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January 17, 2020

Ajo Rabemiarisoa,  
Environmental Engineer  
DNREC - Division of Air Quality  
(Submitted via email to [ajo.rabemiarisoa@delaware.gov](mailto:ajo.rabemiarisoa@delaware.gov))

Re: AHRI Comments to Delaware Draft Regulation 1151 – Regulations for the Use and Manufacturing of Hydrofluorocarbons

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Dear Ms. Rabemiarisoa,

This letter is submitted in response to the Delaware Department of Natural Resources and Environmental Control, Division of Air Quality Proposed Regulation 1151 – Prohibitions on Use of Certain Hydrofluorocarbons in Specific End-Uses.

AHRI represents over 300 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 Delaware Department of Natural Resources and Environmental Control; we hope that our comments will be helpful and encourage you to contact us with any questions, concerns or requests.

We are currently working together with our E-NGO partners and with the Climate Alliance states that have announced an intent to regulate HFCs in the United States. It is our goal to help states adopt and implement laws and regulations consistently, with standard requirements, across jurisdictions. We recognize that regulations must meet greenhouse gas reduction objectives while still providing critical societal benefits—preserving food and medicine and, in some cases, providing life-saving cooling (e.g. hospitals). 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 Delaware's efforts to address this important issue with consistency 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 and consistency for industry by addressing the following topics:

1. Definition and use of “Manufacture”
2. Allowing the use of products intended for service or maintenance
3. Reclaim
4. Definition of “New”
5. Disclosures
6. Codes and Standards
7. Technician Training
8. Formal Exemption Process

### **Definition and use of “Manufacture”**

The intention of United States Environmental Protection Agency (EPA) Significant New Alternatives Program (SNAP) Rules 20 and 21 is to regulate the use of certain HFCs in specific end uses. It is AHRI’s understanding that DNREC’s proposed regulation is intended to adopt these requirements for equipment being installed in the state of Delaware. As written, the draft language may ban warehousing and the transport of non-Delaware products through the state. For example, DNREC’s requirements would prevent products from being imported into the port of Wilmington or transported on I-95 through the state of Delaware. Moreover, the regulatory language could prevent research on HFCs at universities or at companies located in the state of Delaware that manufacture small amounts of refrigerant. AHRI recommends the following edits to clarify the intent of the regulation:

In section 1.0, Purpose, delete the term “manufacture”:

- 1.1 This regulation establishes the prohibitions and requirements for the use ~~and manufacture~~ of hydrofluorocarbons in the State of Delaware according to their specific end usage (including air conditioning and refrigeration equipment, aerosol propellants, and foam end-uses) and adopts specific United States Environmental Protection Agency Significant New Alternatives Policy Program prohibitions. This regulation is designed to support greenhouse gas emission reductions in the State of Delaware.”

In Section 3.0, Definitions:

Banning the formulation or packaging of controlled substances inequitably impacts small and medium distributors, packagers, and companies who may not have sufficient capital to move their regional distribution centers to another state. It harms business owners who prefer operating in Delaware and are willingly compliant with HFC regulations in every state banning their use. AHRI strongly recommends that DNREC modify the definition of “USE” as follows.

“Use” means any utilization of any substance, including but not limited to utilization in a ~~manufacturing process or~~ product installed in Delaware, consumption by the end-user in the State of Delaware, ~~or in intermediate applications in the State of Delaware, such as formulation or packaging for other subsequent applications~~. For the purposes of this regulation, use excludes residential use, ~~but it does not exclude manufacturing for the purpose of residential use~~.

### **Allowance of the manufacture of products intended for service or maintenance**

AHRI supports the clarification that products or equipment manufactured prior to the effective date may be used after the specified prohibition date. However, we are concerned that the language is not clear that products or substances that are intended for servicing, maintenance, or repairs may still be manufactured and used after the effective date, so long as they do not fall under the definition of “new equipment”. Clarification is needed in the regulation to allow for continued servicing of existing equipment as it is not DNREC’s intention to force the replacement of equipment before the end of its useful life.

