February 1, 2016

Cindy Newberg

Chief, Alternatives and Emissions Reduction Branch
Office of Atmospheric Programs
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, D.C.
20460

Dear Ms. Newberg:

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) and the Natural Resources Defense Council (NRDC) present the following letter of support for the Environmental Protection Agency's (EPA's) Significant New Alternatives Policy (SNAP) Program to change the status of refrigerants currently approved for liquid chilling packages ("chillers"). AHRI's members include the leading manufacturers of chillers representing a significant majority of the global market share of water-cooled and air-cooled centrifugal, screw, and scroll chillers. AHRI has been an industry leader on refrigerant policy for over 30 years and its research program on alternative refrigerants is helping industry transition to lower global warming potential (GWP) substitutes. NRDC has a strong history of advocating for changes of status for high GWP refrigerants on the SNAP list, including a recent petition covering the equipment addressed in this letter.

AHRI and NRDC have engaged in discussions on the importance of responsibly moving beyond high-GWP refrigerants used in chillers. Considerations have included the safety of alternatives, the continued improvement of system energy efficiency, reasonable product development timelines, and the avoidance of market migration. With these factors in mind, AHRI and NRDC support EPA finalizing the following changes of status:

- Remove R-134a, R-410A, and R-407C from the list of acceptable substitutes in all new air-cooled and water-cooled chillers using centrifugal, screw, scroll, and all other compressor types effective January 1, 2025

This proposal allows eight years from the publication of the final rule for industry to finish designing and bringing to market chillers using alternative refrigerants. Manufacturers will be designing and releasing products with alternative refrigerants before 2025: the proposed date simply indicates the endpoint of the long process members of industry face redesigning their product lines. The proposed transition period may permit some manufacturers to adopt near-zero GWP, energy-efficient refrigerants directly, without interim adoption of mid-GWP blends that suffer from lower energy efficiency compared to R-134a.

All compressor-bearing equipment is likely to undergo some technology overhaul to convert from R-134a or R-410A to newly-identified refrigerants during the transition period. In addition, this conversion is anticipated to involve use of new 2L flammable refrigerants, which are severely restricted by current

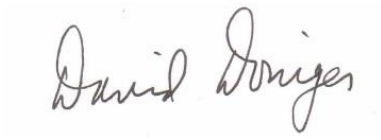
safety and building codes. This proposal provides time to amend model building codes to accommodate these new refrigerants and for adoption by state and local jurisdictions.

This timeframe will also allow each manufacturer to set its own schedule for developing and introducing new products in advance of 2025. Aligning the changes of status for all equipment types will encourage all alternatives to be evaluated and allow the flexibility to design equipment with the lowest carbon footprint.

This schedule provides adequate time for industry to launch products that have been tested and certified by the existing laboratories and certification agencies, such as AHRI, ASHRAE, UL, IEC, ASME, ETL, and other listing agencies globally. Specifically, an adequate time period is provided to complete revisions to ASHRAE 15 and recertify the chillers with safety standards like UL 1995 (or its next edition UL 60335-2-40) as well as qualify materials, oils, and other components to ensure low-leak, high-reliability products. The proposed schedule also provides time for manufacturers to optimize the energy efficiency of their products.

NRDC and AHRI find the consensus-driven, comprehensive nature of this recommendation to be a strong statement of support for EPA's forthcoming SNAP proposal, and we hope EPA proposes changes of status accordingly. We look forward to working with EPA on future SNAP rulemakings to ensure a responsible transition to climate-friendly air conditioning and refrigeration systems.

Sincerely,



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