

February 2, 2018

Undersecretary Dr. Walter Copan
National Institute of Standards and Technology
U.S. Department of Commerce
Washington, D.C. 20230

Dear Dr. Copan:

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI), the Alliance for Responsible Atmospheric Policy (the Alliance), and ASHRAE are writing to you in reference to possible changes being made to the role and function of the Thermophysical Properties of Fluids Group (hereafter referred to as "Group") at the National Institute of Standards and Technology (NIST). AHRI, the Alliance, and ASHRAE would like to express our support for the Group and stress that the industry is in a critical time when the work of the Group is particularly important.

AHRI is the trade association representing US manufacturers of HVACR and water heating equipment. Our 300 plus member companies' products account for more than 90 percent of HVACR and water heating residential and commercial equipment manufactured and sold in North America. The heating, ventilation, air-conditioning, refrigeration (HVACR), and water heating industry employs 1.3 million people and generates \$257 billion in economic activity annually.

Organized in 1980, the Alliance is the leading voice of manufacturers, businesses and trade associations who make or use fluorinated gases for the global market. Member companies are leading the development of safe, efficient, next-generation technologies and applications.

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 56,000 members worldwide focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today.

NIST's Refprop database, which the Group has been working on, is very important to the industry, and has a great impact to AHRI Members and to industry refrigerant research. The industry is in the midst of ongoing efforts to transition to the use lower GWP refrigerants as alternatives to the HFC refrigerants used today in the majority of HVACR applications. As new low GWP refrigerants being developed and implemented, researchers and domestic manufacturers need accurate refrigerant data from NIST's Refprop to design efficient, safe, low cost and reliable HVACR products.

NIST's Thermophysical Properties of Fluids Group has been supplying accurate measured data to update the Refprop database and to provide the US industry and researchers with essential and reliable refrigerants' thermophysical properties. Manufacturers need the Group's continued experimental work on developing such data for new refrigerants to stay competitive in the global market. Elimination or diminishing the capacity of this Group and the work they do will have immediate and significant consequences for ongoing research, as well as domestic

manufacturers and consumers.

We appreciate the opportunity to share our concerns with you and encourage you to reach out if you have any questions or would like to discuss further.

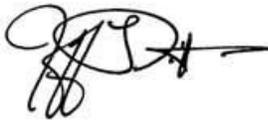
Sincerely,

A handwritten signature in black ink, appearing to read "Joe Trauger".

Joe Trauger
Senior Vice President
Policy and Government Relations
Air-Conditioning, Heating, and Refrigeration Institute (AHRI)

A handwritten signature in blue ink, appearing to read "Kevin Fay".

Kevin Fay
Executive Director
The Alliance for Responsible Atmospheric Policy

A handwritten signature in black ink, appearing to read "Jeff Littleton".

Jeff H. Littleton
Executive Vice President
ASHRAE