March 1, 2024

Submitted through https://minnesotaaoah.granicusideas.com/

Mr. Quinn Carr, Rule Coordinator
Ms. Maya Gilchrist, Data Analyst and Technical Lead
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

RE: Planned New Rules Governing Currently Unavoidable Use Determinations about Products Containing Per-and polyfluoroalkyl substances (PFAS), Revisor’s ID Number R-483

Dear Mr. Carr and Ms. Gilchrist:

The Alliance for Automotive Innovation¹ (Auto Innovators) appreciates the opportunity to provide input on the Minnesota Pollution Control Agency’s (MPCA’s) request for comment on planned new rules governing determinations of Currently Unavoidable Uses (CUUs) of PFAS in products. We understand that the main purpose of this rulemaking is to establish criteria and processes through which MPCA will make decisions on the uses of intentionally added PFAS that will qualify as CUUs in products sold, offered for sale, or distributed in Minnesota.

Auto Innovators represents the auto manufacturing sector, including automakers that produce and sell approximately 95% of the new light-duty vehicles in the United States, equipment suppliers, battery producers and semiconductor makers. Our mission is to work with policymakers to realize a future of cleaner, safer, and smarter personal transportation and to work together on policies that further these goals, increase U.S. competitiveness, and ensure sustainable, well-paying jobs for citizens throughout the country.

Auto Innovators has been actively involved in federal and state activities related to PFAS, including responding to all requests for comment from MPCA. Our comments and recommendations presented here are informed by the regulatory experiences in not only Minnesota but also, and not limited to, Maine, California, Washington, and other states with pending PFAS legislation.

MPCA is currently requesting comment on workable criteria for the CUU rule and definitions contained in subdivision 1 of Minn. Stat. § 116.943. MPCA states that “[t]he definitions in subdivision 1 listed above are a starting point of related terms possibly requiring clarification.”² We read this

---

¹ From the manufacturers producing most vehicles sold in the U.S. to autonomous vehicle innovators to equipment suppliers, battery producers and semiconductor makers – Alliance for Automotive Innovation represents the full auto industry, a sector supporting 10 million American jobs and five percent of the economy. Active in Washington, D.C. and all 50 states, the association is committed to a cleaner, safer, and smarter personal transportation future. www.autosinnovate.org.

request to suggest that MPCA can expand on the definitions provided in the statute and has the authority to do so.

Our comments and recommendations will focus on:

- Clarification of Definitions
- Response to Specific Questions Raised by MPCA

A. Clarification of Definitions

1. Currently Unavoidable Use (CUU)

The definition of “currently unavoidable use” in statute is “a use of PFAS that the commissioner has determined by rule under this section to be essential for health, safety, or the functioning of society and for which alternatives are not reasonably available.”

We recommend expanding on this definition to state the following:

“Currently unavoidable use” means a use of PFAS that the commissioner has determined by rule under this section to be essential for health, safety, or the functioning of society and for which alternatives are not reasonably available. This includes 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.

Additionally, we propose a new definition to further clarify “essential for the functioning of society.”

“Essential for the functioning of society” includes but is not limited to climate mitigation, critical infrastructure, delivery of medicine, law enforcement, lifesaving equipment, essential transportation vehicles including passenger vehicles, and construction.

We propose this additional definition to make clear that transportation vehicles, including passenger vehicles, are essential for the functioning of society. Personal vehicles are key for transportation and getting around, and thus the functioning of society—particularly, we expect, outside of major cities like Minneapolis, St. Paul, and Rochester. If this definition remains unchanged, our industry’s ability to apply for an unavoidable use designation may be harmed. By further defining what is meant by “essential for health, safety, or the functioning of society,” MPCA would provide a more substantive set of criteria and circumstances warranting a CUU exemption. This additional clarity would facilitate the development of more focused CUU exemption requests and aid MPCA in its reviews of such requests.

