



The Honorable Katrina Kessler
Commissioner
Minnesota Pollution Control Agency
520 Lafayette Road North
St Paul, MN 55155

Re: CPMC Comments Part 1; Alternatives Assessment Considerations for Complex Durable Goods

Dear Commissioner Kessler:

The Complex Products Manufacturers Coalition (CPMC or Coalition) appreciates the opportunity to submit comments on alternatives assessment (AA) in response to draft concepts the Minnesota Pollution Control Agency (MPCA) has put forward for new rules governing how the MPCA determines currently unavoidable uses (CUUs) of per- and polyfluoroalkyl substances (PFAS) in products as directed by Minn. Stat. § 116.943.¹

CPMC has identified the proposed alternative assessment (“AA”) process of MPCA’s CUU framework as the most significant element of the rulemaking for manufacturers, particularly those of complex durable goods. The statute specifies that “a person may not sell, offer for sale, or distribute for sale in this state any product that contains intentionally added PFAS, unless the commissioner has determined by rule that the use of PFAS in the product is a currently unavoidable use.”² The term currently unavoidable use is defined in the statute as one for which “alternatives are not reasonably available.”³ The term product is defined in the statute as “an item manufactured,

¹ CPMC brings together individual businesses and trade associations with multi-component consumer and non-consumer products and complex, international supply chains. With 23 members that include trade associations and individual companies, CPMC represents a wide cross-section of products that are essential for health, safety and the functioning of society. These products—including home appliances, on and off-road vehicles, the regulated engines that go into these on- and off-road vehicles and equipment, recreational and commercial vessels, engines and components, outdoor power tools and equipment, lighting, heating, ventilation, cooling, refrigeration, and water heating equipment (HVACR-WH), electronics, and their replacement parts—support vital sectors of the economy, including government, law enforcement, first responders, food and agriculture (including commercial fishing and sea farming), energy, transportation and logistics, public works and infrastructure support, critical manufacturing, the defense industrial base, conservation, and life-saving backup power, climate control and ventilation in homes, hospitals, schools and universities, eldercare facilities, food preservation and processing, and laboratory and life sciences facilities. The use of ingredients that fall in Minnesota’s definition is to ensure their safety and durability, particularly in high-performance environments (e.g., engine components) where failure would be not only costly but also potentially catastrophic. Due to extreme performance requirements, functionally equivalent alternatives may not be available in all cases.

² Minn. Stat. § 116.943, subd. 5(d) (2023).

³ Minn. Stat. § 116.943, subd. 1(j) (2023).



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.”⁴ Thus, the term “product” includes identifiable “product components” which may not be manufactured by the “product” manufacturer.

By definition, a complex durable good consists of one hundred or more components. Under MPCA’s proposed CUU concept, each identifiable component in a complex durable good that contains a fluorinated chemical requires its own AA, magnifying the scope of CUU submissions in a way that is likely to overwhelm both applicants and the MPCA. As proposed, the AA process places substantial burdens on complex durable goods manufacturers to compile the required information for product components they do not necessarily make but instead assemble into finished products.

Comparable AA programs conducted under California’s Safer Consumer Products Program (SCPR) and Washington’s Safer Products Program (SPP) demonstrate that even a single alternatives analysis for a discrete product-chemical combination—such as N(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine (6PPD) in motor vehicle tires⁵—may require an alternatives analysis that is hundreds of pages long, reflecting the depth of information required to evaluate the technical and economic feasibility of an alternative. The data and documentation required to support dozens or even hundreds of component-level AAs would be staggering. Both the California SCPR and Washington SPP were developed to reduce the use of chemicals of concern in consumer products and advance the design, development, and use of products that are chemically safer for people and environment. These programs are relevant to MPCA because they address the same core question as Minnesota’s proposed CUU framework: whether the chemical use in a product or component is “currently unavoidable,” or whether a “reasonably available” alternative exists.⁶ Furthermore, the SCPR and SPP recognize that an assessment of alternatives may not always result in the identification of a safer alternative and limit restrictions on chemicals of concern in products where technically and economically feasible alternatives do not exist or where restricting the chemical would conflict with other federal and state laws.

Ultimately, these programs work because they recognize that the evaluation of alternatives in complex durable goods requires special attention. Washington’s SPP specifically exempts from the AA process:

- Plastic shipping pallets manufactured prior to 2012;
- Food or beverages;
- Tobacco products;

⁴ Minn. Stat. § 116.943, subd. 1(r) (2023).