AHRI suggests adding the following statement:

In section 4.0, Standards (Requirements):

4.1.2 Except where an existing system is retrofit, nothing in this regulation requires a person that acquired a product or equipment containing a prohibited substance prior to an effective date of the prohibition in Section 6.0 to cease use of that product or equipment. Products or equipment manufactured prior to the applicable effective date of the restrictions specified in Table 1 of subsection 6.1.1 of this regulation (including spray foam systems not yet applied on site) may be sold, imported, exported, distributed, installed, and used after the specified date of prohibition. For clarity, products, equipment, or substances may be manufactured, sold, imported, exported, distributed, installed, and used after the specified date of prohibition to service existing equipment. Finally, products may be manufactured, sold, imported, exported, and distributed for use outside the state.

### **Reclaim**

To support the important goals of emissions reductions, AHRI would like to reiterate its suggestion that DNREC encourage the use of reclaimed refrigerants through its HFC regulations. Creating demand for reclaimed refrigerant encourages the proper collection of refrigerant during maintenance and for end-of-life of equipment. We strongly recommend that DNREC 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 DNREC’s goal of reducing HFC emissions by eliminating, or at least significantly reducing, the need to service existing systems with newly manufactured product.

AHRI is concerned that the definition of “Use” in the draft regulation may prohibit the proper collection of refrigerant during maintenance and at the end of life for the equipment

In section 3.0, Definitions:

AHRI strongly recommends that DNREC modify the definition of “USE” as follows.

“Use” means any utilization of any substance, including but not limited to utilization in a ~~manufacturing process or~~ product installed in Delaware, consumption by the end-user in the State of Delaware, ~~or in intermediate applications in the State of Delaware, such as formulation or packaging for other subsequent applications.~~ For the purposes of this regulation, use excludes residential use, ~~but it does not exclude manufacturing for the purpose of residential use.~~

### **Definition of “New”**

AHRI appreciates DNREC’s work to upgrade the definition of “new” based on stakeholder feedback. We believe that this addresses potential ambiguities.

### **Disclosures**

At the September 24<sup>th</sup> 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 HVAC equipment is rarely on display. Rather, it is stored in a warehouse until after it is contracted for, sold, and installed. Internet disclosures are acceptable and a more cost effective and practical means of communicating important compliance, installation, and consumer information about installed equipment such as commercial refrigeration. Indeed, under Federal Trade Commission rules governing the familiar yellow Energy Guide labels, online information by manufacturers satisfies the disclosure obligation. Equipment requiring refrigerant disclosures could be made the same way.

The AHRI Directory offers an option as an existing accessible database of readily available information on a vast array of regulated equipment. As discussed at the September 27, 2019, and January 15, 2020 meeting, 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, the centralized database provides contractors, regulators, and consumers with product information, including model-specific certificates and EnergyGuide labels.

We hope that the September 27, 2019 and January 13, 2020 webinars were helpful to introduce DNREC staff to the AHRI Directory and showcase the capabilities that could be adapted to help manufactures comply with internet disclosures. AHRI encourages DNREC staff to explicitly allow the use of an online or written disclosure to ease the burden on manufacturers and to allow for a more effective means of communicating compliance with consumers and regulators.

## **Codes and Standards**

AHRI strongly recommends DNREC work with the county Divisions of Codes and Standards to adopt rules permitting the use of substitutes not prohibited by this regulation. For manufacturers to adopt some low-GWP alternative refrigerants, the safety standards and building codes must be updated for the use mildly flammable refrigerants. This is a concern with the current proposal and 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 and not yet approved for certain equipment types by EPA. The model building code to enable the use of mildly flammable refrigerants is not yet available. Unless ASHRAE Standard 15 and UL60335-2-40 are adopted into Delaware building codes, chillers manufacturers could not comply with 2024 transition date.

AHRI suggests that Delaware convene a meeting of interested stakeholders including local fire service, state fire marshal, building code officials and others for an educational session regarding the safe transition to low GWP refrigerants.

## **Technician Training**

Training and servicing requirements for technicians will be important considerations for future regulations. AHRI suggests that DNREC 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 have been historically used.

## **Formal Exemption Process**

AHRI would like to reiterate its request for the inclusion of a process to allow for potentially necessary exemptions 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 exemption 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). We encourage Delaware to work with ECCC directly to learn more about the “essential purpose” permitting avenue.<sup>1</sup>

Thank you for providing stakeholders the opportunity to give feedback during and following the stakeholder meetings along with sharing these comments with 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,

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<sup>1</sup> ECCC's Halocarbons Management Team at [ec.gestionhalocarbures-halocarbonsmanagement.ec@canada.ca](mailto:ec.gestionhalocarbures-halocarbonsmanagement.ec@canada.ca).