3 Minn. Stat. § 116.943 subd. 1(j).
It is also imperative to acknowledge that the phrase “for which alternatives are not reasonably available” involves a multi-pronged decision review and must include factors such as: whether any potential substitutes are commercially available, either domestically or from a foreign supplier; whether an alternative that has been developed has passed through EPA’s new chemicals review program without any restrictions that would make it unavailable; whether the alternative has been validated for use in the product for which a CUU is being requested (in our case a motor vehicle); whether the alternative has been approved by federal agencies and whether the part manufactured using that alternative has been tested and found to conform to all applicable Federal Motor Vehicle Safety Standards (FMVSS), as well as greenhouse gas emissions and fuel economy standards as appropriate.

By way of example, we refer MPCA to the definitions in California’s Safer Consumer Products Act that recognize the importance of further defining alternatives:

“Economically feasible” means that an alternative product or replacement chemical does not significantly reduce the manufacturer's operating margin.

“Functionally acceptable” means that an alternative product meets both of the following requirements:

(A) The product complies with all applicable legal requirements; and
(B) The product performs the functions of the original product sufficiently well that consumers can be reasonably anticipated to accept the product in the marketplace.

“Technically feasible” means that the technical knowledge, equipment, materials, and other resources available in the marketplace are expected to be sufficient to develop and implement an alternative product or replacement chemical.

Therefore, we recommend adding a new definition that would further define the term “alternative” as used in the definition of “currently unavoidable use” and would clarify MPCA’s expectations in terms of alternatives availability.

“Reasonably available alternative” refers to a substance or chemical that, when used in place of PFAS, results in a functionally equivalent product and that, when compared to a PFAS that it could replace, would reduce the potential for harm to human health or the environment, or has not been shown to pose the same or greater potential for harm to human health or the environment as that PFAS. To be reasonably available means a PFAS alternative which is readily available in sufficient quantity and at a comparable cost to the PFAS it is intended to replace and functions as well as or better than PFAS in a specific application of PFAS in a product or product component. Alternatives include reformulated versions of products, including versions reformulated by removal or addition of one or more chemicals or substances, that result in the reduction or removal of intentionally added PFAS from the product. Alternatives also include changes to the manufacturing process that result in the reduction or removal of PFAS from a product.

---

2. **Intentionally Added**

As currently defined, “intentionally added” means “PFAS deliberately added during the manufacture of a product where the continued presence of PFAS is desired in the final product or one of the product's components to perform a specific function.”

We recommend clarifying and expanding this definition as follows:

“**Intentionally added**” means PFAS deliberately added during the manufacture of a product where the continued presence of PFAS is desired in the final product or one of the product's components to perform a specific function. Intentionally added PFAS also includes any degradation byproducts of PFAS serving a functional purpose or technical effect within the product or its components. Products containing intentionally added PFAS include products that consist solely of PFAS. Intentionally added PFAS does not include PFAS that is present in the final product as a contaminant.

We propose this modification to address the issue of contaminants. Contaminants are not intentionally added PFAS and consequently do not serve any specific function or technical effect in the final product. The presence of a contaminant is likely to be at a de minimis or undetectable level and therefore will pose little to no exposure pathway.

3. **Manufacturer**

We have no suggested changes for this definition but recommend that MPCA develop guidance regarding due diligence for the importer who is responsible for identifying the presence of PFAS in an imported product. MPCA should adopt some version of the guidance that EPA has prepared for its TSCA Section 8(a)(7) PFAS reporting rule:

Submitters are required to exercise certain levels of due diligence in gathering the information required by the section 8(a)(7) rule. You must report your information to the extent that the information is known to or reasonably ascertainable by you and your company. The term “known to or reasonably ascertainable by” is defined in 40 CFR 705.3, meaning all information in a person’s possession or control, plus all information that a reasonable person similarly situated might be expected to possess, control, or know.

4. **Perfluoroalkyl and Polyfluoroalkyl Substances or PFAS**

As currently defined “perfluoroalkyl and polyfluoroalkyl substances” or “PFAS” means “a class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom.”