⁵ [Preliminary \(Stage 1\) Alternatives Analysis Report Motor Vehicle Tires Containing N-\(1,3-dimethylbutyl\)-N'-phenyl-p-phenylenediamine \(6PPD\)](#), Prepared for U.S. Tire Manufacturers Association, March 15, 2024.

⁶ Draft Rule Concept at pp. 2, 4-5.

- Drug or biological products regulated by the United States food and drug administration;
- Finished products certified or regulated by the federal aviation administration or the department of defense, or both, when used in a manner that was certified or regulated by such agencies, including parts, materials, and processes when used to manufacture or maintain such regulated or certified finished products;
- Motorized vehicles, including on and off-highway vehicles, such as all-terrain vehicles, motorcycles, side-by-side vehicles, farm equipment, and personal assistive mobility devices; and
- Chemical products used to produce an agricultural commodity, as defined in RCW 17.21.020.
-

While these products are exempt, DOE can identify the packaging of these products as Priority Products to undergo an AA under the law. The SPP also prohibit DOE from banning or restricting the use of chemicals of concern in inaccessible components of electronic products.⁷

Additionally, the SCPR acknowledges the challenges in conducting an AA for complex durable goods and provides relief by limiting the number of specific components in these products that can undergo an AA within a three-year period to no more than ten individual components. CPMC recommends that MPCA draw from these established regulatory frameworks to provide a workable CUU application process for complex durable products in Minnesota. The SCPR and SPP programs offer insights for the systematic exclusion, selection and review of a reasonable number of individual product components in CUU requests for complex durable goods. The key aspects of these programs that we encourage MPCA to consider including in a revised CUU process are outlined below.

I. Existing AA state frameworks.

The California SCPR and Washington's SPP share certain fundamental program elements but function slightly differently. Both programs aim to:

1. Recognize that the evaluation of alternatives is challenging for complex durable products. California limits the number of components that can undergo an AA at a given time to no more than ten components and recognizing assemblers as a separate class. Washington's law exempts several products regulated under other federal laws including motorized vehicles from the law all together and does not authorize chemical bans or restrictions on chemicals in internal electrical components;
2. Consider economic feasibility when evaluating alternatives;

⁷ RCW 70A.350.

3. Allow flexibility to select either a finished product or a component for AA evaluation;
4. Seek to avoid regrettable substitutions; and
5. Enable a collaborative approach to allow consortia to form.

While these programs share several key goals, they operate differently.

II. California SCPR.

Under the SCPR, responsible parties must complete an AA to identify whether “safer alternatives” exist that are technically feasible and economically viable as compared to the chemical of concern in the Priority Product. Priority Products are defined as consumer products that (1) contains one or more Chemicals of Concern that have the potential to harm people or the environment, and (2) has been formally listed in the California Code of Regulations through rulemaking. The SCPR require DTSC to describe a Priority Product sufficiently so it is clearly identifiable. If the Priority Product is a component of one or more assembled products, DTSC must describe the assembled product(s) in which the component is used. Here is an overview of the process:

California SCPR Process⁸



⁸ See 22 C.C.R. § 69501 et seq. and https://dtsc.ca.gov/wp-content/uploads/sites/31/2016/01/AA-Guide-Version-1-0_June-2017.pdf

Manufacturers and importers bear the primary AA obligation; retailers and assemblers are a backstop only if the manufacturer or importer does not comply. The SCPR define “assemblers” as “any person who assembles a product containing a component that is a product subject to the requirements” of the SCPR.⁹ Because assemblers typically incorporate a product as a component (rather than manufacture it), the California Department of Toxic Substances Control (DTSC) recognizes they may lack the information needed to complete an AA and allows them to defer to manufacturers and importers. If the manufacturer or importer does not comply an assembler may avoid the AA by ceasing to order the product and timely notifying DTSC.¹⁰

The regulations provide relief for complex durable goods by limiting to ten the number of components within a single complex durable product that may be listed as a Priority Product and subject to an AA during any three-year period.¹¹ This limitation was included in the SCPR to support complex durable goods manufacturers in managing the products design complexity, which increases as more components must be evaluated at the same time for redesign. It also provides manufacturers who have long product-development timeframes with certainty about the maximum number of AAs they must address for components in a set period, which helps them focus resources on a manageable set of components during each design and AA cycle.¹² The regulations provide the flexibility for a manufacturer or group of manufacturers of a Priority Product to complete the AA. If the AA identifies a “safer alternative,” the DTSC can implement regulations that ban the use of the chemical of concern in the product and require the use of the safer alternative. If no alternative is found, the law provides regulators with a number of regulatory responses including no regulatory response, funding a green chemistry grant, or labeling.

