The MPCA is seeking feedback on the draft rule concepts that are summarized in this document and were presented during the February 26, 2026, webinar. The agency is asking that parties interested in the proposed rule please provide responses to the following questions:

Feedback period questions	**JFMA Comment**
1. Who is commenting? (choose the best fit) • Member of the general public • Representative of an environmental group • Representative of a product manufacturer(s) • Representative of another unit of government • Representative of a public health group • Academic or research organization • Other (please specify)	Representative of a product manufacturer(s)
2. If you are commenting as a representative, what is the name of the entity you are commenting on behalf of?	Japan Fluorocarbon Manufacturers Association (JFMA)
3. If you represent a product manufacturer or industry group, what industry(ies) do you represent?	F-gas manufacturing
4. 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?	Refrigerant, Propellent, Solvent, Blowing Agent, Fire extinguishant, etc.
5. 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 prior to answering)	JFMA asks that MPCA recognize that F-gas meets the criteria for “essential for health, safety, or the functioning of society”. These applications are necessary to maintain building habitability and support critical infrastructure such as medical facilities, schools, and nursing homes. Climate control systems protect vulnerable populations during extreme heat and cold, maintain indoor air quality in educational and healthcare facilities, and ensure continuous operation of telecommunications and data infrastructure. Certain fluorinated materials are used but critical applications within HVACR-WH equipment, including temperature cycling, refrigerants. In many cases, the absence of f-gas refrigerants would compromise safety, durability, or code compliance, rendering this equipment unusable and causing the product’s service to be unavailable. Also, fire extingushant for fire suppression for closed environment building secure safety for operators, automobiles, and systems in data center for example. Propellent use for MDI contribute to patient of asthma. Solvents support precision cleaning of electronics components, parts for transport, etc with maintaining safe and longer use. Blowing agent improve insulation for residentials and industrial use with high energy efficiency. F-gas applications are essential for the health, safety, and functioning of society, and JFMA asks that MPCA explicitly acknowledge this in the CUU rule. To lessen the burden on the regulated community, JFMA asks MPCA to harmonize with other enacted laws and regulations as much as possible. For example, MPCA could consider using the definition found in Maine’s Section 1614 of Title 38, which defines “Essential for Health, Safety or the Functioning of Society” to mean: Products or product components that if unavailable would result in a significant increase in negative healthcare outcomes, an inability to mitigate significant risks to human health or the environment, or significantly interrupt the daily functions on which society relies. Products or product components that are Essential for Health, Safety or the Functioning of Society include those that are required by federal or state laws and regulations. Essential for the Functioning of Society includes but is not limited to climate mitigation, critical infrastructure, delivery of medicine, lifesaving equipment, public transport, and construction.