---

5 Minn. Stat. § 116.943 subd. 1(l).


7 Minn. Stat. § 116.943 subd. 1(p).
We recommend clarifying and expanding this definition to state the following:

“Perfluoroalkyl and polyfluoroalkyl substances” or “PFAS” means non-polymeric perfluoroalkyl and polyfluoroalkyl substances that are a group of man-made chemicals that contain at least 2 fully fluorinated carbon atoms, excluding gases and volatile liquids, and that have a Chemical Abstracts Service (CAS) number. “PFAS” includes PFOA and PFOS and excludes refrigerants and fluoropolymers.

By defining PFAS as “a group of man-made chemicals that contain at least 2 fully fluorinated carbon atoms” MPCA will provide consistency with EPA’s definition of PFAS as well as those of other states with PFAS laws. By adding the precision of “2 fully fluorinated carbon atoms,” the PFAS definition will allow focus on a narrower but more relevant group of PFAS that may pose a concern. We recognize that this is not the definition in the enabling legislation and that MPCA may be constrained by that definition. We have provided this recommendation in the event that MPCA determines that it may have some flexibility in further defining PFAS of concern.

We also encourage MPCA to exclude chemicals that do not have Chemical Abstracts Service (CAS) numbers. CAS numbers are the universal identifier used to identify a chemical substance or molecular structure in an unambiguous manner and to discern between many possible systematic, generic, or proprietary chemicals. In the absence of CAS numbers, the automotive sector will be unable to search its Material Safety Data Sheets (MSDS) or use its International Material Data System (IMDS).

Because of the importance of this clarification, we request that it be added to the definition itself, as suggested above. MPCA should also define regulated PFAS with a list of chemical names and CAS numbers. That would clearly define the universe of chemicals that require notification and further clarify reporting requirements.

Auto Innovators also requests that MPCA provide further guidance on how they expect the regulated community to report on PFAS chemicals that have a CAS number but “are withheld by other persons or are otherwise unavailable.” What due diligence is required to seek out PFAS chemicals that may be present in a product but are claimed as confidential business information (CBI) by the supplier or other entity or covered by non-disclosure agreements?

MPCA should also exempt fluoropolymers and refrigerants from the definition of PFAS, as suggested above. The current definition of PFAS being used by MPCA includes the refrigerants that are used in motor vehicle air conditioning (MVAC) applications. Those refrigerants are already the subject of regulations covering hydrofluorocarbons (HFCs) at both the state and federal levels; in fact, those regulations have resulted in the industry undertaking over the past several years the behemoth task of transitioning from one type of refrigerant to another that has a lower global warming potential. Banning use of the refrigerant now currently used in our vehicles would require original equipment manufacturers (OEMs) to have an available alternative that is also approved by all of those HFC regulations and would result in OEMs having to significantly redesign and reengineer our recently revamped MVAC systems and vehicles, possibly even with a need to retrofit older vehicles. Similarly, fluoropolymers satisfy widely accepted criteria to be considered polymers of low concern, indicating that they do not present a significant risk to human health or the
environment. For this reason, fluoropolymers should be regulated differently from PFOA and PFOS. The definition of PFAS needs to be revised to exempt these substances.

5. Product

As currently defined, “product” means “an item manufactured, assembled, packaged, or otherwise prepared for sale to consumers, including but not limited to its product components, sold or distributed for personal, residential, commercial, or industrial use, including for use in making other products.”

We would recommend expanding this definition to state the following:

“Product” means an item manufactured, assembled, packaged, or otherwise prepared for sale to consumers, including but not limited to its product components, sold or distributed for personal, residential, commercial, or industrial use, including for use in making other products. For complex durable goods, “product” would encompass the complete product such as a complete vehicle, including replacement and service parts. This definition does not include the packaging for any product.

This expanded definition accounts for the fact that complex durable goods such as vehicles may contain multiple components that contain PFAS. It would be unworkable both for MPCA and the regulated community to apply for CUU exemptions for each individual component given that all CUU exemptions would need to be approved in order to continue to sell and service the complete product, in this case, a vehicle, in the state of Minnesota. This recommended approach is consistent with the approach adopted by the state of Maine and recognizes the practicality of complete product reporting, which we discuss further below in our response to Question #6.

