January 25, 2016

Mr. Luke Hall-Jordan
Stratospheric Ozone Protection
Office of Atmospheric Programs, Mail Code 6205T
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460


Dear Mr. Hall-Jordan:

These comments are submitted by the Air-Conditioning, Heating and Refrigeration Institute (AHRI) in response to the U.S. Environmental Protection Agency’s (EPA) notice of proposed rulemaking appearing in the Federal Register on November 9, 2015 (80FR769458) proposing an update to the refrigerant management requirements under the Clean Air Act.

AHRI is the trade association representing manufacturers of heating, cooling, water heating, and commercial refrigeration equipment. More than 300 members strong, AHRI is an internationally recognized advocate for the industry, and develops standards for and certifies the performance of many of the products manufactured by our members. In North America, the annual output of the HVACR industry is worth more than $20 billion. In the United States alone, our members employ approximately 130,000 people, and support some 800,000 dealers and contractors.

AHRI has been a strong proponent of extending the provisions of Section 608 of the Clean Air Act (CAA) to hydrofluorocarbons (HFCs). We supported the EPA when it first made the proposal back in 1998. We also supported the petition filed in 2014 by Alliance for Responsible Atmospheric Policy which called on the EPA to finalize the rulemaking proposed in 1998. AHRI has actively supported industry-led efforts to promote refrigerant management. With other industry partners we established the Global Refrigerant Management Initiative (GRMI). Last July, we announced, in collaboration with the United Nations Environmental Programme (UNEP), the development of a global qualification program for refrigerant supply chain networks, titled "refrigerant driving license" (RDL), aimed at ensuring the sound and safe management of refrigerants.
AHRI supports the general intent of the proposed rule. However, we would like to provide several comments that we believe will help ensure that the refrigerant management policies proposed by EPA are robust, enforceable and will achieve the desired reduction in HFC emissions. We have reviewed the proposed rule and would like to comment on the following issues:

**Definitions**

The proposed revisions to the definition of “substitute” continue to center on any chemical or product that is used as a refrigerant to replace a class I or II ozone depleting substance (ODS). This definition was appropriate 20 years ago, where all new alternative refrigerants were intended to replace class I and II ozone depleting substances. However, today, most alternatives accepted under the Significant New Alternative Policy (SNAP) program are replacements to HFCs, which are not ozone depleting substances. AHRI believes that the definition must be amended to reflect this reality and proposes the following:

*Substitute* means any substance, other than a class I or class II substance that functions as a refrigerant, including but not limited to HFCs, PFCs, HFOs, hydrofluoroethers and hydrocarbons.

**Recordkeeping for Appliances Containing Five to 50 Pounds**

AHRI supports in principle EPA’s proposed recordkeeping requirements for equipment containing more than 5 and less than 50 pounds of refrigerants. EPA justifies the proposal by stating that it will improve the agency’s ability to enforce the venting prohibition. While AHRI hopes this will be the case, we believe it is imperative that EPA steps up its enforcement actions in the field against non-compliant technicians.

**Leak Inspections and Repairs**

In principle, AHRI supports periodic leak inspections as a proactive means to detect leaks, reduce refrigerant emissions, and maintain energy efficiency of equipment. However, AHRI questions the cost effectiveness of requiring owners and operators of large commercial refrigeration equipment (with a refrigerant charge of 500 pounds or more) to perform quarterly leak inspections. The cost of a single leak inspection on a large supermarket could be well in excess of $5,000. However, this cost will be imposed even when the source of the leak is readily evident and accessible. AHRI would support a proposal that requires a comprehensive leak inspection on a yearly basis only.

AHRI supports the proposed changes to the leak repair requirements. However, when implementing these changes, it is important for EPA to differentiate between accidental and sudden discharge versus leak over time. Similarly, the regulations must differentiate between major fixable leaks and minor unfixable leaks. ASHRAE Standard
147-2013, *Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems*, includes Section 6.2.1, *Leak Rate Specification* and Table 6.2.1, *Equipment Manufacture Leak Threshold Limits*. AHRI recommends that EPA reference this standard in 157(e), *Appliance Repair*, indicating that leaks meeting the thresholds described in ASHRAE 147 should be identified and repaired as an alternative to the statement that “all leaks must be identified and repaired.”

AHRI also believes that EPA should allow owners and operators to continue operating their appliance beyond the two-year period if they notify EPA that the reason they went over the leak limit was only because of one or more catastrophic leaks. As written, this rule could have the unintended consequence of requiring the replacement of a relatively new and expensive piece of equipment which may have many years of useful life remaining. In addition, it is important that owners and operators be allowed to continue operating the equipment until EPA has responded to the notification and that any potential actions based on the EPA response have been implemented.

**Standard for Recovery and/or Recycling Equipment**

AHRI believes that the most appropriate and practical option moving forward is the creation of an appendix B4 that would combine the requirements of appendix B3 (based on AHRI 740-2015) with the requirements in Supplement SB of UL 1963. However, in creating this appendix, AHRI strongly encourages EPA to engage industry in the process to strengthen the safety requirements associated with the use of flammable refrigerants.

Furthermore, to distinguish between recovery and/or recycling units capable of handling flammable refrigerants from those that cannot, AHRI strongly recommends that a label be required on all products certified to handle one or more flammable refrigerants.

