Chris Cleet

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?
Information Technology Industry Council (ITI)

If you represent a product manufacturer or industry group, what industry(ies) do you represent?
Information and Communication Technology (ICT) industry

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?
Information and communication technology products and parts, including semiconductors and chips.

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)*
The term "essential for health, safety, or the functioning of society" is not defined in the statute. Under Minnesota law, undefined statutory terms must be interpreted according to their plain, ordinary meaning — not a narrower construction. State v. Powers, 962 N.W.2d 853, 858 (Minn. 2021). MPCA's concept definition departs from that standard in two respects that would, if finalized, produce results inconsistent with both the statute's plain meaning and the Legislature's evident purpose.

First, MPCA's definition introduces limiting language: "bare necessities for human survival" and "serve the basic needs of human beings", language that has no basis in the statutory text and is narrower than its ordinary meaning. Nothing in the statute suggests the Legislature intended to limit CUU eligibility to products necessary for bare survival. Minnesotans rely on information and communication technology (ICT) products daily for work, education, healthcare access, emergency services, and civic participation. A definition that could be read to exclude such products would undermine the program's workability and risk foreclosing CUU determinations that are fully consistent with the statute's intent.

Second, MPCA's use of the word "services" is more restrictive than the statute requires and narrower than the approach taken by Maine under its analogous program. "Services" carries an implication of institutional or commercial provision to the public, which could exclude many critical activities that are central to modern life but not delivered as formal services. Maine's

corresponding definition uses the word "functions" — a broader, more accurate term that better captures the full range of societal activities that depend on ICT products, including several activities that improve the quality of life for consumers, including recreation and entertainment. This distinction is not semantic; it has direct practical consequences for whether CUU requests for consumer electronics can be approved.

For these reasons, ITI recommends that MPCA harmonize its definition of "essential for health, safety, or the functioning of society" with Maine's formulation under 38 M.R.S.A. § 1614(1)(B-1):
"'Essential for health, safety or the functioning of society' means a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies."

This formulation reflects the statute's plain meaning, aligns with Maine's approach to encourage multi-state consistency, and preserves MPCA's discretion to grant CUU determinations for ICT products where the record supports it.

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)*

ITI supports MPCA's inclusion of the phrase "functionally equivalent product" in the definition of “alternative” because it recognizes that uses of PFAS that are critical to product functionality should continue until an alternative that provides equal functionality is identified.

However, whether an alternative is "functionally equivalent" should be further clarified in the definition. PFAS serves specific critical functions in consumer electronics products, including establishing key performance attributes such as thermal and chemical stability, ensuring a product's durability, and ensuring consumer safety. Any definition of "alternative" should incorporate these three core functions. For example, the following language could be added after "functionally equivalent product" to the concept definition: "…considering key performance attributes, product lifespan, and consumer safety."

The rule must also specify the standards by which a potential alternative may be eliminated from consideration. Without such standards, manufacturers face uncertainty about what showing is sufficient and MPCA lacks a consistent framework for evaluating submissions. California's Safer Consumer Products Regulations (SCPR), 22 C.C.R. Chapter 55, are instructive in this regard. The industry believes that in any of the below listed situations, it would be appropriate and necessary to conclude that a potential alternative is not viable. Each of these has an analogue in the SCPR.

The potential alternative has the potential to pose adverse impacts equal to or greater than those posed by the PFAS it is replacing (see 22 C.C.R. § 69505.5(d)(2));
The potential alternative is not functionally acceptable (see id. § 69505.6(a)(2)(C));
The potential alternative is not technically feasible (see id.);
The potential alternative is not economically feasible (see id.);

Additional factors and information, as long as the reason for the elimination is explained in the CUU application (see id. § 69505.5(e)).

Although the SCPR is not specific to PFAS, it is instructive for MPCA to consider

when designing its own alternatives assessment process. The industry recommends that MPCA incorporate each of these standards into the CUU rule, giving both manufacturers and the agency a clear, consistent basis for alternatives determinations.

