

Steven Kooy

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?

Business + Institutional Furniture Manufacturers Association (BIFMA)

If you represent a product manufacturer or industry group, what industry(ies) do you represent?

Furniture Manufacturers

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?

Internal mechanical components such as hydraulic cylinders, electrical components, and electronics.

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*)

The rule should clarify that “reasonably available” must consider, at minimum:
 a. Availability at commercial scale across multiple suppliers;
 b. Ability to meet safety/performance specifications without increasing failures, warranty risk, or product waste;
 c. Feasibility within engineering qualification cycles (including redesign, tooling, validation, and regulatory/customer requirements);

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.”*)

Allow determinations for classes of components/functions that are broadly used across industries and supply chains. This will reduce administrative burden for MPCA and reduce duplicative submissions from hundreds of manufacturers using the same upstream parts. For furniture, product categories such as seating, tables, storage, systems, and desks are industry standard categories.

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?

Multiple product categories given many products and product lines share the same internal components.

What safety or other standards require the use of PFAS in a product? *(Please include the specific citation)*

BIFMA Safety and Performance standards (e.g. X5.1) require seating products to meet multiple tests modeling 10 years of product use. Internal mechanisms, to avoid friction which leads to squeaking and/or mechanical failure, require PFAS-containing products. Manufacturers are seeking alternatives.

When an alternative is identified, implementation commonly requires 6–24 months (testing, safety validation, supplier onboarding; longer if redesign/molds/mechanism re-engineering are needed).

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?

1. No
2. No

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?

We support the categories as listed.

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.

More than 500 hours

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.

101 to 500 hours

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).

The cost is primarily operational expenses. Resources to properly review, test and implement alternatives include:
1. Long response times to determine PFAS presence in purchased components and raw materials (reported ranges from ~4 weeks to 6 months domestically; international often longer) during the vetting process.
2. Availability of a consistent supply chain of non-PFAS electronics and some mechanical components are long even under optimistic assumptions (best case 3–5 years, worst case 10+ years).
3. Implementation of an alternative commonly requires 6–24 months (testing, safety validation, supplier onboarding; longer if redesign/molds/mechanism re-engineering are needed).

This results in thousands of people hours to ensure safety, quality, and durability going forward.

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.

3-5 years

Response to Request for Comments

To: Minnesota Pollution Control Agency

From: Steve Kooy

Date: March 23, 2026

Subject: PFAS in products: Currently unavoidable use (Revisor ID R-4837)

BIFMA appreciates the opportunity to provide input on MPCA’s rulemaking to establish criteria and a process for “currently unavoidable use” (CUU) determinations for intentionally added PFAS in products sold, offered for sale, or distributed in Minnesota.

BIFMA represents commercial and institutional furniture manufacturers and their supply chains. Our members design, manufacture, import, and distribute products used in workplaces, healthcare, education, and public spaces. We support Minnesota’s objective to reduce PFAS where safer, feasible alternatives exist, and we want the CUU rule to be practical, enforceable, and focused on outcomes—reducing PFAS use and environmental releases—rather than creating compliance bottlenecks that do not accelerate substitution.

For commercial furniture—particularly task chairs and upholstered furniture with electrical/electronic features—the highest-risk implementation challenge is PFAS in internal electrical, electronic, and mechanical components (e.g., wire/cable jacketing and insulation, connectors, printed wiring boards, gaskets/seals, lubricants, low-friction bearings, and related assemblies). These components are commonly sourced through global, multi-tier supply chains that are shared with larger sectors (automotive, appliances, industrial electronics). The furniture industry does not control those upstream material choices, and component redesigns typically require long qualification cycles.

Therefore, BIFMA recommends the creation of a clear, broad CUU pathway for these component categories/functions. The CUU rule should enable component- or function-level determinations that apply across product types where the same internal components are used.

BIFMA previously provided MPCA with member feedback describing the practical barriers to identifying PFAS presence and securing PFAS-free alternatives—especially for electronics used in upholstered furniture and powered/connected seating. That feedback reflects:

- Long response times to determine PFAS presence in purchased components and raw materials (reported ranges from ~4 weeks to 6 months domestically; international often longer).
- No viable pathway identified today for non-PFAS electrical goods in the relevant supply chains; suppliers often believe they are outside PFAS rules.
- Estimated timelines for meaningful availability of non-PFAS electronics are long even under optimistic assumptions (best case 3–5 years, worst case 10+ years).
- For mechanical components, certain performance-driven applications still lack viable substitutes (e.g., Teflon-lined bearings for quiet, reliable operation; timelines for lubricants and mechanical components vary widely and can be indeterminate.).
- Even when an alternative is identified, implementation commonly requires 6–24 months (testing, safety validation, supplier onboarding; longer if redesign/molds/mechanism re-engineering is needed).

These issues align with the intent of a CUU determination: the function is essential, and alternatives are not reasonably available—especially at scale and within realistic engineering/qualification timelines.

BIFMA recommends MPCA incorporate the following elements into the CUU rule:

1. Establish a streamlined CUU track (or CUU categories, subject to periodic review) for intentionally added PFAS used in internal electrical/electronic and mechanical components where the PFAS function is tied to safety/reliability (e.g., dielectric performance, thermal stability, chemical resistance, long-term durability, low friction/noise). This should explicitly cover the component types commonly embedded in task chairs and upholstered furniture with electronics.
2. Allow determinations for classes of components/functions that are broadly used across industries and supply chains. This will reduce administrative burden for MPCA and reduce duplicative submissions from hundreds of manufacturers using the same upstream parts.
3. The rule should clarify that “reasonably available” must consider, at minimum:
 - a. Availability at commercial scale across multiple suppliers;
 - b. Ability to meet safety/performance specifications without increasing failures, warranty risk, or product waste;
 - c. Feasibility within engineering qualification cycles (including redesign, tooling, validation, and regulatory/customer requirements);
4. CUU determinations should include a reasonable review cycle (e.g., 3–5 years) to revisit availability of alternatives—without triggering annual resubmissions for unchanged component classes.
5. Align CUU with reporting systems and avoid duplicative obligations. MPCA finalized the PFAS reporting/fees rule in December 2025, and manufacturers are building compliance systems accordingly. CUU submissions should be structured to minimize duplicate data entry and maximize reuse of information where appropriate.

On behalf of our industry members, we welcome the opportunity to work together further on this important issue. Please contact me at skooy@bifma.org, with any questions or requests.

Thank you,

A handwritten signature in black ink, appearing to read 'Steve Kooy', with a stylized flourish extending to the right.

Steve Kooy
Director of Health and Sustainability
BIFMA