Furthermore, the SCPR requires consideration of technical and economic feasibility. DTSC can require a manufacturer to stop selling the product with the chemical of concern in the product where an alternative is not selected, but the rules also allow DTSC to permit the product to stay in the market if a manufacturer can demonstrate that the product’s benefits outweigh any adverse impacts, and administrative or engineering controls are available to adequately protect health and the environment.¹³ The SCPR program also authorizes exemptions from a chemical restriction where no technically and economically feasible alternative exists when a ban or restriction conflicts with one or more state or federal laws or applicable treaties or international agreements.¹⁴

⁹ 22 C.C.R. §69501.1(a)(16).

¹⁰ 22 C.C.R. §69501.1

¹¹ [Final Statement of Reasons, Safer Consumer Products, Department Reference Number: R-2011-02](#)
[Office of Administrative Law Notice File Number: Z-2012-0717-04](#), Page 193.

¹² [Id.](#)

¹³ 22 C.C.R. §69506.5.

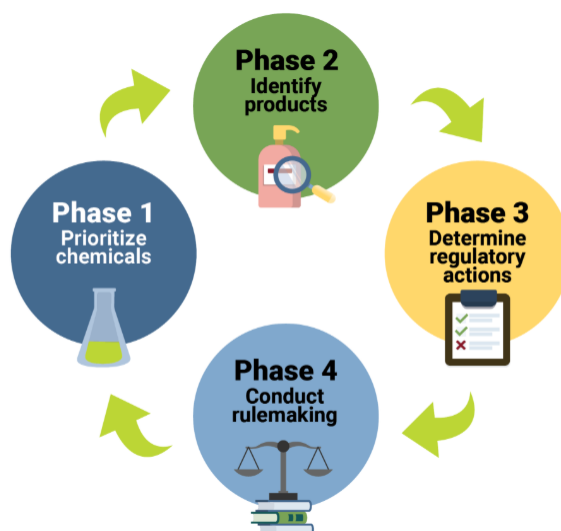
¹⁴ 22 C.C.R. §69506.9.

III. Washington SPP.

Under the SPP, the Washington Department of Ecology (DOE) to conduct the AA rather than manufacturers. DOE initiates the SPP by nominating chemical/product combinations for which it will conduct an alternatives analysis during a five-year cycle. After approval of the chemical/product combinations by the legislature, the chemical product combinations become Priority Products, and the DOE begins evaluation of alternatives. If alternatives are found to be both “feasible” and “available,” DOE can propose a chemical ban or restriction on the chemical of concern in the product.

Washington’s SPP specifically exempts a number of products including: “motorized vehicles, including on and off-highway vehicles, such as all-terrain vehicles, motorcycles, side-by-side vehicles, farm equipment, and personal assistive mobility devices,” from the AA process and prohibits DOE from banning or restricting the use of chemicals of concern in inaccessible components of electronic products. The graphic below provides a summary of the SPP AA process.¹⁵

Washington SPP Process¹⁶



IV. Flexibility in selecting a finished product or a specific component for AA evaluation.

Minnesota’s law defines a “product” as 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. Due to the use of the commas in this sentence, it is not entirely clear if there are

¹⁵ <https://ecology.wa.gov/waste-toxics/reducing-toxic-chemicals/washingtons-toxics-in-products-laws/safer-products#cycle>

¹⁶ https://dtsc.ca.gov/wp-content/uploads/sites/31/2016/01/AA-Guide-Version-1-0_June-2017.pdf



two separate examples of a product in this definition (the finished product and individual components) or just one (the finished product). In addition, a definition for the term “consumer” is not found in the statute; comments were submitted during the reporting rulemaking to suggest that the legislature had only individuals and households in mind. Unfortunately, the legislative history on the law is scant and does not speak directly to that issue.