6. 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 prior to answering)	JFMA recommends that when defining “alternative”, MPCA consider the safety and performance of an alternative over its expected service life. HVACR-WH systems useful product life commonly range from 15 to 25 years. Substituting f-gas that cause safety risks during usage and also increasing energy consumption during life cycle. Safe use by lower toxicity and non/less flammability over expected service life must be considered when defining if an “alternative” would result in a functionally equivalent product. If the “alternative” significantly decreases the expected performance and safety, then it is not a feasible alternative. MPCA must also consider an “alternatives” compatibility within a product. A non-PFAS “alternative” must be compatible within the HVACR or water heating product, it must meet applicable safety certifications and building codes, and it must perform under extreme environmental conditions. Many f-gas applications are required to meet federal efficiency standards, pursuant to the Energy Policy and Conservation Act of 1975 (EPCA). MPCA must consider than a non-PFAS “alternative” must not hamper f-gas based products and systems’ ability to meet these requirements. JFMA proposes that the “alternative” definition be modified as follows, which will include considerations for the federal statutory requirements that f-gas based products must meet: “Alternative" means a non-PFAS chemical, substance, material, manufacturing process change, non-chemical change, component with equivalent ratings and use conditions, or product intended for similar use, application or installation, that, if used in place of a PFAS or PFAS-containing product, would result in a functionally equivalent product. JFMA recommends that MPCA clarify the definition of “product”, as used in the proposed definition in “alternative.” If “product” in this context is defined the same as it is in Chapter 116, Section 116.943, of the 2025 Minnesota Statutes (Products Containing PFAS), then it is unrealistic to require that HVACR-WH manufacturers conduct a full assessment of alternatives as these products contain hundreds of parts and components that are often supplied by Tier 3 suppliers.
7. 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 prior to answering)	Similarly to JFMA’s recommendation for defining “alternative”, MPCA must consider the safety and performance and lifespan of a non-PFAS alternative when defining “reasonably available”. In MPCA’s proposed rule concepts, it proposes to define “reasonably available” as an “alternative to a PFAS that can perform comparable to the PFAS being considered for replacement in a product or component”. MPCA must consider that HVACR-WH systems, fire suppression systems, insulation for residential, buildings and industrial uses, etc. useful product life are over 15~30 years respectively. A non-PFAS alternative are not “reasonably available” if it significantly shortens the intended lifespan of the product or component that contains PFAS. While cost alone should not determine whether an alternative is “reasonably available”, MPCA must consider the commercial feasibility and ability to provide essential infrastructure equipment and system at scale when evaluating whether a non-PFAS alternative are “reasonably available.” The cost of transitioning to a non-PFAS “alternative” may make the product or component economically non-viable, which risks denying access of essential products for many Minnesotans. JFMA asks MPCA to consider using the definition found in Maine’s Section 1614 of Title 38, which defines “reasonably available” as follows: A PFAS alternative which is readily available in sufficient quantity and at a comparable cost to the PFAS it is intended to replace and performs as well as or better than PFAS in a specific application of PFAS in a product or product component.
8. 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.")	JFMA supports MPCA’s initiative to establish product categories and recommends that MPCA establish a category for “HVACR-WH” which includes heating (including space heating), ventilation, air conditioning, refrigeration (including transport), refrigerants, and water heating equipment and their components and parts including replacement parts, materials, and manufacturing and servicing needs. HVACR-WH systems are integrated assemblies comprised of numerous components that function together to provide safe and reliable operation. Likewise HVAC -WH, other f-gas uses for fire suppression system, precision industrial cleaning, foam insulation systems, prepellent for MDIs should be the same approach. Component-level CUU determinations would create substantial compliance complexity and risk unintended disruption of replacement parts and service support for installed equipment.
9. 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 allowed to submit a CUU determination request for multiple product categories since the PFAS may serve the same purpose in similar products that are not considered substitutes for each other. For example, refrigerants that may be considered PFAS are used similarly across many products that are not used interchangeably. It would significantly ease the regulatory burden for MPCA and manufacturers if MPCA evaluated one CUU determination request for multiple product categories.
10. What safety or other standards require the use of PFAS in a product? (Please include the specific citation)	One single standard may not require the use of PFAS, but very often products are not subject to just one standard or regulation. The end result may be that compliance with all applicable standards and regulations necessitates the use of a PFAS for which there are no current viable alternatives.

11. 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.	Product redesign, validation, safety testing, and certification cycles in the f-gas based applications are lengthy and rigorous. Development timelines are influenced by safety listings, building code requirements, and federal efficiency standards. JFMA recommends that MPCA consider a longer initial CUU duration for essential infrastructure equipment, such as 10 years. Regulatory stability is important to avoid disruption of long product development and validation cycles. JFMA also recommends a streamlined CUU renewal process where no reasonably available alternatives have emerged. This is a commonsense modification that would alleviate the compliance burden on manufacturers and the evaluation process undertaken by MPCA staff. While JFMA understands MPCA's efforts to stagger renewal deadlines, JFMA proposes that positive CUU determinations expire from the PFAS prohibition effective date. If the positive CUU determination expires from the date of issuance, it creates a disincentive to apply early for a CUU designation. This defeats MPCA's intended purpose of easing the administrative burden of processing CUU requests.
• Do you have any concerns about unintended consequences with this proposal?	
• Do you have any alternative recommendations to stagger renewal deadlines?	
12. The MPCA has developed a preliminary list of potentially eligible data categories that may be considered for trade secret requests. (Please review the list of potentially eligible data prior to answering)	JFMA recommends that MPCA establish a category titled "Other", which will capture additional information that could be a trade secret, but is not explicitly stated in the rule.
• 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?	
13. 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)	
14. 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	

