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California Air Resources Board 1001 I Street Sacramento, CA 95814

Submitted via: electronic submittal

Re: Lennox Comments on California Air Resources Board Proposed Regulation for Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration and **Foam End-Uses**

Lennox International Inc. (Lennox) hereby submits comments regarding the, *Notice to consider* Proposed Regulation for Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration and Foam End-Uses, published by the California Air Resources Board (CARB) on January 30, 2018.

Lennox is a leading provider of climate control solutions for the heating, air-conditioning, and refrigeration equipment markets. Lennox is a publicly-traded company focused on the HVACR industry and has thousands of employees. Lennox manufactures Commercial Refrigeration products that will be impacted by California regulations as an outcome of the proposal and future California regulatory actions.

Lennox supports California and national efforts to reduce climate pollutants to improve human health, help to preserve natural resources and protect our environment. This is exemplified by Lennox's tradition of innovation and product efficiency leadership in the HVACR industry. This industry is an important source of American jobs, and provides equipment that is vital to the health and wellbeing of consumers and the preservation of food. Lennox appreciates the opportunity to work with CARB to develop reasonable, practical regulations that help to further California's climate improvement initiatives.

General Comments

Lennox provided comments regarding CARB's Proposed High Global Warming Potential Emission Reduction on November 10, 2017, the content of which remain valid. Lennox again recommends CARB align California actions aligned with that federal requirements and international agreements provide the most effective way to reduce emissions of high GWP refrigerants. Harmonized regulations across North America are more desirable and effective than individual countries or state-by-state efforts which could lead to inconsistent requirements between regions and added costs of compliance being passed to consumers. Further CARB should use processes that insure direct stakeholder involvement and consensus where ever possible. These following comments will add to the prior comments from Lennox regarding the new aspects of the recent CARB proposal.

We agree with the general approach of this Rulemaking and support the current regulatory structure—a consistent, predictable regime administered nation-wide by the EPA managing refrigerants. Further, when looking at adopting EPA SNAP Rules into state regulation, Lennox strongly recommends that ARB consider several additional factors from those outlined in the current proposal:

- ARB should focus on a clearly defined process on managing and regulating the use of acceptable HFC refrigerants.
- ARB should incorporate certain provisions of the Environment and Climate Change Canada (ECCC)¹ final rule published in October 2017.
- ARB should consider a phasedown schedule for the use of certain HFCs.
- Lastly, ARB should acknowledge the existing federal process for acceptable replacements and consider servicing and reclaimed refrigerant scenarios.

Process Clarification

From the proposed regulation it is unclear how ARB will manage and regulate the use of acceptable HFC refrigerants. In the current proposed regulation, there is no reference to how California will determine or acknowledge acceptable refrigerants. Without clear direction, this could create confusion as manufacturers determine which refrigerants are acceptable alternatives to the list of prohibited substances in Appendix A. The EPA maintains a list of acceptable refrigerants that provides guidance to manufacturers regarding which refrigerants are legal as replacements for prohibited substances at the federal level. Manufacturers need clarification for how California will identify acceptable refrigerants and the process that will be used for that determination. Lennox urges that ARB acknowledge and abide by the EPA's SNAP listing process. It is a vital principal of the SNAP program that replacement refrigerants are identified and approved prior to the prohibition of existing refrigerants. Because EPA's regulations remain the law, manufacturers, distributors, and consumers are operating under the expectation that all EPA-approved refrigerants will remain so in California, unless expressly prohibited. It would be helpful for ARB to clarify this legal reality in express terms.

Additionally, ARB has not included any information on the future process for determining prohibited refrigerants beyond those listed in Appendix A of the proposed regulation. In order to comply and plan for future regulation, manufacturers need clarity on how California will continue to regulate HFC refrigerants in all end-uses.

Coordination with Environment and Climate Change Canada (ECCC)

In the proposed regulation, R-404A would be prohibited for commercial refrigeration standalone medium temperature units between 2019 and 2020. Lennox would like to see the prohibition on R-404A delayed one year for stand-alone equipment. This delay would allow EPA the opportunity to approve an acceptable alternative such as R-448A and R-449A&B. While

¹ http://www.gazette.gc.ca/rp-pr/p2/2017/2017-10-18/html/sor-dors216-eng.php

these refrigerants are not yet EPA SNAP approved for this end use, the industry is actively pursuing their approval and filed a petition with the EPA in March 2017. However, with no acceptable refrigerant currently identified for R-404A, serious market confusion and disruption is likely to occur. In coordinating with the ECCC regulation, ARB should amend its refrigeration regulation to allow for the use of R-448A and R-449A&B in stand-alone medium-temperature applications. These refrigerants have a low GWP and can be retrofitted in R-404A systems. Testing done by manufacturers show a 5% to 10% efficiency improvement over R-404A. In addition, components compatible with these refrigerants are readily available and the supply chain has reached a level of maturity comparable to R-404A which could significantly reduce the time needed to use these alternatives in this application. We strongly recommend that ARB update the proposed regulation to allow for the use of R-448A and R-449A&B in stand-alone medium-temperature commercial refrigeration applications moving forward. As mentioned above, further clarification on the future process with an emphasis on California allowing refrigerants approved by the EPA would benefit end users and manufacturers when complying with these regulations.