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*)
Cost must be included as a factor. MPCA's proposed definition focuses exclusively on comparable performance and sufficient quantity, and expressly excludes cost from the analysis. This does not reflect how availability actually works in practice. An alternative that technically performs comparably but is not available at a reasonably comparable cost is not, in any meaningful sense, reasonably available, and a rule that ignores cost will produce CUU denials that are commercially unworkable. ITI recommends that MPCA align with Maine's formulation, which requires that an alternative be available "at a comparable cost to the PFAS it is intended to replace." If MPCA declines to incorporate cost into the definition itself, the rule should at minimum specify how and when cost will be weighed in the CUU determination process so that manufacturers have a meaningful opportunity to present that evidence.

The "in use in equivalent products" presumption should be eliminated or substantially narrowed. MPCA's draft deems any alternative that is in use in an equivalent product or component to be automatically "reasonably available." This categorical presumption is technically unsound and should not survive scrutiny. Whether a non-PFAS alternative performs adequately in one manufacturer's product does not establish that it performs adequately in another's, even where those products serve similar end-use purposes. Application-specific qualification, safety validation, and supply chain development are product-specific inquiries that vary across manufacturers and cannot be resolved by reference to what a competitor has done. The presumption as drafted would allow MPCA to deny a CUU request the moment any manufacturer anywhere ships a PFAS-free version of a broadly similar product, without any inquiry into whether that alternative is validated, scalable, or commercially viable for the applicant. MPCA should replace this automatic presumption with a rebuttable inference, requiring consideration of whether the alternative has been validated for the specific application at issue, is available at sufficient commercial scale for the applicant's production volumes, and can be implemented within a reasonable transition timeline.

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.")*
For several reasons, it is appropriate and necessary to group ICT products into broad categories. First, the type, location, and functionality of PFAS within these products is likely to be functionally similar. For example, any portable electronic device that has a speaker component is likely to contain a microporous protective membrane that allows air and sound to pass through while blocking water and debris. These specialized membranes are

often made with fluoropolymers and are likely to appear in most or all phones, tablets, and laptop computers. The alternatives assessment process for these membranes will be the same across all products that contain the membranes. Phones, tablets, and laptop computers will have many other overlapping PFAS uses as well, making them appropriate to group into a single category.

Second, broad product grouping is necessary to help ensure the workability of the CUU program. Given that the January 1, 2032 prohibition is a hard deadline and MPCA has acknowledged it cannot estimate how long CUU determinations will take, MPCA should consider all available options to streamline its own workstreams. Narrowly defined product categories would multiply the number of required submissions without producing meaningfully different substantive analyses, increasing burden for both manufacturers and MPCA without any corresponding regulatory benefit. This should include broadly defining product categories for electronics.

Broad electronic product categories should include, for example:
• Phones, tablets, and laptop computers as a single category;
• Integrated CPU/monitor products;
• CPUs without integrated monitors;
• Headphones (including over-ear, on-ear, and earbuds within a single category)
• Computer accessories (including keyboards, mice, pens, power adaptors, docks and adaptive products);
• Game consoles and controllers

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?
Applicants should be permitted to submit a single CUU request covering multiple product categories. Restricting each request to a single product category is unnecessary, administratively burdensome, and would not produce better agency decisions.

Where the same PFAS application appears across multiple product categories, and the alternatives assessment is therefore substantially the same, requiring separate submissions for each category would multiply filings without generating any additional substantive information for MPCA to evaluate. It would simply increase costs and processing time for both manufacturers and the agency.

Restricting submissions to a single product category would also disproportionately burden smaller manufacturers who lack the resources to prepare multiple parallel CUU applications covering the same underlying PFAS use. Permitting multi-category submissions where the PFAS use and alternatives assessment are substantially similar is a straightforward workability measure that MPCA should adopt.

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.

