JRAIA The Japan Refrigeration and Air Conditioning Industry Association
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28th January, 2025

To:
Ms. Kerri Malinowski Farris
Maine Department of Environmental Protection (DEP)
17 State House Station
Augusta, Maine 04333
(Submitted via email to: pfasproducts.dep@Maine.gov)

JRAIA's Request to Maine Department of Environmental Protection (DEP) regarding Chapter 90: Products Containing Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)

The Japan Refrigeration and Air Conditioning Industry Association (JRAIA) representing manufacturers of refrigeration and air conditioning equipment in Japan, and its member companies are committed to maintaining and improving living standards by providing environmentally sustainable refrigeration and air conditioning products/services for human comfort and industrial processes.

We would like to comment regarding the Maine Department of Environmental Protection's (DEP) posting draft "Ch. 90 Products Containing Perfluoroalkyl and Polyfluoroalkyl Substances" in compliance with amended The Act to Stop Perfluoroalkyl and Polyfluoroalkyl Substances Pollution (38 M.R.S. §1614).

HVACR and water heating equipment provides critical services to society by providing life-saving climate control and ventilation in most buildings, notably homes, hospitals, schools, and elder care facilities. The cold chains for both food and medicines, such as vaccines, depends on transportation and storage provided by transport and commercial refrigeration equipment manufactured by our members.

JRAIA members greatly appreciate DEP's response to feedback on the proposed regulations. We thank DEP for exempting a critical electrical component (semiconductors) and for exempting product components incorporated within complex products from the notification requirement. JRAIA continues to note the practical challenge of complex product manufacturers complying with the proposed regulations.

Merely identifying the use of chemicals in supply chains is an exceptionally challenging and often unsuccessful task for manufacturers of complex systems, due to the general lack of transparency around component composition and the number of chemicals (approximately 9,000) included in the overly broad definition of PFAS the State of Maine continues to use as the basis for this regulation. This is exacerbated by confidentiality claims by component manufacturers and suppliers and the lack of clarity on whether this regulation will impact chemicals embedded in the polymer matrix of equipment components.

JRAIA urges Maine to focus its efforts on the regulation of PBT chemicals in high-exposure products.

Although the key focus of Maine's legislation is persistent, bioaccumulative, and toxic (PBT) PFAS that pose a risk to human health and the environment, Maine's definition of PFAS implicates a much broader group of chemicals that do not all share these three critical properties. For example, the low global warming refrigerants used in HVACR and water heating systems are not persistent or bioaccumulative, and they have low levels of toxicity. Moreover, HVACR and water heating products are hermetically sealed and tend to have a useful life over 15 years. Refrigerants and HVACR and water heating technology provide life-saving heating and cooling and is integral to the cold chain for both food and medicine. These technologies are also vital to the decarbonization of our society. Additionally, certain polymers that meet Maine's definition of PFAS (i.e., fluoropolymers such as polytetrafluoroethylene (PTFE)) are used in a wide variety of products with unlikely potential for human or environmental release or exposure during use of the product, therefore, presenting minimal risk associated with the actual product itself.

Maine's broad definition of PFAS includes approximately 9,000 known chemicals. Even for industries with strong knowledge of the chemical make-up of components, it is extremely difficult to ensure an accurate dataset of chemicals within their supply chains. The HVACR and water heating industry must request, accumulate and summarize chemicals in components to even determine if their final products contain PFAS

to fully understand the effects of these draft regulations. Focusing the legislation on the non-polymer PBT PFAS will ensure Maine is able to protect human health and the environment from PFAS pollution, without putting unnecessary and ineffective burden on industries whose products may contain low-exposure PFAS that are not persistent, bioaccumulative, or toxic.

JRAIA would like to thank Maine for excluding new equipment use refrigerants and servicing-use refrigerants of HVACR equipment. JRAIA also thanks Maine for excluding refrigerants subject to acceptable use conditions pursuant to the U.S. Environmental Protection Agency's (EPA) Significant New Alternatives Program (SNAP). This will allow Maine consumers continued access to the newest generations of low global warming potential refrigerants and refrigeration equipment.

JRAIA urges DEP to clarify the definition of "Cooling, heating, ventilation, air conditioning or refrigeration equipment."
While we appreciate Maine's creation of a category of "Cooling, heating, ventilation, air conditioning or refrigeration equipment," this wording creates regulatory ambiguity for the HVACR and water heating industry. This category does not specify that water heating, water cooling, dehumidifiers, air cleaners, and all other space conditioning equipment are also included in the scope of the category. JRAIA requests the DEP to clarify if the scope of "cooling, heating, ventilation, air conditioning or refrigeration equipment" includes all equipment used to improve the indoor air environment or if it has a narrower scope.

JRAIA notes that some HVACR and water heating applications are not regulated under EPA's SNAP and would request that DEP provide a compliance pathway for product which utilize these refrigerants that are not covered under EPA's SNAP.

