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Joshua Shodeinde
Regulatory and Compliance Engineer
Maryland Department of the Environment
Air and Radiation Administration
Air Quality Planning Program
1800 Washington Blvd, STE 730
Baltimore, MD 21230
(Submitted via email to Joshua.Shodeinde@maryland.gov)

Re: AHRI Comments to Maryland Draft Regulatory Prohibitions on the Use of Certain Hydrofluorocarbons in Aerosol Propellants, Chillers, Foam, and Stationary Refrigeration End-Uses Stakeholder Meeting, September 23, 2019

Dear Mr. Shodeinde,

This letter is submitted in response to the stakeholder meeting held on September 23, 2019 on the Maryland Department of the Environment's (MDE) draft proposal for Regulations .01 to .05 under new chapter COMAR 26.11.33 Prohibitions on Use of Certain Hydrofluorocarbons in Aerosol Propellants, Chillers, Foam, and Stationary Refrigeration End-Uses.

AHRI represents over 315 air-conditioning, heating, and refrigeration equipment manufacturers. In North America, the annual output of the HVACR and water heating industry is worth more than \$44 billion. In the United States, the industry supports 1.3 million jobs and \$256 billion in economic activity annually.

AHRI has been working for more than a decade to support regulations to reduce the consumption and production of HFCs. Our members strongly supported the agreement to amend the Montreal Protocol on Substances that Deplete the Ozone Layer to phase down HFC production and consumption as a proven, predictable, and practical approach. We demonstrated that support in our work with state regulators and environmental non-governmental organizations (E-NGOs). Our industry has worked closely with local governments, both foreign and domestic, to prepare and successfully execute the safe and orderly transition to low-GWP refrigerants. We look forward to collaborating with the Maryland Department of the Environment; we hope that our comments will be helpful and encourage you to contact us with any question, concerns or requests.

We are currently working together with our E-NGO partners and with the eight Climate Alliance states that have announced an intent to regulate HFCs in the United States. It is our goal to help states and provinces adopt and implement laws and regulations consistently across jurisdictions. We recognize that regulations must meet greenhouse gas reduction objectives while still providing critical benefits—preserving food and medicine and, in some cases, life-saving facility cooling. As a matter of general policy, AHRI would prefer a federal initiative to address low-GWP refrigerants to avoid a patchwork of regulations. We recognize Maryland’s efforts to address this important issue and appreciate the opportunity to comment on the regulation.

Our comments focus on recommendations designed to harmonize aspects of the regulation with existing regulations, to align with the intent of the original EPA SNAP rules, and to achieve a workable, enforceable framework to provide certainty, consistency and fairness for industry.

Definitions

The MDE regulation includes relevant definitions which are largely consistent with the EPA’s SNAP 20 & 21 regulations. AHRI’s experience with these regulations suggests that their terms “new equipment” “nominal compressor capacity” and “reclaim” have multiple interpretations relating to the commercial refrigeration sector. To resolve potential ambiguities, AHRI proposes adding the following definitions:

“New Refrigeration Equipment” means

1. Any refrigeration equipment system, manufactured after the effective date of this regulation, that is first installed for an intended purpose using new or used components; or
 - a. Additions to existing equipment such that they increase the total nominal compressor capacity of a system after the date at which this sub article becomes effective;
2. Any refrigeration equipment that is modified such that it is:
 - a. Modified to increase the total nominal compressor capacity of a system after the date at which this sub article becomes effective; or
 - b. Replaced or cumulatively replaced after the date at which this sub article becomes effective, such that the capital cost of subsequent service, repair or replacement would exceed 50 percent of the capital cost of replacing the entire refrigeration system based on quoted system replacement cost.

“Nominal Compressor Capacity” means the capacity of the system’s compressor(s) based on published ratings in accordance with a recognized standard such as AHRI Standard 540.