In response to this ambiguity, we urge MPCA to be flexible in allowing companies to group CUU requests. Based on the definition of complex durable goods as being made up of 100 or more components, CPMC supports allowing CUU requests for a product class and not require separate requests for individual components. CPMC supports MPCA’s example of a product class of “vehicles” rather than sedans, SUV’s, vans, trucks, RV’s and “printers” rather than receipt printers, thermal printers, label printers, residential printers, commercial printers, etc. It would be extremely challenging (if not impossible) within the anticipated timeframe allowed for complex durable products manufacturers to generate multiple CUU applications for each individual containing component in a finished good.

For complex durable goods, the use of the component in connection with the finished good often provides the necessary context for evaluating the availability of alternatives. Potentially affected components in the critical electricity infrastructure sector include but are not limited to insulating coatings and lubricants, seals and gaskets that prevent leakage of oils and gases, insulating gases, nozzles, slide rings, deflectors, wire harnesses (insulation), current transformer winding, and spacers. In these cases, it makes sense to consider the necessity of the component part within the context of a CUU request for the finished product.

Companies may want to describe the product class in terms of the relationship to emission regulations (and associated safety standards for installation considerations) which drive materials choice and selection to maintain the required performance and durability characteristics as are required by federal standards. An example of this type of a “product class” is regulated “engines”, without regard to the specific product in which the engine is installed such as: “engines, systems, components, or separate technical units regulated under Title 40 of the Code of Federal Regulations, Title 13 of the California Code of Regulations, or is Minnesota site-tested for emissions.” This approach reduces the redundancy that would result by linking an engine to each end use application: in this example the regulated engine is the same regardless of whether it is used in agriculture or commercial hauling. The approach of using product groupings that identify the finished goods rather than the use application is similar to how the European Chemicals Agency (ECHA) is structuring derogations in the REACH Annex XVII proposal.

Nevertheless, this law affects such a wide range of products that MPCA should also accept submissions on components as well where it makes sense. AA’s in California and Washington demonstrate that the states have taken a flexible approach to designate as a Priority Product, either a product or a component of a product. For example, DTSC listed Carpets and Rugs containing



PFASs as a Priority Product. Carpets and Rugs may contain backing and other components, however in this case, DTSC chose to list the product rather than a specific component as a Priority Product. In other cases, specific components have been listed as a Priority Product, for example the SPP listing of organo-halogen flame retardants (HFRs) in plastic device casings of electric and electronic equipment. Because the statute requires a manufacturer to report information on the purpose of the ingredient in the product, including any product components, a key factor in evaluating alternatives, it appears to give some flexibility to manufacturers to conduct an AA at either the product or component level, whichever is most appropriate as determined by the manufacturer.¹⁷

CPMC urges MPCA to be flexible in how companies may group CUU requests and cautions against a “one size fits all” approach.

V. SCPR and SPP require an assessment of economic feasibility.

SCPR and SPP consider the economic feasibility of the alternative before banning or restricting a chemical. Unlike MPCA’s proposed definition of “reasonably available,” the SCPR and SPP programs consider the cost of an alternative when identifying whether an alternative is “reasonably available.” In the Final Statement of Reasons for the SCPR, DTSC states:

“The term “economically feasible” is used in Articles 3, 5, and 6. This criterion includes the economic viability of the alternative that would allow the product to be profitable for the manufacturer. The responsible entity must consider the effect on the operating margin of the manufacturer. This factor reflects marketplace realities and business realities in determining whether there is an economically viable alternative to a Priority Product. Thus, this term is necessary to make clear that one of the considerations during the AA is whether the use of an alternative will significantly reduce the operating margin of a manufacturer. The purpose of this program is not to put companies out of business, but to ensure a fair and reasonable search for safer alternatives that may actually be used.”¹⁸

Washington’s Toxic Pollution Law does not define “feasible” or “available,” but DOE does provide a useful benchmark in practice for an alternative to be capable of replacing a chemical of concern. Under DOE’s framework, an alternative is “feasible” if it meets the same functional and performance requirements as the chemical it is replacing and is (1) already used for the application, (2) marketed for the application, or (3) identified as feasible by an authoritative body.¹⁹ “Available” means the alternative is currently used for the application or offered for sale at a comparable

¹⁷ Minn. Stat. § 116.943, subd. 2(2) (2023).

¹⁸ [Final Statement of Reasons, Safer Consumer Products, Department Reference Number: R-2011-02](#)
[Office of Administrative Law Notice File Number: Z-2012-0717-04](#), Page 67.