Phasedown Schedule

Lennox also supports a phasedown schedule as opposed to a complete prohibition on use of certain HFCs. Complete prohibitions raise the concern of servicing equipment. The current installed base—i.e. the existing commercial refrigerators, freezers, and other applications that are currently in use throughout the state of California—uses refrigerants that are legal today, but will be prohibited after the regulation goes into effect. Existing products will require servicing. An outright prohibition will eliminate the ability to repair and service presently installed equipment, the function of which relies on the refrigerant that it was designed to use when it was manufactured. The installed base, including newly installed equipment, will have to undergo a costly replacement, rather than a simple repair. A phasedown process with clear benchmarks for repair, reclaimed refrigerant and retrofit uses would address this issue and provide clarity for equipment with prohibited refrigerants that was installed before the date of prohibition. ARB should address this issue by providing clear guidance on servicing existing equipment. For example, existing systems using prohibited refrigerants should continue to be allowed to be operated, serviced and maintained for the remainder of their useful life if installed or retrofitted prior to the effective date as described in Federal Register / Vol. 80, No. 138 / Monday, July 20, 2015.

Additionally, we cannot emphasize enough the importance of exempting reclaimed refrigerant as an essential part of ARB's strategy to reduce HFC emissions. Any ban that does not exempt reclaimed product will leave stranded all existing equipment that relies on a banned refrigerant. We believe that ARB'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 ARB not just exempt it from future sales bans, but that it take affirmative steps to promote reclamation. A strategy that promotes the recovery, reclamation

and re-use of refrigerants directly achieves CARB's goal of reducing HFC emissions by eliminating, or at least reducing, the need to service existing systems with newly manufactured product.

A complete prohibition of the refrigerants listed in Appendix A de facto outlaws all retail food refrigeration equipment in the state of California. By ostensibly de-listing a refrigerant without a replacement in some applications, ARB is creating an untenable gap. The production of new equipment is dependent on several factors, including available components, certainty with regulations, and market desire – all of which take a significant amount of time and research. Manufacturers must develop, demonstrate, test, and evaluate new equipment, and then retool their lines to manufacture it. Additionally, commercial refrigeration equipment must pass national sanitation standards. Therefore, a complete prohibition on September 1, 2018 on specific refrigerants could prevent any equipment from being sold in California and prevent any repairs of existing equipment.

A phasedown schedule better reflects market realities and gives manufacturers a reasonable timeline to develop new technology for compliance. A delay in all new rules until Jan 1, 2019 would give industry 9 months to adapt and it would prevent the need to change dates of phase out currently scheduled for Jan 1, 2019.

Definitions

Lennox finds the definition of "New Refrigeration Equipment" to be broad and difficult to enforce. The definition includes the mention of a full charge increase, but an "increase" is not defined. With an arbitrary charge increase absent a measurement, fixing or updating a component of a system could require a whole new system and refrigerant to be used.

Additionally, part (ii) of the definition of "New Refrigeration Equipment" is not consistent with EPA's and creates serious confusion and doubt when repairs are made not knowing the future operation of the equipment. The full definition for "New Refrigeration Equipment" should align with the federal definition.

There is also no definition for repair included in the rulemaking. Lennox suggests the use of EPA's definition found in 40 CFR 82.152 – Definitions "Provided the equipment being installed has the same capacity and provides the same function as the original equipment, the EPA considers this as a system repair. As such, the system can continue to use the delisted refrigerant."

Enforcement Requirements

The requirements for recordkeeping are overly burdensome on manufacturers. Lennox manufacturers sell to a global market that requires sophisticated recordkeeping meant to optimize the efficiency of their operation and. Additional requirements by one state can disrupt this process and create unnecessary burdens.

Lennox operates in a supply chain where equipment is shipped around the globe on a daily basis. The equipment is often not shipped to the direct end-user. Distribution centers and contractors play a role in delivery to the end user. Documentation requirements will also not be known for all equipment as some of these equipment are just components of the full system and will not individually contain all refrigerant and charge information. Placing these unnecessary record keeping requirements on manufacturers comes at a cost and does not improve the enforcement of these regulations.

Sales records that manufacturers do keep are confidential business information and should not be required to be disclosed in any circumstance. Confidential business data must be protected. Customer lists, market shares, and product selections are important proprietary business data. Creating a single point source for this information can be very harmful to all levels of product distribution and installation but particularly for overburdened small business interests.

Additionally, nowhere in this regulation is the issue of install vs manufacture date addressed. As written, if a piece of equipment is ordered, manufactured, and shipped before the enforcement date, that equipment will not be allowed to be installed if it arrives after the enforcement date. This disrupts the production chain, which sometimes requires months of planning and actual manufacturing. These orders can also include sophisticated, custom built equipment that meets an individual customer's needs for a specific end use. Equipment manufactured before the date of enforcement should be allowed to enter the marketplace and be installed.

Summary

In summary, Lennox appreciates the opportunity to provide these comments on the further development of the CARB strategy and regulation. While Lennox supports CARB's intent to reduce emissions, we recommend proceeding with a plan aligned with National and global efforts to streamline the process and maximize the environmental benefits while reducing potential negative consumer, end-user and manufacturer impacts. While Lennox has made some specific points and recommendations as part of these comments Lennox recommends direct dialogue with stakeholders to ensure understanding and development of options which help CARB achieve its objectives to improve air quality. If you have questions regarding this submission, please do not hesitate to contact me.

Sincerely,

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