applicable mandatory standards. The evaluation of alternatives should incorporate feasibility, lifecycle, and economic considerations, as well as whether a substitute can be deployed at scale under real-world conditions. These criteria will help ensure that identified alternatives are not only theoretically lower risk, but also technically feasible, meet compliance needs, and are effective in real-world use.

Do you have any recommended changes or other considerations that you think the MPCA should take into account when defining the term "reasonably available"? (*Please review the proposed definitions in the rule concept document prior to answering*)
MPCA's definition of "reasonably available" should be updated to reflect CPI's proposed criteria when defining an "alternative," including technical feasibility, market availability, and scalability, as well as the ability to meet applicable standards and codes. Financial impacts on manufacturers – research, reformulation, certification, testing, and manufacturing process modifications – should be considered, as these costs ultimately increase total costs to consumers.

When considering the proposed definition of "product category", how broadly should the agency group product categories? *(Examples: "vehicles" versus "sedans, SUV's, vans, trucks, RV's" or "printers" versus "receipt printers, thermal printers, label printers, residential printers, commercial printers, etc.")*

Product categories should be broadly defined and also allow product manufacturers to rely on established federal programs for seeking CUU determinations, including at the component level. As noted, U.S. EPA's SNAP program evaluates substitutes across functional product groupings for ODS and HFCs being phased out under the American Innovation and Manufacturing Act (AIM), identifying "safer alternatives to reduce environmental and health risks." This approach would provide regulatory consistency across jurisdictions, reduce duplicative analysis, and provide greater clarity and predictability for manufacturers, regulators, and consumers.

Defining product categories too narrowly may lead to inconsistent regulatory outcomes and increased compliance burden, requiring separate analyses for closely related products that present similar performance characteristics, exposure profiles, and substitution options.

Should each request for a CUU determination be limited to a single product category, or should applicants be allowed to submit a request for a CUU determination for multiple product categories?
MPCA should establish as efficient a process as possible, including allowing manufacturers to submit a CUU determination request for multiple product categories. This approach will also help facilitate MPCA's review of applications.

What safety or other standards require the use of PFAS in a product? *(Please include the specific citation)*
In several product sectors, compliance with established electrical, thermal, and fire-safety standards may functionally necessitate the use of PFAS to meet performance requirements for heat resistance, electrical insulation, and flame retardancy. Relevant standards may include UL 94, IEC 60335-1, UL 60335-2-89, ASHRAE 15, EN 378, ASTM E84, and NFPA 285, which establish minimum safety and performance thresholds for materials used in appliances, refrigeration systems, and building assemblies.

These standards are intended to ensure fire safety, durability, and reliable operation under demanding conditions and, in some applications or complex chemical formulations, limit the range of materials capable of meeting required safety and performance criteria.

The agency is seeking feedback on the potential that the initial positive CUU determination duration for existing products will expire eight years from the date of issuance regardless of product category. This is intended to stagger renewal deadlines and ease the administrative burden of processing renewals.

- Do you have any concerns about unintended consequences with this proposal?
- Do you have any alternative recommendations to stagger renewal deadlines?

CPI has concerns that the proposed approach, under which the CUU determination for existing products would expire eight years from the date of issuance, could create uncertainty and unintentionally disadvantage manufacturers that submit timely applications. Because the proposed rule and review process will be new, MPCA has indicated that it may take "at least two years or more to process requests for a CUU determination." As a result,

manufacturers that apply early could receive approvals that expire sooner relative to the statutory prohibition date of January 1, 2032. This would effectively shorten the useful duration of a CUU determination compared to applicants that submit later. CPI anticipates that manufacturers will want to submit CUU determination requests close to the January 1, 2030, deadline in order to take advantage of as long of an approved CUU determination as possible past the January 1, 2032, prohibition.

CPI strongly recommends that the initial duration of CUU determinations for existing products be aligned to the January 1, 2032, prohibition date, rather than from the date of issuance. This provides consistent treatment of applicants and would avoid penalizing early submissions. In addition, MPCA should establish clear review timelines and provide for provisional approval if the agency does not meet those timelines, which would improve regulatory certainty and support continued compliance planning given the long research, development, and safety validation cycles required to reformulate many products.

CPI reiterates that MPCA can reduce uncertainty and administrative burden by recognizing substances and uses already evaluated under established federal programs like U.S. EPA's SNAP program.

The MPCA has developed a preliminary list of potentially eligible data categories that may be considered for trade secret requests. *(Please review the rule concept document for the list of potentially eligible data)*

- Do you have any concerns about unintended consequences with this proposal?
- Do you have any alternative recommendations for data that should or should not be eligible for trade secret requests?

No response.

