Joe Sansone

Who is commenting? *(choose the best fit)*
Representative of an environmental group

If you are commenting as a representative, what is the name of the entity you are commenting on behalf of?
The Aerospace Industries Association

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

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?
Please find attached comments

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)*
Please find attached comments

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)*
Please find attached comments

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*)
Please find attached comments

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.")*
Please find attached comments

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?
Please find attached comments

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

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?

Please find attached comments

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?

Please find attached comments

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)*
Please find attached comments

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)
Please find attached comments

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)
Please find attached comments

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).

Please find attached comments

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?

Please find attached comments

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.

Please find attached comments

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)*
Please find attached comments

March 27, 2026

Submitted electronically via mpca.commentinput.com

Minnesota Pollution Control Agency
520 Lafayette Rd.
Saint Paul
MN 55155-4194

AIA comments on the proposed rule concepts for the PFAS in products: Currently unavoidable use (CUU) rulemaking

To Whom it May Concern:

The Aerospace Industries Association (AIA) appreciates the opportunity to respond to the Minnesota Pollution Control Agency's (MPCA's) request for comment on the Agency's proposed rule concepts for the Currently Unavoidable Use (CUU) rulemaking as it seeks to establish criteria and processes in accordance with Minn. Stat. § 116.943 Products Containing PFAS (Amara's Law). Founded in 1919, AIA is the premier trade association representing over 300 of the United States of America's leading manufacturers and suppliers of civil, military, and business aircraft and aircraft engines, helicopters, unmanned aerial systems, missiles, and space systems.

Aerospace and defense (A&D) industry products include civilian and military aircraft and associated ground equipment, naval vessels, aeroderivative power equipment, armored vehicles, weapon systems and munitions, ground platforms and other security equipment products, and space equipment systems including satellites, launch vehicles, and communications platforms and associated spare parts for the entire lifecycle of these products. Our products are critical to the proper functioning of society, such as the transport of people and goods and the furtherance of US national interests. Our products are routinely technologically complex and must operate with high (often extreme) levels of reliability and safety and commonly rely on critical uses of per- and polyfluorinated alkyl substances (PFAS) to meet demanding product and product support requirements. Unfortunately, for many of those uses no feasible alternatives currently exist. Further, our supply chain is highly technological and diverse in terms of its geographical distribution, capabilities and the need for materials to meet our industry's and its stakeholders' needs. The inability to obtain and use the critical materials (such as PFAS) needed for our products will significantly endanger our ability to develop and maintain our products and meet the demands of our customers and many other stakeholders.

As with all hazardous material use in our industry, AIA members are fully committed to safe and sustainable chemical management and share the goal of identifying ways to minimize environmental and human health risks associated with PFAS chemistries while using such chemistries in beneficial ways. Our members support a science-based,

comprehensive, and integrated approach to managing risks associated with PFAS, including specific measures to prioritize, monitor, evaluate, and regulate PFAS through innovation and the advancement of best practices.

To address the anticipated impacts from the CUU process on our industry and its stakeholders in and outside of Minnesota, we submit the following requests and comments:

Request for an A&D CUU Exemption or Expedited CUU Pathway
Because PFAS-containing A&D products and components are critical to the safety of flight, the functioning of society and national security and cannot yet be replaced, AIA respectfully requests that MPCA either provide an overarching exemption or an upfront Currently Unavoidable Use (CUU) determination for A&D products, necessary supplies and spare parts. This relief is needed so that PFAS may continue to be used in critical parts and systems avoiding hundreds of thousands of individual component level CUU requests while we continue to pursue alternatives. This approach would prevent unnecessary administrative burdens on A&D manufacturers and their associated supply chains, avoiding regulatory uncertainty and disruption to such activities as flight operations, aircraft maintenance, repair and overhaul and lifecycle sustainment in Minnesota.

We recognize this request is outside the immediate scope of MPCA's CUU concept feedback, but it is directly pertinent to ensuring MPCA is not unduly burdened with large numbers of A&D CUU requests and does not create uncertainties and unintended operational disruptions to A&D companies, users of our products and other stakeholders (e.g., the general public).