JRAIA urges DEP to amend its language regarding the effective date of the regulation.
JRAIA is concerned with language in the draft regulation stating DEP's intent to make the prohibition of products containing intentionally added PFAS effective immediately for all covered products, including those already in the stream of commerce. JRAIA strongly recommends DEP amend the prohibition to be effective on products containing intentionally added PFAS entering the stream of commerce at a date no earlier than one year from the publication of the final rule based on the manufacture date of the product. This kind of advanced notice would allow affected parties to contact suppliers and gather the most accurate data available to report to DEP. Additionally, without this lead time, inventory can become stranded causing a shortage of equipment and increasing costs to consumers in Maine. This additional time will also allow DEP to effectively staff and train the personnel who will manage reporting and certification requirements.
JRAIA notes this is a common practice for chemical reporting. EPA finalized a one-year information collection period following the effective date of Toxic Substances Control Act Reporting and Recordkeeping Requirements for Perfluoroalkyl and Polyfluoroalkyl Substances, which was then followed by a six-month reporting period. Thus, reporting forms were to be due a total of 18 months following the effective date of EPA's rule.

JRAIA requests DEP to clarify the exclusion of embedded components in the regulation.
AHRI's Directory of Certified Product Performance lists over 4 million unique products with over 9 million new products sold and installed annually in homes and businesses. Members must parse through tens of thousands of stock-keeping units (SKUs), each having hundreds of associated components and spare parts, to better understand whether their products will be affected by this draft regulation.

Collectively, this introduces hundreds of millions of potential chances for any given component to contain one of the thousands of PFAS included in Maine's PFAS definition. JRAIA's members have discovered in previous chemical reporting that frequently, component suppliers are unable to disclose the chemical composition of their components to their manufacturer customers, as the chemical composition is confidential intellectual property. While the draft regulations provide a process by which suppliers may substantiate these claims, JRAIA believes compliance challenges will inevitably complicate and delay the implementation of this regulation.

Chemicals in HVACR components are not disposed of in waterways, nor do they result in exposure through drinking water. The burden for this type of regulation would be impossible or nearly impossible for

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manufacturers to comply with. JRAIA notes that components used in HVACR are not generally accessed by the public.

JRAIA requests DEP to clarify the definition of "complex product" in the regulation.
JRAIA also notes that DEP does not define "complex product" in this regulation. JRAIA requests DEP consider clarifying the definition of "complex product" to align with Directive 98/71/EC OF THE European Parliament and of the Council (Directive - 98/71). Directive - 98/71 defines "complex product" as a product which is composed of multiple components which can be replaced permitting disassembly and reassembly of the product. It is important to address the definition of complex products to remove any ambiguity as to the reporting requirements.

Products or components containing de minimis levels, less than 0.1% by weight, of any PFAS should be exempt from the regulation.
PFAS in electrical and other components are difficult for manufacturers to track. Manufacturers have limited visibility and control over complex, multi-tiered, global electronics supply chains. Manufacturers must rely on the accuracy of reporting from every supplier throughout their entire supply chain on trace amounts of a chemical, even those that are present unintentionally. JRAIA notes there are common components in use by the HVACR and water heating industries that could be manufactured at the same facilities producing components for industries that can contain PFAS. This could result in unintentional cross-contamination and the continued presence of de minimis quantities of PFAS in components used in HVACR and water heating equipment. We continue to urge DEP to exempt articles that contain only de minimis quantities of PBT or non-PBT PFAS of 0.1% by weight or less, which will allow for a practicable regulation that is reasonably implementable. Not having a de minimis exemption puts an unreasonable burden on manufacturers, and therefore, DEP should provide permanent regulatory relief.

Conclusion
JRAIA thanks DEP for incorporating our previous feedback to acknowledge the complexity of HVACR and water heating products and the critical role they serve in the functioning of modern society.

JRAIA thanks DEP for the opportunity to comment on the Posting Draft for the Maine PFAS in Products Program and requests a discussion regarding ways to protect public health and the environment while considering the practical challenges to compliance with this concept draft.

We would be happy to provide any further information you may require.

Best Regards,

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About JRAIA

The Japan Refrigeration and Air Conditioning Industry Association (JRAIA) was originally established in February 1949 as the Japan Refrigerating Machine Manufacturers Association which was thereafter reorganized in February 1969 to become an incorporated association and renamed as it is at present.
JRAIA is the industry association representing over 160 manufacturers of refrigeration and air conditioning equipment in Japan. We, the members of JRAIA, have so far been dedicated to offering quality products to the global markets including the U.S. JRAIA aims to promote and improve production, distribution and consumption of refrigeration and air conditioning equipment and their applied products, as well as auxiliary devices and components, automatic controls and accessories and thereby contribute to the steady development of Japanese industry and the improvement in people's standard of living.

For more information, please see JRAIA's website: www.jraia.or.jp
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