

Todd Titus

My name is Todd Titus, and I am the Director of State Government Affairs for the Heating Air-Conditioning & Refrigeration Distributors International (HARDI). HARDI's comments for HJM3 are attached to this submission. Thank you for the opportunity to comment.

James Kenney
Cabinet Secretary
New Mexico Environment Department
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September 16, 2026

RE: HARDI Comment Letter for House Joint Memorial 3.

Dear Secretary James Kenney,

New Mexico has been a leader in banning harmful per- and poly-fluoroalkyl substances (PFAS) and correctly exempted heating, ventilation, air-conditioning, and refrigeration (HVACR) equipment and refrigerant from the PFAS prohibition and reporting requirements adopted under the PFAS Protection Act. If the HVACR equipment and refrigerant exemptions were removed, New Mexico citizens would no longer have access to refrigeration and air-conditioning in their businesses and homes. This is due to a lack of legally and technologically available alternatives. HARDI believes in a risk-based approach to PFAS and supports New Mexico's decision to exempt products that are not harmful to human health. As such, HARDI asks New Mexico to retain the exemptions for HVACR equipment and refrigerants approved under the Environmental Protection Agency's (EPA) Significant New Alternative Policy (SNAP) program. Additionally, the New Mexico legislature should apply the HVACR equipment and refrigerant exemption to the PFAS labeling requirements that the NMED created.

HARDI is a trade association comprised of more than 1,150 member companies, more than 490 of which are U.S.-based wholesale distribution companies. These include 11 wholesaler-distributor members in New Mexico, with 24 locations serving heating, ventilation, air-conditioning, and refrigeration (HVACR) contractors and technicians throughout the state. More than 80 percent of HARDI's distributor members are classified as small businesses that collectively employ more than 60,000 U.S. workers, representing an estimated 75 percent of the U.S. wholesale distribution market for HVACR equipment, supplies, and controls.

I. PFAS found in HVACR equipment and refrigerants are not a danger to human health and should continue to be exempt from the PFAS product prohibition and reporting requirements, as adopted in the PFAS Protection Act.

New Mexico is justified in seeking to reduce and, if possible, eliminate the use of harmful PFAS. However, the New Mexico legislature acted correctly in adopting exemptions for the HVACR industry in the PFAS Protection Act, understanding that not all PFAS should be considered a danger to human health. According to the EPA, more than 16,000 substances contain fluorinated carbon atoms in their molecular structure. For some, a single fluorine and carbon chain is enough to be considered per- and poly-fluoroalkyl

substances.ⁱ Only a subset of these substances have the characteristics that harm human health. According to a systematic review of chemicals by NIH, the three factors that create a danger are "[p]ersistent, bioaccumulative, and toxic substances ... that can subsist for decades in human tissues and the environment."ⁱⁱ This letter will walk through the available science to show why hydrofluorocarbons (HFCs) approved for use in HVACR by the EPA do not meet the three requirements to classify them as dangerous PFAS and urge the addition of exemptions when a separate state or federal regulation or code prohibits PFAS alternatives, such as the EPA's SNAP program.

Persistent

Many PFAS are rightly called "forever chemicals" because of their persistence in the environment for "thousands of years."ⁱⁱⁱ A persistent PFAS will enter the environment and not degrade over time. Typically, these dangerous PFAS either stay in the soil or become mobile, moving to water where they can enter streams, rivers, aquifers, and lakes. On the other hand, refrigerant HFCs are gases at ambient temperature; because of this, HFCs cannot be absorbed into the soil and are not water-soluble. Additionally, HFCs have a shorter life span than other PFAS, breaking down in the atmosphere after an average of 15 years.^{iv} With such a short lifespan in the atmosphere, HFC refrigerants are not considered persistent compared to other PFAS.

Bioaccumulative

"Humans, as the final link in numerous food chains, are subjected to PFAS uptake primarily through food and drinking water."^v As mentioned, PFAS often enters streams, rivers, and lakes, where fish and other animals ingest them. Additionally, plants can absorb PFAS from contaminated soil or irrigation water.^{vi} The ability of dangerous PFAS to be absorbed in human tissue and remain there for the rest of a person's life is a concern. However, toxicology reviews have found that R-32 and R-125 are not considered bioaccumulative.^{vii} R-32 and R-125 are the components used to create R-410A, the most common refrigerant gas primarily used in air conditioners and heat pumps. In addition, as a gas, the ability of HFC refrigerants to enter the food chain is nearly impossible without first degrading from its original molecule. Additional bioaccumulation factsheets are available on other HFC refrigerants like R-134a^{viii} and R-143a.^{ix} R-23, R-125, R-134a, and R-143a are the components used to make the majority of HFC refrigerant blends used in HVACR. HARDI has found no safety data sheets showing an HFC refrigerant listed as bioaccumulative.