¹⁹ [Id.](#) at page 301.

price—recognizing that a substitute that exists but is not obtainable at a similar price point is not “available.”²⁰ Under the SPP “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.”²¹ An “economically feasible” alternative product or replacement chemical is one that does not significantly reduce the manufacturer’s operating margin.²²

Therefore, CPMC disagrees with the proposal to define the term “reasonably available” as devoid of cost considerations for an alternative that “can perform comparably”. The proposed definition of “alternative” specifies that the alternative must result in a “functionally equivalent” (i.e., the same rather than a lesser performing “comparable”) product. These definitions do not align: a “comparable” alternative is not “equivalent”. The proposed definition of “reasonably available” only speaks to sufficient quantities and use. More frequently, the definition of “reasonably available” in environment laws must address three areas: (1) technically feasible, (2) economically reasonable, and (3) capable of implementation within an allotted timeframe.²³

An AA framework that disregards economic feasibility will result in identifying “alternatives” that may exist on paper but are not cost-effective or realistic in practice. This could result in discontinued products, reduced availability of essential goods, and price increases for consumers. Including economic feasibility in AA determinations ensures the evaluation of safer substitutes in a manner that preserves the flow of commerce and the continued availability of critical products and services.

CPMC recommends that MPCA revise the definition of “reasonably available” to incorporate an explicit economic feasibility criterion into the CUU process. “Reasonably available” alternatives should perform the same, be available at a cost that does not put companies out of business, and at sufficient quantities to preserve the flow of commerce.

VI. Avoid regrettable substitutions and allow CUU timelines which avoid this pitfall.

The SCPR and SPP processes are designed to avoid unintended consequences through a rigorous, evidence-based evaluation of alternatives before approving any substitution. Under the SCPR, two years is allotted for alternatives assessment, with extensions. As DTSC recognizes, “when hazardous chemicals are banned or voluntarily removed from the market, they may be replaced with chemicals that are similar but less well studied. Sometimes these replacement

²⁰ Id.

²¹ 22 C.C.R. §69501.1(a)(65).

²² 22 C.C.R. §69501.1(a)(29).

²³ Clean Air Act §§ 172(c)(1), 182(b)(2), EPA RACT guidance and state SIP regulations (consideration of whether a company capable of meeting the limit); 40 C.F.R. § 702.3 (consideration of deadlines); 40 C.F.R. § 51.1312(c)(consideration of technical and economic feasibility and capable of meeting within a prescribed timeframe); 40 C.F.R. § 1502.14, CEQ and agency NEPA guidance (consideration of technical and economic feasibility); *Michigan v. EPA*, 576 U.S. 743 (2015) (some consideration of costs required).

chemicals turn out to be similarly harmful to human health or the environment, a situation known as regrettable substitution.”²⁴ Including consideration of regrettable substitutions in the CUU application process is essential to ensure that replacements do not inadvertently result in the adoption of alternatives that pose equal or greater risks to human health or the environment. This concept is notably missing from the proposed CUU application proposal.

The evaluation of alternatives begins with identifying where a chemical is used, followed by efforts to locate a technically viable alternative. The alternative selection process in California and Washington includes a comparison of the hazards, performance, and lifecycle impacts of alternative substances to prevent shifting from one harmful chemical to another. When an alternative is identified, it triggers a multi-year process to comply with federal and state performance and safety requirements. Manufacturers of complex durable goods must initiate a resource-intensive redesign process, which frequently includes prototype development, extensive performance testing, validation under real-world operating conditions, and recertification to ensure continued compliance with applicable safety standards or contractual specifications. Depending on the specific product, trial use by customers can take between 1 and 5 years prior to engineering approval and the ability to start designing with and/or purchasing the new equipment.

To avoid regrettable substitutions after a CUU determination is made due to the lack of an available alternative, the time period that is provided to companies to further investigate alternatives is another important consideration. MPCA is proposing to require simultaneous assessments for a multitude of products and components every five years for novel products and every eight years for existing products. Complex product re-design cycles exceed these timeframes, given asset lives in some cases of up to 40 years. CPMC urges MPCA to consider longer renewals of 15 years or more where needed. These timeframes are more consistent with product redesign cycles for complex durable goods, which may span at least 7 to 15 years or more, particularly for components integrated into safety-sensitive systems. As one example, the transmission and distribution power delivery industry has been working on replacing the greenhouse gas SF₆ for close to two decades, which required California (§ 95350) and New York (6 NYCRR Part 495) to develop regulations that are now in place to allow for a staged phase out of the gas over a period of time. In a review after the initial phase out date, users from both states shared their experiences which include actual product lead-times that have turned out to be longer than the original product exemption duration that was granted.