We recommend adopting the definition proposed by Maine DEP that would exclude packaging used in marketing, handling, or protecting a product. Maine sensibly proposed to exclude packaging that serves an essential purpose in protecting the product as it moves through the channels of trade.

For further clarification, we recommend adding a new definition that would further define the term “complex durable good.” Our proposed definition is consistent with the TSCA definition:

“Complex durable goods” means manufactured goods composed of 100 or more manufactured components, with an intended useful life of 5 or more years, where the product is typically not consumed, destroyed, or discarded after a single use.

6. Product Component

We have no recommended changes for the definition of product component. We ask that MPCA recognize that in some circumstances, like for motor vehicles, product components can be sold separately in order to keep a product functional and in service; regardless, they should not be treated as independent products.

---

8 Minn. Stat. § 116.943 subd. 1(q).
B. Response to Specific Questions Raised by MPCA

1. Should criteria be defined for “essential for health, safety, or the functioning of society”? If so, what should those criteria be?

Yes, criteria to further define the elements that MPCA will consider as it makes CUU decisions is critical to providing clarity and transparency into this key process. We suggest that “criteria” include specific clarification of the definition of CUU itself as well as the addition of definitions for key terms in that definition. By specifying key criteria, MPCA will provide a more precise set of requirements for requesting and granting a CUU exemption. For MPCA staff reviewing CUU requests, additional criteria will provide for greater consistency in MPCA decision-making; for the regulated community, criteria will assist in understanding eligibility and in developing a CUU request (and determining whether to make a request) and for the general public, criteria will allow oversight of how CUU exemptions are being granted or denied.

Additional criteria that MPCA should consider in its decision-making process and should be captured in either the regulatory preamble or regulatory text include:

- Are any potential substitutes commercially available, either domestically or from a foreign supplier?
- Does the alternative provide the same safety and functionality required to meet federally regulated performance standards such as fire safety, efficiency, weight requirements, etc.?
- If an alternative has been developed, has it passed through EPA’s new chemicals review program without any restrictions that would make it unavailable?
- Has the alternative been tested for use in the product for which a CUU is being requested?
- Has the alternative been regulated or cued up for regulation by either the federal government or a U.S. state government?

As presented in more detail in the previous section A.1. on definitions, we would recommend expanding the definition of “currently unavoidable use” and adding a definition for “reasonably available alternative.”

2. Should costs of PFAS alternatives be considered in the definition of “reasonably available”? What is a “reasonable” cost threshold?

Yes, the combined costs of identifying, developing, validating, and implementing an alternative should be considered by MPCA when making decisions about CUU exemptions. These costs include but are not limited to costs associated with redesigning product components to be PFAS free; costs associated with testing for performance and safety standards and compliance with federal and other state requirements; and the time and cost of development, testing, and application for use within the United States. The cost of using a PFAS alternative should not be substantially higher than that of use of the PFAS, as the difference is likely to be passed on to consumers and increase the price of many consumer goods.
In a CUU exemption decision, these costs should be weighed against the costs to Minnesota’s residents if motor vehicles are not available for sale in Minnesota, as well as costs associated with regrettable substitution should a chosen alternative become the subject of future regulation.

For example, PFAS alternatives in the semiconductor industry’s microelectronics applications must have requalification if a manufacturer substantively alters the fabrication process, which can easily exceed $10 million. Similar costs can be expected for any major modifications to automotive components. If drop-in replacements (i.e., functionally equivalent and safer, cleaner, or greener alternatives) were readily available, substitutions would already have been made given the focus on PFAS. PFAS applications in passenger vehicles support advanced emissions, battery, safety, electronics, and other cutting-edge technologies.

3. **Should unique considerations be made for small businesses with regards to economic feasibility?**

Yes, a large portion of the automotive industry supply chain is comprised of small businesses. It is important to support these businesses to provide stability to the overall automotive supply chain.