• Less than 40 hours	
• 40 to 100 hours	
• 101 to 500 hours	
• More than 500 hours	
• Other (please specify)	
15. 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.	F-gas based applications and systems incorporates numerous sourced components, often from multiple tiers of suppliers. Establishing CAS-number-level mapping for intentionally added PFAS across product lines requires substantial supplier coordination and technical review. For complex product lines, developing a comprehensive baseline inventory could require thousands of technical staff hours. Obtaining detailed information from Tier 2 and Tier 3 suppliers for even a single product platform will require a significant amount of time and resources. Allowing consolidated, category-based CUU submissions—particularly through trade associations—would meaningfully reduce duplicative administrative burden. JFMA members will provide comments regarding their best estimates for the amount of technical staff hours that would be required to identify PFAS, by its CAS number, in all components in their products.
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	
• Less than 40 hours	
• 40 to 100 hours	
• 101 to 500 hours	
• More than 500 hours	
• Other (please specify)	
16. 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).	
17. 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?	
18. 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.	
19. Please provide any additional information or documentation needed to support your answers to any of the questions posed.	JFMA has no additional comments on question 19.

20. 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).	**Confidential Business Information** JFMA supports robust protection of confidential business information, including chemical identity and concentration, engineering redesign strategies, reformulation plans, and supplier and supply chain information. Public disclosure of this information could compromise proprietary innovation and competitive positioning without advancing the objectives of the rule. Exemption for Replacement Parts MPCA must consider providing an exemption to replacement parts. Many manufacturers are required to maintain replacement parts for years to ensure that consumers' products can continue to remain operational and meet warranty demands. It is not economically feasible for manufacturers to redesign and produce replacement parts years after they were originally made, because many of these parts are no longer being actively manufactured. So that companies can meet legal and consumer requirements, we request that MPCA provide a fifteen-year exemption for all replacement parts. **Streamlined CUU Requests** JFMA recommends that MPCA streamline the CUU request process when manufacturers request a similar CUU determination for a product in the same product category that has already received a positive CUU determination. Requiring manufacturers to complete the application process for a product for which another manufacturer has already received a CUU determination is unnecessary and overly burdensome for MPCA and the manufacturer. Streamlining this process will alleviate the regulatory burden on MPCA and manufacturers, as well as lessen the risk that Minnesotans will lose access to essential products that could be held up in this unnecessary regulatory process. **CUU Statutory Deadlines** The proposed rule concepts include statutory deadlines for manufacturers, but it does not require MPCA to maintain an application processing schedule. The rule states that a manufacturer who has applied for but has not received a positive CUU determination before the 2032 deadline may not sell product in Minnesota until such determination is made. While MPCA is proposing a January 1, 2030, deadline for "existing products" to submit CUU requests, it does not alleviate the concerns that MPCA may be delayed in reviewing these applications, thus causing a lapse in access to essential products. JFMA requests that the CUU rule includes a CUU application review timeline to ensure that determinations are made in a timely manner.

20. 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).	**Grouped CUU Requests** JFMA strongly supports explicit allowance for industry associations, such as JFMA, to submit CUU requests on behalf of multiple member manufacturers for shared product categories. HVACR-WH manufacturers design products to common safety and performance standards. The technical basis for certain PFAS uses is often substantially similar across manufacturers. Requiring duplicative, company-by-company CUU filings would increase administrative burden for both manufacturers and MPCA without improving protections for human health or the environment. JFMA recommends that an industry association be permitted to submit a consolidated CUU request for a defined product category; participating manufacturers certify the accuracy of information submitted on their behalf; and the resulting determination would apply to all listed manufacturers. This approach would streamline review, promote consistency, and reduce redundancy. **Consideration for Complex, Durable Goods** Through the proposed rule concept, there is a lack of consideration for PFAS in complex durable goods, such as HVACR-WH equipment. These products present a significantly different risk to consumers since many of the components that may contain PFAS are hermetically sealed and not accessible to consumers under normal operation. Plus, HVACR-WH products present a low risk of environmental contamination since 1) the handling and disposal of the PFAS-containing components is regulated by the U.S. Environmental Protect Agency, and 2) the handling and disposal of the PFAS-containing components is done by a licensed professional, not a consumer. The proposed rule concept treats all PFAS and their uses equally. MPCA must consider streamlining CUU determinations for low-risk, low-exposure PFAS applications. J FMA recommends that MPCA include a definition for “complex durable goods”. J FMA recommends MPCA incorporate the definition used in New Mexico’s proposed rule 20.13.2 Per- and Poly-Fluoroalkyl Substances in Consumer Products (Title 20, Chapter 13, Part 2), which reads as follows: "Complex durable good" means a product that is a manufactured good composed of 100 or more manufactured components, with an intended useful life of five or more years, where the product is typically not consumed, destroyed, or discarded after a single use.