Toxicity

The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) classifies all refrigerants as "higher toxicity" or "lower toxicity."^x Common HFC refrigerants and blends like R-410A are classified as lower toxicity. However, even non-HFC refrigerants, like ammonia, are rated "higher toxicity, lower flammability" by ASHRAE or "higher flammability" like propane; even CO₂ is listed as "lower toxicity."

Refrigerants are designed to stay in the closed loop of an air conditioner, heat pump, or refrigerating machine; only when leaked out of the machine in an enclosed space, does toxicity become a concern. CO₂ creates dangerous conditions at concentrations as low as 5,000 ppm;^{xi} R-32, on the other hand, required 350,000 ppm before adverse effects were observed.^{xii} In addition, some HFCs used as refrigerants, like R-134a, are also used as propellants in metered-dose inhalers because of their short serum half-life of between 4 and 11 minutes; this is considered a low human toxicity risk.^{xiii} HFC refrigerants have low human toxicity and have lower toxicity compared to some non-HFC refrigerants.

According to REACH, the European Union regulation for protecting human health, HFC refrigerants do not meet the persistent, bioaccumulative, or toxicity factors necessary to make them dangerous PFAS.^{xiv} No refrigerant is 100 percent safe; however, HFC refrigerants pose a physical and environmental hazard rather than a health hazard like the PFAS that New Mexico intends to regulate. Because of this physical and environmental hazard, HFCs are already highly regulated. Unfortunately, the same proponents of eliminating HFCs faster than the Kigali Amendment to the Montreal Protocol often try to include HFCs in the definition of PFAS as an end-run around federal and international policy. The HVACR industry has worked with the international community to move to environmentally safer refrigerants. However, advocates falsely claim health hazards that do not exist to circumvent these industry agreements. HARDI has fully supported the phase-down of HFC refrigerants and is actively working with the EPA to reduce emissions of these refrigerants into the atmosphere.

Other factors

The EPA regulates the life cycle of HFC refrigerants through the Clean Air Act and the American Innovation and Manufacturing Act. Knowingly releasing HFC refrigerant gases into the atmosphere is a crime. Refrigerants within systems do not wear out like oil in a car engine; with proper tools, refrigerants can be purified back to their original quality, an action required by the EPA. Federal and New Mexico regulations require HVACR technicians to recover refrigerants from equipment at the end of life; this refrigerant is then sent to an EPA-certified reclaimer to purify or destroy the refrigerant. Using reclaimed refrigerant reduces the environmental impact of HFCs by ensuring they are not released into the atmosphere. This process is vital as HFC production and imports are reduced over the next 11 years, and the industry reduces consumption by 85 percent from the baseline. To further reduce the impact of HFCs, the HVACR industry is moving to other refrigerants with lower global warming potential listed under the SNAP program.

Additionally, 30 out of the 31 states that have adopted PFAS policies have purposely chosen not to include or explicitly exempt the HVACR industry. The states of Alaska, Arizona, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Nevada,

New Hampshire, New Jersey, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia, Washington, West Virginia, and Wisconsin chose not to include or exempt the HVACR industry from their prohibitions. New Hampshire, New Mexico, and Maine legislatures adopted explicit exemptions for the HVACR industry from their PFAS prohibition.

Thus, New Mexico should retain the HVACR equipment and refrigerant exemptions adopted under the PFAS Protection Act, as the legislature correctly recognized that not all PFAS pose a danger to human health.

II. Prohibiting PFAS for HVACR equipment and refrigerants would leave New Mexico without essential air-conditioning and refrigeration.

Removal of the exemptions for HVACR equipment and refrigerants would remove citizens' ability to have effective air-conditioning and refrigeration. If New Mexico banned all PFAS-defined refrigerants, based on the New Mexico definition, there would only be three industrial refrigerants available as refrigerants. The three options, ammonia, carbon dioxide, and propane, are not legal or technologically capable for use in each sector, such as residential air-conditioning. Leaving all homes in New Mexico without essential air-conditioning while living in a harsh climate.

For equipment, many parts of an HVACR system don't have alternatives for the coatings, lubricants, and other chemicals that meet New Mexico's PFAS definition. Without any alternatives available in the market, New Mexico would lose the ability to install effective and efficient air-conditioning and refrigeration systems in the state. Removing air-conditioning and refrigeration from all of New Mexico's citizens' businesses and homes.

Thus, New Mexico should retain the exemptions under the adopted PFAS Protection Act for HVACR equipment and refrigerants to protect citizens' access to effective and efficient air-conditioning and refrigeration.

III. NMED should implement consistent HVACR exemptions for PFAS labeling, as the legislature provided throughout all other parts of the PFAS Protection Act.