“Reclaim” means to reprocess recovered refrigerant to all of the specifications in appendix A of this subpart (based on AHRI Standard 700-2016 or the most recent subsequent version), Specifications for Refrigerants) that are applicable to that refrigerant

and to verify that the refrigerant meets these specifications using the analytical methodology prescribed in that standard.

We welcome feedback from MDE staff if there are any questions surrounding these proposed additions.

Formal Exemption Process

AHRI requests the inclusion of a process to allow for potentially necessary exceptions that may come to light in the future. A good model for this framework is Canada's "essential purpose" permit option included in the Ozone-depleting Substances and Halocarbons Alternatives Regulations (ODSHAR). Low-GWP alternatives and the products that use them are complex. Manufacturers are innovating and developing new products and technologies for a variety of vital applications like commercial refrigeration. As new uses and technologies come onto the market and as innovation continues, there may be a need to exempt certain products for certain applications. In the ODSHAR, the exception permit clause is intended to allow a person to import, manufacture, use, or sell a substance or product designed to contain a substance if "it will be used for an essential purpose" and a permit is specifically issued. Environment and Climate Change Canada (ECCC) defines "essential purpose" as a purpose requiring the use of a substance or a product containing or designed to contain a substance, when that use is necessary for the health and safety or the good functioning of society, encompassing its cultural and intellectual aspects, and when there are no technically or economically feasible alternatives to that use that are acceptable from the standpoint of the environment and of health.

The ODSHAR essential purpose exemption and definition clause can be reviewed at Part 5 – s.66 (1) and (2). The permitting process is still being finalized by ECCC. We encourage Maryland to work with ECCC directly to learn more about the "essential purpose" permitting avenue.¹

Disclosures

At the September 23rd meeting, many stakeholders expressed concern with the proposed requirement for a written disclosure statement. AHRI recommends including a provision in the regulation that expressly permits the use of internet disclosures in lieu of physical labels. Industry experience demonstrates that physical labels are not an effective means of communicating compliance with consumers or regulators because this kind of equipment is never on display. Rather, it is stored in a warehouse until after it is contracted for, sold, and installed. Internet disclosures are more cost effective and practical means of communicating important compliance, installation, and consumer information about installed equipment such as commercial refrigeration. Importantly, the AHRI Directory offers an existing accessible database of readily available information on a vast array of regulated equipment. The AHRI Directory may be of use to regulators as states promulgate HFC rulemakings, particularly as a means of easily accessing information on millions of models on the market. Currently, centralized database

¹ ECCC's Halocarbons Management Team at ec.gestionhalocarbures-halocarbonsmanagement.ec@canada.ca.

provides contractors, regulators, and consumers with product information, including model-specific certificates and EnergyGuide labels.

We extend the offer to host a webinar to introduce MDE staff to the AHRI Directory and showcase the capabilities that could be adapted to help manufactures comply with internet disclosures. The AHRI Directory website is, <https://www.ahridirectory.org>.

One additional concern about the disclosure requirement in the proposed draft regulations is its length and unique language. As MDE is aware, an important policy consideration in implementing state regulation is the additional burdens that state-by-state patchwork of regulations impose on a line of products that are marketed and sold nationally. A practical regulation would align as much as possible with other states' requirements to reduce added costs to Maryland consumers for Maryland-specific products. As such, we encourage the MDE to adopt alternate, more generic language for the label:

“This equipment meets the regulatory requirements for hydrofluorocarbons in all states as of the manufacturing date. Only those refrigerants approved in the state for specific end-uses may be used.”

It is imperative that states enacting SNAP Rules 20 and 21 permit for the use of a generic label in order to maintain market certainty and allow for distributors to sell products throughout the country.

Recordkeeping

AHRI request that the MDE reconsider the proposed recordkeeping requirements. Due to the complexities of state-by-state regulation and the distribution chain for commercial refrigeration and stationary AC equipment, the proposed requirements for recordkeeping are overly burdensome on manufacturers.