The product redesign process requires a collaborative effort between chemical manufacturers, component manufacturers, and assemblers. The challenge of evaluating alternatives is magnified for complex durable goods that contain hundreds or thousands of

24

<https://dtsc.ca.gov/scp/#:~:text=When%20hazardous%20chemicals%20are%20banned,as%20a%20%E2%80%9Cregrettable%20substitution.%E2%80%9D>

components, each with distinct functional requirements and validation pathways where the individual components must perform under a range of conditions, including extreme conditions, within the broader system. “Simple” or single chemical substitutions can take years to evaluate and cost millions of dollars. Even when the same component is used in multiple designs, the technical design tests must be repeated for each unique design. If the product contains multiple materials, this testing may be required for each iteration, depending on the function of the material. Once tested and certified to industry standards, the market adoption curve needs to grow to be able to scale manufacturing which also requires additional capital investment.

In a motor vehicle, these chemistries may be used in fuel system seals and gaskets to prevent leaks and withstand exposure to heat and aggressive fuels; in wire and cable insulation to meet fire resistance and dielectric requirements; in transmission and drivetrain components, such as seals, O-rings, and gaskets, to maintain integrity under sustained heat, pressure, and exposure to lubricants and hydraulic fluids; and in lubricants and greases applied to moving parts such as steering assemblies, actuators, bearings, or braking mechanisms, where reduced friction, wear resistance, and performance under extreme temperatures are necessary to ensure safe operation. Each of these functions evaluation of their integrated performance as a whole. The vehicle must perform under 100 °F conditions in Florida and – 30 °F conditions in Minnesota equally well.

CPMC urges MPCA to integrate an assessment of regrettable substitutions in the proposed rules to ensure that regulatory actions genuinely advance public and environmental health, rather than simply exchanging one risk for another and allow additional time beyond 8 years.

VII. Minimize duplicative submissions and allow industry collaboration.

The SCPR allows “a consortium, trade association, public-private partnership, non-profit organization, or other entity acting on behalf of, or in the stead of, the responsible entity” (entity required for conducting the AA).²⁵ DTSC recognized that working as a group enables manufacturers to significantly reduce their individual costs by submitting a combined AA via a consortium. A consortium approach reduces the number of individually submitted CUU applications the MPCA must review for the same product or component.

Adopting a consortium approach helps to ensure that companies do not simply benefit from previous CUU approvals without contributing to the rigorous assessment process. According to the Draft Rule Concept Summary, an applicant may request a similar CUU determination if the commissioner has already granted a positive CUU determination for a product within the same product category. This process could enable manufacturers who have not invested the significant time, resources, and effort required to evaluate “reasonably available alternatives” to take

²⁵ 22 C.C.R. §69501.2.

advantage of the work completed by others at no additional cost. Grouping reviews encourages collaboration, fairness, and procedural integrity.

CPMC supports provisions included in the proposed CUU process that enable CUU requests to be submitted by a consortium or group of manufacturers.²⁶

VIII. Limit CUU reviews to no more than ten components within a three year period for complex durable goods.

The SCPR and SPP recognize the significant challenges for evaluating complex durable goods. These programs either exempt certain assembled products and internal electrical components from AA assessment altogether (in the case of Washington) or restrict the number of components that undergo an AA to ten over a three year period (in California).

As California and Washington developed their AA programs, they did so in appreciation of the time and volume of information necessary to adequately assess alternatives. Washington DOE has selected nine priority consumer products that contain no more than one to two chemicals of concern for their five-year AA cycle. In California, DTSC has assessed nine priority products since the program began in 2013 and has proposed an additional seven priority products to undergo an AA. This brings the total number of products or components under review in California to 16 over the past 13 years. The modest throughput reflects the reality that to avoid regrettable substitutions, the AA process is highly technical, expensive, and lengthy.