What are the potential ongoing costs to society if the commissioner issues a positive currently unavoidable use determination for the continued use of PFAS within a product or product category? *(For example: environmental, human health, or remediation costs)*
When evaluating the potential ongoing costs to society of issuing a positive CUU determination, MPCA should also consider the societal benefits of continued use in applications where alternatives are not reasonably available. Denial of a CUU may result in greater environmental or economic costs than approval. HFO and HCFO foam blowing agents provide a clear example. Under a robust review under the SNAP program, U.S. EPA has determined that "acceptable" HFO and HCFO foam blowing agents "reduce overall risk to human health and the environment compared to other substitutes for the particular end-use."

Further, these blowing agents are used in a wide range of insulation applications, including spray polyurethane foam (SPF) in buildings and rigid foam in appliances, refrigeration equipment, and insulated panels. High-performance polyurethane insulation significantly improves energy efficiency and reduces greenhouse-gas emissions over the life of buildings and equipment, resulting in lower energy consumption and operating costs for households and businesses.

MPCA's CUU framework should evaluate both the potential risks of continued use and the broader societal costs that could arise if high-efficiency technologies are restricted, particularly where such restrictions could undermine state and national climate and energy-efficiency and GHG reduction efforts.

For manufacturers: Administrative cost of requesting a CUU determination (Part 1 of 2). *Please provide your best estimates or rough orders of magnitude (for example "approx. 200 hours"). Precise accounting data is not necessary to answer this question.*

If your company currently possesses information regarding intentionally added PFAS (to the CAS number level) for all components in your product lines, please estimate the number of technical staff hours that were required to establish this baseline.
Not applicable

For manufacturers: Administrative cost of requesting a CUU determination (Part 2 of 2). *Please provide your best estimates or rough orders of magnitude (for example "approx. 200 hours"). Precise accounting data is not necessary to answer this question.*

If your company does not possess information regarding intentionally added PFAS (to the CAS number level) for all components in your product lines, please estimate the number of technical staff hours needed to obtain this data from your Tier 2 or 3 suppliers for a single product line.
Other (please specify)
In general, MPCA is significantly underestimating per-company burden of developing a CUU request application, particularly for complex products. Depending on product and product line complexity, manufacturers reviewing MPCA's draft concepts have indicated estimates ranging from hundreds to thousands of hours to obtain PFAS information across all components and all suppliers. This should be recognized and accurately updated in MPCA's rule analysis.

For manufacturers: Expenditure considerations when seeking non-PFAS alternatives (Part 1 of 2). *Please provide your best estimates or rough orders of magnitude (for example "primary cost is CapEx"). Precise accounting data is not necessary to answer this question.*

If you have identified a technically viable non-PFAS alternative for one of your products that contains intentionally added PFAS, does implementing this alternative require Capital Expenditure (such as purchasing new molds, retooling machinery) or primarily Operational Expenditure (such as purchasing more expensive raw materials)?

- Please estimate the ratio of Capital Expenditure to Operational Expenditure (or indicate which category is the dominant cost driver).

No response.

For manufacturers: Expenditure considerations when seeking non-PFAS alternatives (Part 2 of 2).

If you have not identified a technically viable non-PFAS alternative for one of your products that contains intentionally added PFAS, have you conducted a Research & Development (R&D) feasibility study?

- If so, what was the cost of that study?

No response.

For manufacturers: Research and development safety validation cycles.

What is the typical duration of the R&D and safety validation cycle for a reformulated product in your sector (from concept to market entry)?

Does this cycle align with the 5-year renewal period typically associated with regulatory exemptions?

- If not, please explain the specific technical barriers that would require a longer validation period.

No response.

Please provide any additional information or documentation needed to support your answers to any of the questions posed.
U.S. EPA's SNAP program: https://www.epa.gov/snap

U.S. EPA, Substitutes in Foam Blowing Agents: https://www.epa.gov/snap/substitutes-foam-blowing-agents

Do you have any additional questions or comments regarding the PFAS in products: Currently unavoidable use rule? *(Please note that we may be unable to respond to specific questions regarding rule content in this phase of the rulemaking process)*
CPI has significant concerns regarding MPCA's projection that it may take two or more years to review CUU request applications. Based on the CUU rulemaking timeline, the earliest a manufacturer could submit an application is 2028, but MPCA might not issue a determination until 2030. Given the January 1, 2032, statutory prohibition date, this timeline creates significant planning uncertainty for manufacturers and their downstream customers, who must make long-term investment, procurement, and product design

decisions well in advance.

To improve predictability and support compliance planning, CPI recommends that MPCA establish a deadline for a completeness review (such as 30 days from submission) to confirm whether an application contains the information necessary for evaluation. MPCA should additionally consider:
-- A formal process to appeal negative determinations
-- A mechanism for requesting extensions
-- Provide the objective criteria by which CUU determinations will be considered positive or negative to increase process transparency and help stakeholders proactively address MPCA's concerns in CUU requests