A bill recently introduced in the Minnesota House (HF 4257) includes CUU classifications aligned with A&D exemptions adopted in Maine and proposed for New Mexico[1], reflecting a growing consensus that A&D PFAS uses merit distinct treatment due to their critical nature. While the regulatory situation in the proposed EU PFAS restriction proposal under the EU REACH regulation is rapidly changing, regulators there also have indicated special consideration is also likely for aerospace and defense products.[2] In addition, the EU Parliament recently published a study recommending time unlimited derogations or extended deadlines for aerospace and defense products in the final REACH restriction.[3] The draft Minnesota CUU concept notes that it intends to ask

[1] Maine, 38 MRS § 1614(4)(H) ("*A product required to meet standards or requirements of the United States Department of Transportation, Federal Aviation Administration, the National Aeronautics and Space Administration, the United States Department of Defense or the United States Department of Homeland Security, except that the exemption under this paragraph does not apply to any textile article or refrigerant that is included in or as a component part of such products*"); New Mexico, NM Stat § 74-15-3(A)(9) ("a *watercraft, an aircraft, a lighter-than-air aircraft or a seaplane*").

[2] Committee for Risk Assessment (RAC) Committee for Socio-economic Analysis (SEAC) Background Document to the Opinion on the Annex XV dossier proposing restrictions on Per- and polyfluoroalkyl substances (PFASs), Version #14, June 24, 2025 (available at https://echa.europa.eu/documents/10162/17233/rest_pfas_bd_draft_240625_en.pdf/86488ab5-30c9-f7b9-547d-84db15535d9a?t=1755590462498)

[3] European Parliament, "The Per- and polyfluoroalkyl substances (PFAS) and their role as enablers in the competitiveness of European industry," December 2025 (available at https://www.europarl.europa.eu/RegData/etudes/STUD/2025/778581/ECTI_STU(2025)778581_EN.pdf).

applicants to report CUU determinations or restrictions in other jurisdictions; Minnesota's regulatory approach should consider the regulatory treatment of A&D in those jurisdictions, as indicated.

We acknowledge MPCA may be reluctant to adopt an exemption without direction from the Legislature. If that is the case, as an alternative approach, we would request that MPCA establish an expedited CUU pathway for uses that are clearly critical—such as those tied to national security, critical infrastructure, or public health and safety. Under this pathway, applicants would be eligible for accelerated review and provisional approval without submitting exhaustive component-level disclosures or full alternatives analyses, both of which would impose a substantial administrative burden on both applicants and MPCA reviewers.

Feedback on key definitions in MPCA's Draft Rule Concept Summary
As part of the Draft Rule Concept Summary, MPCA requested feedback on proposed definitions. AIA offers the following feedback:

- **Essential for health, safety, or the functioning of society.**

We generally agree with MPCA's proposed definition of "essential for health, safety, or the functioning of society." for products to be considered for exclusion from the regulatory requirements. To remove ambiguity and ensure consistent application of the CUU criteria to defense-critical A&D uses, we recommend explicitly referencing national security in the definition, and clarifying that this includes PFAS containing components, materials, parts, and manufacturing, maintenance, authorized repair, or lifecycle sustainment processes that are qualified to military, industry, or company-proprietary specifications and are used to manufacture or support products that serve national security or critical infrastructure functions.

The A&D industry products and processes clearly fall within MPCA's definition of uses "essential for health, safety, or the functioning of society." A&D products and components directly support critical infrastructure—transportation, emergency response, national security, and communications—and these products rely on PFAS for essential functions as attested to by the International Aerospace Environmental Group's Review of Aerospace and Defense Dependencies and Regulatory Action relating to PFAS[4] and the Department of War's (DoW's) Report on Critical Per-and Polyfluoroalkyl Substance Uses.[5] Both reports speak to the significant technical challenges and time and resource requirements needed to identify, develop and qualify PFAS alternatives. Disruptions to the A&D supply chain could therefore have immediate consequences, including impacts on military activities, aircraft operations and maintenance and flight operations (amongst others) within Minnesota.