Other (please specify)
ITI anticipates that for the ICT industry, well over 500 hours will be required to develop and submit each CUU application, and MPCA should treat that figure as a floor rather than a ceiling. ICT products are complex products containing many deeply integrated components, each of which may contain intentionally added PFAS serving distinct functional purposes. For each such component, manufacturers must conduct a comprehensive alternatives analysis covering identification of potential alternatives, evaluation of performance and toxicity profiles, assessment of cost and supply chain availability, and determination of substitution feasibility and timeline. Each of these steps requires input from multiple technical disciplines including chemistry, materials science, electrical engineering, manufacturing, and regulatory affairs, as well as coordination with Tier 2 and Tier 3 suppliers who may themselves lack ready access to CAS-level compositional data. The burden is further compounded by the fact that a single CUU application for an ICT product line is not a single alternatives analysis, rather it is many analyses conducted in parallel, one for each distinct PFAS use present across the product's components. The preparation and coordination required to produce a complete, defensible CUU submission will easily and consistently exceed MPCA's high-end estimate of 500 hours. MPCA should take this reality into account both in setting the January 1, 2030 submission deadline and in designing a processing timeline that is realistic given the volume and complexity of submissions it should expect to receive.

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.
Not applicable

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.

The R&D and safety validation cycle for a reformulated ICT product does not begin until a technically viable alternative has been identified, which may itself require years of prior research. The full timeline from initial research through market entry routinely exceeds five years.

The R&D and validation processes involve sequential, non compressible stages and vary by the type of devices made. These processes include: laboratory scale performance evaluation, integration testing within the product architecture, safety and reliability qualification including third party certification, and supply chain development to secure commercial scale supply of the alternative material. Each stage may require iteration before the next can begin.

The five year renewal period is too short and does not reflect these realities. A manufacturer who receives an eight year initial CUU determination and immediately begins working toward substitution may still be in active qualification when the renewal window opens. MPCA should extend the renewal period to at least eight years, consistent with the initial determination period, or establish a formal extension mechanism for manufacturers who can demonstrate active, good faith progress toward substitution within a documented timeline. A renewal period misaligned with actual validation cycles will penalize manufacturers for technical constraints outside their control rather than incentivize the substitution progress the program is intended to encourage.

Please provide any additional information or documentation needed to support your answers to any of the questions posed.
For question #14: ITI anticipates that for the ICT industry, well over 500 hours will be required to develop and submit each CUU application, and MPCA should treat that figure as a floor rather than a ceiling. ICT products are complex products containing many deeply integrated components, each of which may contain intentionally added PFAS serving distinct functional purposes. For each such component, manufacturers must conduct a comprehensive alternatives analysis covering identification of potential alternatives, evaluation of performance and toxicity profiles, assessment of cost and supply chain availability, and determination of substitution feasibility and timeline. Each of these steps requires input from multiple technical disciplines including chemistry, materials science, electrical engineering, manufacturing, and regulatory affairs, as well as coordination with Tier 2 and Tier 3 suppliers who may themselves lack ready access to CAS-level compositional data.

The burden is further compounded by the fact that a single CUU application for an ICT product line is not a single alternatives analysis, rather it is many analyses conducted in parallel, one for each distinct PFAS use present across the product's components. The preparation and coordination required to produce a complete, defensible CUU submission will easily and consistently exceed MPCA's high-end estimate of 500 hours. MPCA should take this reality into account both in setting the January 1, 2030 submission deadline and in designing a processing timeline that is realistic given the volume and complexity of submissions it should expect to receive.

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)*
MPCA must establish a response deadline for CUU requests. MPCA's concept draft acknowledges that it cannot estimate how long it will take to issue final determinations. This creates unacceptable uncertainty for manufacturers who face a hard sales prohibition on January 1, 2032. MPCA should commit to a reasonable response deadline, as other states have done — for example, New Mexico's proposed CUU rule specifies that certain final determinations will be issued by March 1, 2027. MPCA should adopt a comparable commitment.

Additionally, MPCA should allow continued sales while a timely-submitted, complete CUU request is under review — either through an "approved pending review" approach (as New Mexico has proposed) or a formal no-action assurance. The current framework, which would require manufacturers to cease sales if a determination is not issued before January 1, 2032, effectively penalizes manufacturers for MPCA's own processing timeline.

CUU grants should not be company-specific. MPCA's draft contemplates that CUU determinations apply only to the manufacturers named in the request, and that other manufacturers of the same product category must undergo the full public comment process independently. This is an inefficient use of agency and manufacturer resources. Minnesota should instead adopt an approach consistent with Maine's, under which manufacturers may benefit from positive CUU determinations obtained for the same product category, with a streamlined notification and fee process in lieu of a full CUU submission. 38 M.R.S.A. § 1614(2).