For complex durable goods, a CUU to address each specific PFAS-containing component in a finished product (seal, hose, gasket, etc.) would be a significant undertaking. A component-level alternatives analysis would require engineering teams to identify and work with our supply chain and their suppliers as it concerns the availability (or lack thereof) of non-PFAS containing components that are able to meet our rigorous and demanding design specifications. Several CPMC members estimate that, if a company does not already have CAS-level information on intentionally added PFAS for all components in a product line, it would require more than 500 hours of technical staff time to obtain that information from Tier 2 and Tier 3 suppliers for just one product line. It is difficult to put an exact number on the cost of requesting a determination and the staff hours to determinate the baseline but given the different categories of use this would be a significant undertaking involving several hundred hours of work.

The alternatives assessment for spray polyurethane foam systems with unreacted methylene diphenyl diisocyanatos is 200 pages long.²⁷ It includes a detailed assessment of the function of the chemical of concern in the product, applicable laws and regulations, availability of

²⁶ Draft Rule Concept at pg. 2.

²⁷ [Abridged Alternatives Analysis Report for Two-component Low- and High-pressure Spray Polyurethane Foam Systems Containing Unreacted Methylene Diphenyl Diisocyanate, Prepared for American Chemistry Council, Center for the Polyurethanes Industry, Spray Foam Coalition, October 14, 2020.](#)

alternatives including feasibility and cost considerations. MPCA is proposing to require complex product manufacturers to conduct this type of assessment on multiple components they do not manufacture and all at the same time. Assuming each complex product manufacturer completed an AA and submitted a CUU request for ten components, this would result in hundreds of technical documents for MPCA to review. And since CUU determinations expire after eight years (or five years for novel products) this process will continue repeating. This is not a practical or workable approach. In practical terms, a single finished product could trigger dozens of parallel AAs. The undertaking is further magnified by the fact that all manufacturers would be required to undertake this exercise simultaneously. The cumulative result would be an unprecedented volume of highly technical submissions in a compressed timeframe.

To select the components to be reviewed, SCPR has prioritization criteria to see that AAs are directed toward the uses posing the greatest potential risk to human health and the environment, while also considering the technical and market realities of product design. We recommend MPCA consider similar criteria for prioritization such as:

- **Type and Prevalence:** Prioritize those chemicals that are restricted under national/regional/global regulatory or voluntary frameworks, the amount used, and the number of affected products in the market. Information on these substances is readily available. The OECD figure in Attachment A classifies and identifies in red the restricted chemicals in this broad category.²⁸
- **Potential for Exposures:** Prioritize components where there is a reasonable likelihood of public, environmental, or occupational exposure during the product's use or from disposal.
- **Feasibility of Safer Alternatives:** Prioritize components where technically and economically feasible alternatives are most likely to exist.
- **Regulatory and Market Context:** Consider whether the component or its use is already subject to regulatory action in other jurisdictions.

These (or similar criteria) are consistent with the goal of minimizing those chemicals with life cycle impacts on contamination and public health.

CPMC encourages MPCA to limit the number of CUU applications to no more than 10 within a three year period for complex products and include a process to prioritize selection of those 10 products or components.

²⁸ Department of Toxic Substances Control, Product-Chemical Profile for Carpets and Rugs Containing Perfluoroalkyl or Polyfluoroalkyl Substances, October 2019, page 13.