AHRI members operate within a global supply chain. The equipment is often not shipped to the direct end-user. Distribution centers and contractors play the central role in delivering the good to the end user. Most AHRI members do not keep the statements and records that this regulation will now require, such as the name and address of the purchaser or the date of sale because the manufacturer never executes a sale to the end-user. In most cases, the manufacturer sells to a local distributor, who sells the equipment to a contractor, who sells the equipment to the end user and then installs the equipment. Many of the products that are manufactured by our members do not reach Maryland through the initial sale because distributors operate in multi-state geographic regions, as to many contractors. Reporting is further complicated by the system-structure of the equipment. Frequently, a sale of part or some of a system includes components, and those components may not individually contain all refrigerant and charge information. AHRI encourages the department to reconsider recordkeeping requirements to reduce unnecessary burden that drives little benefit.

Also relevant is the competitive impact of sales disclosures. Sales records including customer lists, market shares, and product selections that manufacturers are important

proprietary business data. For example, the U.S. Department of Justice discourages the disclosure of any market data or sales information that is not an aggregation of more than five market players. With sales-specific recordkeeping comes a risk of public disclosure that could result in anticompetitive impacts, contrary to the policies of the Department of Justice.

AHRI recommends Maryland remove all recordkeeping requirements.

Codes and Standards

In order for manufacturers to adopt some low-GWP alternative refrigerants, the safety standards and building codes must be updated for the use mildly flammable refrigerants. While we anticipate that this is a minor concern with the current proposal, it is important to note that some products' installation may be inhibited by existing code limitations. For example, there are no refrigerants listed pursuant to the EPA's Significant New Alternatives Program as acceptable alternatives for chillers designed to use high pressure "410A"-like refrigerants. The ASHRAE-listed alternatives are mildly flammable. The model building code to enable the use of mildly flammable refrigerants is not yet available. If ASHRAE Standard 15 and UL60335-2-40 are adopted into Maryland building codes, chillers manufacturers could comply with 2024 transition date. AHRI would like to suggest MDE work with the Department of Labor, Licensing and Regulation to adopt rules permitting the use of substitutes not prohibited by this regulation.

AHRI has developed an expertise in the codes and standards amendments required to successfully install low-GWP refrigerant. We would appreciate the opportunity to engage with and educate MDE staff and other government officials on the necessary code changes.

Reclaim

To support the important goals of emissions reductions, AHRI strongly suggests that MDE encourage the use of reclaimed refrigerants through its HFC regulations. Allowing the use of and creating demand for reclaimed refrigerant encourages the proper collection of refrigerant during maintenance and at the end-of-life of equipment. Any ban that does not exempt reclaimed product will leave stranded all existing equipment that relies on a prohibited refrigerant. We believe that Maryland's strategy should not only exempt reclaimed refrigerant but should start with a heavy emphasis on the value of refrigerant reclamation as a means to reduce emissions and we strongly recommend that MDE not just exempt it from for servicing equipment installed prior to the SNAP prohibition dates, but that it take affirmative steps to promote reclamation by requiring the use of reclaimed refrigerant in state procurement processes. A strategy that promotes the recovery, reclamation and re-use of refrigerants directly achieves MDE's goal of reducing HFC emissions by eliminating, or at least significantly reducing, the need to service existing systems with newly manufactured product.

Technician Training

Training and servicing requirements for technicians will be important considerations for future regulations. AHRI suggests that MDE consider including a requirement that technicians have refresher training on some frequency as the transition to lower global warming potential

refrigerants will require new uses of different American Society of Heating and Refrigeration Engineers (ASHRAE) safety classification of refrigerants than has been historically used.

Thank you for providing stakeholders the opportunity to give early feedback and for taking comments back to the Climate Alliance to ensure state-to-state harmonization of rules. If you have any questions regarding this submission, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'LPG', with a long horizontal flourish extending to the right.

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