4. **What criteria should be used to determine the safety of potential PFAS alternatives?**

Approved and commercially available test methods for PFAS and alternatives are still under development and their availability is limited. In their absence, comparing risk profiles of PFAS with those of alternative chemistries is challenging and could easily lead to regrettable substitution. In fact, experience with chemical substitution based on rigorous risk assessments has still resulted in regrettable substitutions. For example, while not a PFAS application, consider the move to methyl tertiary-butyl ether (MTBE) as a replacement when tetra-ethyl lead was banned for use in gasoline. MTBE proved to be of equal, if not greater, environmental concern and was ultimately the subject of a national phase-out.11

For this reason, it is all the more critical that as alternatives are developed, they go through rigorous testing and evaluation before they are deemed an appropriate substitute. After such a determination is made, it will still take a number of years to ensure durability and functional equivalency to be able to phase in to product development cycles. A CUU exemption for vehicles and their replacement parts is warranted at this time, while the sector and its supply chain explore substitution options.

At a minimum, we would recommend that MPCA not identify any chemical as a PFAS alternative that is included on any of the following lists: EPA’s TSCA 2014 Workplan Chemicals,12 California’s

---


Safer Consumer Products Priority List, or Washington State’s Safer Products for Washington program. These chemicals are all being considered for regulation under the appropriate statutes and may be unavailable for use in the future.

5. How long should PFAS currently unavoidable use determinations be good for? How should the length of the currently unavoidable use determination be decided. Should significant changes in available information about alternatives trigger a re-evaluation?

We recommend any CUU exemption for the automotive sector cover a minimum of 15 years. The minimum design cycle for a vehicle is typically five years, with additional time necessary for testing and determination of compliance with state and federal regulations. Replacement parts CUU exemptions should have no expiration dates and should remain valid for the full life of the vehicle that the replacements parts were designed to maintain.

6. How should stakeholders request to have a PFAS use be considered for currently unavoidable use determination by the MPCA? Conversely, could stakeholders request a PFAS use not be determined to be currently unavoidable? What information should be submitted in support of such requests?

We recommend that MPCA adopt the same approach to product identification for a CUU exemption that Maine is taking pursuant to 38 M.R.S. § 1614. Also, it is appropriate and important that MPCA and Maine consider providing reciprocity for CUU findings, since deviations from each other’s CUUs would be disruptive for the flow of interstate commerce. Their proposed rule on reporting stated:

Reporting multiple products or product components together under a single GPC [global product classification] code or HTS [harmonized tariff schedule] number under subsection A above is allowed, so long as:

1. All products to be so reported fall within the same GPC brick code or HTS number,
2. The same PFAS are present in every product, and
3. Each PFAS is present in every product, either:
   (a) In a substantially similar amount as determined by a commercially available analytical method, or
   (b) If reporting by range of concentration is available, within the same concentration range.

For a CUU exemption for the automotive sector, we would propose that requests be permitted at the whole vehicle level (see proposed revised definition for “product” and discussion above) and be

---


permitted to be submitted by an individual manufacturer, a consortium, or automotive trade organizations, as Maine is allowing. This request would cover current production vehicles, and replacement / accessory parts and operating materials, defined as parts and materials that are intended to enhance, maintain, or repair current production vehicles.

The automotive industry sells around 15 million vehicles each year across the nation, and the same vehicles sold in Minnesota are sold in the other 49 states as well. A single vehicle has tens of thousands of individual parts as single parts, subassemblies, and assemblies, as depicted in the graphic below. Requesting a CUU exemption for individual parts that may contain PFAS will not only overwhelm MPCA staff reviewing these requests but will also place an unreasonable burden on automobile manufacturers, with no added value for MPCA or the public.

Given the lack of viable alternatives at this time, as well as the lead time necessary to test, verify, and incorporate a change in a chemistry once an alternative is available, it is appropriate and necessary to consider the vehicle as a whole at this time for a CUU exemption. In the future, it may be appropriate to consider certain subassemblies or parts separate from the vehicle as a whole.

If there are stakeholders that have concerns about the granting of any specific CUU, any request to deny or rescind that CUU should be accompanied with specific responses to the criteria presented earlier when considering the availability of alternatives.