IX. Conclusions and recommendations.

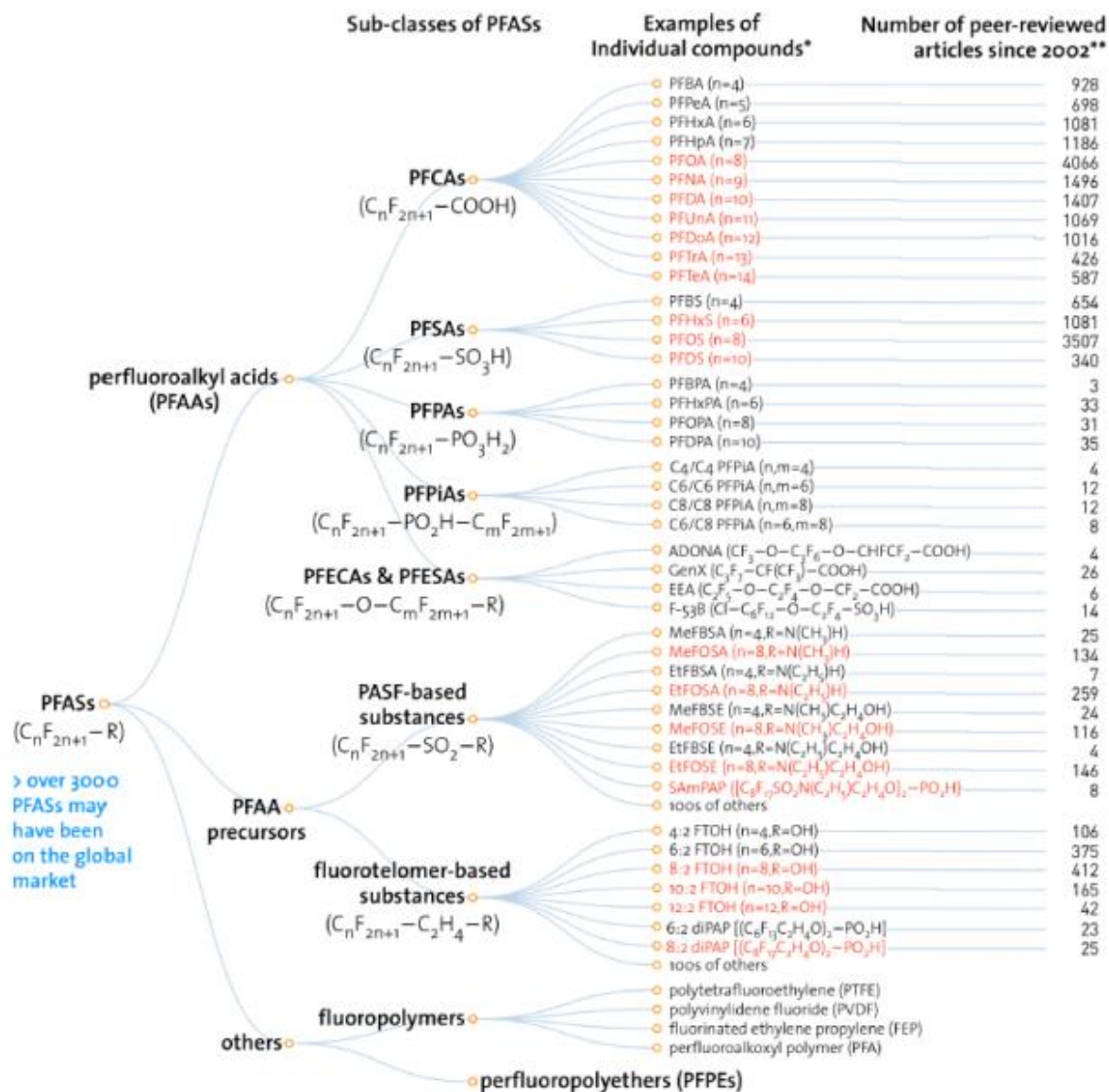
CPMC supports a workable CUU process in Minnesota that acknowledges the unique circumstances for complex durable products and builds upon the experience of the SCPR and SPP programs. We think the cornerstones to accomplish this goal include the following:

1. Allow flexibility to select a finished product or a specific component for AA evaluation;
2. Defining “reasonably available” to include technical feasibility, economic feasibility, and achievable within a reasonable timeframe.
3. Seeking to avoid regrettable substitutions and provide additional time beyond 8 years for complex durable goods to reflect the longer product lead times.
4. Enabling manufacturers of specific products or components to take a collaborative approach to evaluate alternatives.
5. Limit CUU applications to no more than 10 components within a three-year period for complex durable products and establish criteria for selecting the products of components and fluorinated chemicals for assessment.

CPMC notes that Simona Balan, with DTSC, and Marissa Smith, with DOE, are members of the rulemaking “check-in” group in Minnesota. We encourage MPCA to leverage their strong expertise to design a practical CUU process for complex durable goods that includes the aspects of the SCPR and SPP outlined above. For further information contact Martha Marrapese, Counsel to CPMC, mmarapese@wiley.law /202-719-7156.

Attachment

Attachment A



* PFASs in RED are those that have been restricted under national/regional/global regulatory or voluntary frameworks, with or without specific exemptions (for details, see OECD (2015), Risk reduction approaches for PFASs, <http://oe.cd/tAN>).

** The numbers of articles (related to all aspects of research) were retrieved from SciFinder® on Nov. 1, 2016.

Figure 1: General classification of PFASs. Reprinted (adapted) with permission from Environ. Sci. Technol. 51, 5, 2508-2518 (Wang et al. 2017b). Copyright 2017 American Chemical Society.