- **Alternative**

We agree with the proposed definition of "alternative," but offer the following context regarding the requirement that an alternative be "functionally equivalent." In A&D applications, materials, parts, and processes are qualified to detailed specifications that define high levels of performance, testing, and quality-control requirements, as

[4] Reference to the IAEG PFAS report; it should be noted that IAEG intends to provide an update to this report in 2026 (https://www.iaeg.com/workgroups/wg5/activities)
[5] Reference to the DoW report (https://www.acq.osd.mil/eie/eer/ecc/pfas/docs/reports/Report-on-Critical-PFAS-Substance-Uses.pdf)

indicated above. While uses of PFAS per se are not explicitly mandated by federal law or regulation, the presence of PFAS in A&D products falls under the purview of the U.S. federal government as aviation safety and military product performance is governed by performance and safety requirements imposed by such federal agencies as the Federal Aviation Administration (FAA), the Department of Homeland Security (DHS), and the DoW.

In the case of aviation, certification of the design and manufacture of an aircraft is the responsibility of the FAA. Conformance with material and process specifications, to which PFAS-containing materials are qualified, is required to ensure that products meet stringent safety and reliability requirements. Thus, transitioning to alternatives requires identification, extensive testing, qualifications to industry, military, and/or company-proprietary specifications, and finally industrialization to ensure that sufficient and qualified alternatives are available to meet demand. This process is resource-intensive for each legacy use and may take many years, even decades, with no guarantee of success at every step in the process. This is similarly true for other A&D products, such as helicopters, unmanned aerial and naval systems, military ground equipment, engines, radar systems, communication systems equipment, naval vessels, space systems, missiles, and weapons systems. A&D products must undergo a rigorous process of qualification, validation, and certification, according to airworthiness regulations, defense or space customer requirements.

In addition, while A&D manufacturers and their suppliers control their own company-proprietary specifications, approval of a material or process to military or federal specifications is not within a manufacturer's control. A manufacturer may demonstrate that a PFAS-free product meets these specification requirements, but formal inclusion in a government specification or standard requires coordination and approval through the responsible agency's process which is often rigorous and time and resource consuming. This specification approval process is essential when assessing whether an identified alternative can be considered truly "functionally equivalent" for A&D uses as an alternative cannot be used until it is listed on the specification.

Additional Consideration by MPCA Needed for Classified Exemption and Other Sensitive Information Concerns

In the recently finalized reporting rule, MPCA included several exemptions, one of which refers to "information regarding PFAS-containing products or components that is provided to any federal government agency and that is classified information as defined in 14.18 United States Code, title 18, section 798." Because the MPCA rule otherwise provides for trade secret protections and the MPCA's reporting system does not appear configured to receive classified information, AIA believes the agency intended to exempt reporting for PFAS information that is classified by federal agencies. However, the cited statutory provision (18 U.S.C. § 798) is narrowly focused on disclosure of classified cryptographic and communications intelligence information, which does not capture the broader range of classified defense or national security materials the A&D industry needs protected. We suggest MPCA clarify or revise this citation (such as 32 CFR 2001.21(a)(i)(A)-(H)) if the intent was to cover classified information more broadly.

Similarly, protections must extend to other types of sensitive information such as that covered by the Arms Export Control Act (22 USC.2778) and its associated regulatory requirements.

Timeline Concerns
Minnesota's approach, which would bar use of a substance without an approved CUU (effectively an authorization) and only permit use for a limited period before requiring renewal, risks replicating implementation challenges seen in the EU REACH Annex XIV authorization process for hexavalent chromium. Our industry's collective experience with the REACH authorization process for hexavalent chromium revealed that information gaps and heavy workloads due to many authorization applications can produce prolonged review periods, legal disputes, and multi-year delays that undermine predictability for industry and impede substitution and innovation. To avoid similar burdens and uncertainty, Minnesota should adopt clear, enforceable timelines for each stage of the CUU process and ensure novel product submissions receive prompt initial review and regular status updates so manufacturers can plan R&D and market entry without undue risk, as well as a clearly defined appeals process.

Conclusion
AIA once again expresses its gratitude for the opportunity to comment on MPCA's development of the CUU rulemaking. We thank the agency for its consideration of these comments, which we believe will help ensure the successful implementation of Minnesota's Amara's Law. AIA would be happy to provide additional information on any of these issues as needed.

Respectfully,

David Hyde
Senior Director, Civil Aviation Strategy, Innovation & Environmental Affairs