As adopted by the New Mexico Legislature, the PFAS Protection Act exempts HVACR equipment and their refrigerants from the PFAS prohibition and reporting requirement. The legislature gave no legislative text for the labeling requirement, only a broad authority that the NMED may create a PFAS labeling requirement. The NMED PFAS label rulemaking did not align with the products exempted in the prohibition and reporting requirement. Instead, a label waiver process is used that targets the exempted products with financial burdens for compliance. As such, NMED and the New Mexico legislature should align the PFAS labeling exemptions with the PFAS Protection Act HVACR equipment and refrigerant exemptions originally adopted. An alignment that likely would have occurred if the New Mexico legislature had provided legislative text for the PFAS labeling rulemaking.

IV. Conclusion

HARDI asks that the HVACR industry continue to be exempt from New Mexico's PFAS prohibitions and reporting requirements. HARDI's request is justified due to the lack of danger to human health, other states' PFAS prohibition precedent, lack of legal alternative technologies for each sector, and the enacted federal phasedown on the HVACR industry.

Sincerely,



Todd Titus

Director of State Government Affairs

Heating, Air-conditioning, & Refrigeration Distributors International

ⁱ Environmental Protection Agency, CompTox Chemicals Dashboard v2.3.0, PFAS structures: <https://comptox.epa.gov/dashboard/chemical-lists/PFASSTRUCT>

PFAS without explicit structures: <https://comptox.epa.gov/dashboard/chemical-lists/PFASDEV>

ⁱⁱ Fernández-Martínez, N. F., Ching-López, A., Olry de Labry Lima, A., Salamanca-Fernández, E., Pérez-Gómez, B., Jiménez-Moleón, J. J., Sánchez, M. J., & Rodríguez-Barranco, M. (2020). Relationship between exposure to mixtures of persistent, bioaccumulative, and toxic chemicals and cancer risk: A systematic review. *Environmental research*, 188, 109787. <https://doi.org/10.1016/j.envres.2020.109787>

ⁱⁱⁱ Washington Department of Ecology, Per- and polyfluoroalkyl substances (PFAS), <https://ecology.wa.gov/waste-toxics/reducing-toxic-chemicals/addressing-priority-toxic-chemicals/pfas>

^{iv} Climate & Clean Air Coalition, Hydrofluorocarbons (HFCs), <https://www.ccacoalition.org/short-lived-climate-pollutants/hydrofluorocarbons-hfcs>

^v Brunn, H., Arnold, G., Körner, W. *et al.* Correction: PFAS: forever chemicals—persistent, bioaccumulative and mobile. Reviewing the status and the need for their phase out and remediation of contaminated sites. *Environ Sci Eur* 35, 30 (2023). <https://doi.org/10.1186/s12302-023-00730-7>

^{vi} Ghisi, R., Vamerali, T., & Manzetti, S. (2019). Accumulation of perfluorinated alkyl substances (PFAS) in agricultural plants: A review. *Environmental research*, 169, 326–341. <https://doi.org/10.1016/j.envres.2018.10.023>

^{vii} George M. Rusch (2018) The development of environmentally acceptable fluorocarbons, *Critical Reviews in Toxicology*, 48:8, 615-665, DOI: 10.1080/10408444.2018.1504276

^{viii} Safety Data Sheet – R-134a, A-Gas, https://dimplexthermal.com/wp-content/uploads/2016/05/SDS_R-134a_V01.pdf

^{ix} Safety Data Sheet – R-143a, National Refrigerants, https://nationalref.com/wp-content/uploads/2019/05/SDS_R143a_CLP.pdf

^x ASHRAE, Update on New Refrigerants Designations and Safety Classification, https://www.ashrae.org/file%20library/technical%20resources/bookstore/factsheet_ashrae_english_november2022.pdf

^{xi} Occupational Safety and Health Administration, OSHA Hazard Information Bulletins Potential Carbon Dioxide (CO₂) Asphyxiation Hazard When Filling Stationary Low Pressure CO₂ Supply Systems, <https://www.osha.gov/publications/hib19960605>

^{xii} Safety Data Sheet – R-32, Chemours, https://hdsuppliesolutions.com/wcsstore/ExtendedSitesCatalogAssetStore/product/fm/additional/15/150110_MS_DS-PDF.pdf

^{xiii} Ritchie, G. D., Kimmel, E. C., Bowen, L. E., Reboulet, J. E., & Rossi, J., 3rd (2001). Acute neurobehavioral effects in rats from exposure to HFC 134a or CFC 12. *Neurotoxicology*, 22(2), 233–248. [https://doi.org/10.1016/s0161-813x\(01\)00011-0](https://doi.org/10.1016/s0161-813x(01)00011-0)

^{xiv} REACH Online, Annex XIII: Criteria for The Identification of Persistent, Bioaccumulative and Toxic Substances, and Very Persistent and Very Bioaccumulative Substances, <https://reachonline.eu/reach/en/annex-xiii.html>