It should be noted that certain used flammable refrigerants may constitute hazardous waste which would, based on current regulations, not only prevent contractors from recovering and transporting them, but would also prevent reclaimers from receiving, processing and reclaiming such refrigerants. At the time of enactment of the original 608 rules, EPA also enacted rules under the Resource Conservation and Recovery Act (RCRA) that specifically exempted used CFCs from being classified as hazardous waste to ensure that used CFCs would be able to be reclaimed. AHRI strongly believes EPA must implement a blanket exemption for all used/recovered refrigerants, excluding ammonia, from the definition of hazardous waste in conjunction with the effective date of the final Section 608 rulemaking.

Finally, AHRI supports EPA’s proposal to allow equipment certifying organizations that have already been approved by EPA to continue certifying equipment without the need to re-apply. These certifying organizations already have the necessary technical expertise and have been testing recovery/recycling equipment with HFCs and other substitutes for a very long time. AHRI also supports removing the existing reporting
requirements and requiring instead certifying organizations to publish lists of certified equipment online. AHRI has for many years provided a list of certified equipment on its website at the following link: https://www.ahridirectory.org/ahridirectory/pages/rrr/RRREDirectory.pdf

**Technician Certification**

AHRI supports extending the technician certification requirement for the handling of all refrigerants, exempt and non-exempt. We believe all refrigerants and substitutes should be treated equally in order to provide consistency and clarity in the industry. We don't understand EPA's rationale to extend the technician certification requirements only to refrigerants that are not exempt from the no-vent requirements. Most refrigerants exempted from the no-vent requirements are highly flammable and require extreme care during handling and servicing. Exempting these refrigerants from the technician certification requirements would be irresponsible as it will allow unqualified personnel access to refrigerants that require special handling. We urge EPA to reconsider its proposal and extend the technician certification requirements to all refrigerants.

AHRI also supports a periodic update of the technician certification test bank. The current test bank focuses on CFCs and HCFCs and does not address the proper handling and recovery of HFCs and other substitute refrigerants. It is also important that the test bank be updated on a regular basis to make sure that the questions remain current. AHRI offers to assist EPA in this process.

Finally, we strongly believe in the periodic recertification of technicians instead of a one-time certification that may very well have been obtained 20 years ago. The industry is constantly changing in particular with respect to refrigerants. Keeping technicians current by requiring periodic recertification will be beneficial to the environment and the industry. We strongly encourage EPA to consider a mechanism to keep the proposed technician database current.

**Adoption of AHRI 700**

AHRI supports EPA's adoption of the latest version of AHRI 700. However, we strongly recommend that EPA institute a process by which it will adopt future versions of the AHRI standard in a timely manner. This is particularly important as new refrigerants are being added in record numbers to the AHRI standard and the SNAP program.

AHRI recommends that the AHRI standard be incorporated by reference. The AHRI standard is publically available and can be downloaded for free from the AHRI website. As a new version of the AHRI standard becomes available, EPA would simply need to update the new publication year of the standard. Doing so will ensure that the regulations are up-to-date.
Refrigerant Reclamation

AHRI supports EPA’s proposed reporting and record keeping for reclaimers. However, we do not support a special label for reclaimed refrigerants for the following reasons:

- Both virgin and reclaimed refrigerants must meet the requirements of AHRI 700 and are therefore compliant with purity levels that are deemed acceptable by the industry.
- Labeling reclaimed refrigerants may imply that reclaimed refrigerants are of inferior quality and could send a confusing signal to the market place.
- Requiring a label will add cost to reclaimed refrigerants. EPA has not assessed the cost-effectiveness of requiring such a label.

We also support third party certification requirements for reclaimers and refrigerant testing laboratories to ensure that reclamation facilities have the capability to follow required practices and that reclaimed refrigerant is properly tested and certified to meet the specifications of AHRI 700.

AHRI has administrated a voluntary third-party certification program for reclaimers. In fact, AHRI established its reclaimer certification program in the late nineties in anticipation that EPA would require it. However, for reasons unclear to us, EPA decided otherwise. We are glad to see that EPA is reconsidering the matter. AHRI also administers a voluntary third party certification program for refrigerant testing laboratories to verify the ability of laboratories to properly and consistently test all refrigerants for compliance with the AHRI 700 standard.

AHRI shares EPA’s vision of a more robust reclaimer certification process. We strongly believe that the most effective way to ensure the capability of reclaimers is to subject reclaimers to an independent third-party certification process. AHRI also believes that a most effective way to ensure the quality of reclaimed refrigerants would be to require that all reclaimed refrigerant be tested and certified as reclaimed by an independent third party certified laboratory. Such programs will provide a level playing field for all reclaimers while providing EPA, OEMs and consumers assurances that reclaimed refrigerants on the market meet the specification of AHRI 700. EPA currently requires third-party certification for recovery/recycling equipment, and therefore could implement similar programs for refrigerant testing laboratories and reclaimers. However, the fact that AHRI is the only entity currently operating a program should not stop EPA from requiring third-party certification of reclaimers and laboratories as other organizations will see a business opportunity to start similar programs once the regulations are in place.

- AHRI has developed operational manuals that describes the procedures and policies of its reclaimed refrigerant and refrigerant testing laboratory certification programs. The documents can be downloaded from the AHRI website at the following links: Reclaimed Refrigerant Certification Program Operations Manual: [http://www.ahrinet.org/App_Content/ahri/files/Certification/OM%20pdfs/2012/RE](http://www.ahrinet.org/App_Content/ahri/files/Certification/OM%20pdfs/2012/RE)
CL%20OM-2012.pdf


We invite EPA and any other organization interested in starting similar programs to study these documents which are based on more than two decades of experience. AHRI appreciates the opportunity to provide these comments. If you have any questions regarding this submission, please do not hesitate to contact me.

Sincerely,

[Signature]

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