7. In order to get a sense of what type of and how many products may seek a currently unavoidable uses determination, please share what uses and products you may submit a request for in the future and briefly why. There will be a future opportunity to present your full argument and supporting information for a possible currently unavoidable uses determination.

We anticipate submitting a CUU determination request for motor vehicles and motor vehicle equipment (parts and operating materials) (the product) used for transportation (the use). Please also see our response to Question #6 above for additional details.
8. Should MPCA make some initial currently unavoidable use determinations as part of this rulemaking using the proposed criteria?

Yes. In keeping with our recommended revised definition of CUU, making some initial determinations as examples of what uses meet the criteria adopted by MPCA (see recommended criteria above) would be appropriate and would provide some certainty for manufacturers that sell products that are “essential for health, safety, or the functioning of society and for which alternatives are not reasonably available.” Further clarification and/or a definition surrounding “essential” will similarly assist in providing certainty and clarity.

We recommend that MPCA identify motor vehicles, motor vehicle equipment, and replacement parts and operating materials necessary to maintain those vehicles as a CUU in the anticipated rulemaking. This determination would be wholly consistent with the proposed definition, the proposed criteria and, as a benchmark, with the U.S. Department of Homeland Security Cybersecurity & Infrastructure Security Agency’s assignment of critical infrastructure uses during and following the COVID-19 pandemic, which include:

- Workers supporting or enabling transportation and logistics functions, including truck drivers, bus drivers, dispatchers, maintenance and repair technicians, warehouse workers, third party logistics, truck stop and rest area workers, driver training and education centers, Department of Motor Vehicle (DMV) workers, enrollment agents for federal transportation worker vetting programs, towing and recovery services, roadside assistance workers, intermodal transportation personnel, and workers that construct, maintain, rehabilitate, and inspect infrastructure, including those that require cross-jurisdiction travel.
- Workers supporting personal and commercial transportation services including taxis, delivery services, vehicle rental services, bicycle maintenance and car-sharing services, and transportation network providers.
- Vehicle repair, maintenance, and transportation equipment manufacturing and distribution facilities.
- Workers who support the construction and maintenance of electric vehicle charging stations.
- Workers who repair and maintain vehicles, aircraft, rail equipment, marine vessels, bicycles, and the equipment and infrastructure that enables operations that encompass movement of cargo and passengers.
- Workers critical to the manufacturing, distribution, sales, rental, leasing, repair, and maintenance of vehicles and other equipment (including electric vehicle charging stations) and the supply chains that enable these operations to facilitate continuity of travel-related operations for essential workers.

Motor vehicles and the replacement parts and operating materials to repair them are essential for health, safety, and the functioning of society. If Minnesota residents did not have access to functional vehicles to get to medical appointments, places of employment, and food and grocery stores, there would be far-reaching repercussions for quality of life and functioning of society for Minnesota residents. One estimate has Minnesota with the fifth-highest average miles driven per year by drivers, at 17,887, and with residents outside of major metropolitan areas driving significantly greater distances to reach essential medical and other services. Clearly, vehicles are key for transportation in Minnesota and a lack of availability of personal transportation could jeopardize health and safety and disrupt the standard functioning of society.

Finally, Minnesota is implementing an aggressive plan to mandate that automakers bolster availability of all electric and hybrid vehicles across the state. PFAS are critical to the technologies underlying electrification and enable achievement of the state’s emissions standards.

Conclusion

Our recommendations provide a framework that emphasizes the key questions that must be asked and answered when assessing whether to grant a CUU exemption for PFAS use. The availability of alternatives, as we have defined them, is key to making these CUU decisions.

Thank you for considering our comments. We would be happy to discuss them with you in further detail, as well as to discuss PFAS in products issues more generally. We can also provide information on PFAS uses in our industry and the nature of our supply and production chain. I can be reached at cpalin@autosinnovate.org or at 202-326-5511.

Catherine Palin
Senior Attorney & Director of Environmental Policy
Alliance for Automotive Innovation
