



RETAIL INDUSTRY
LEADERS ASSOCIATION



THE FOOD
INDUSTRY
ASSOCIATION



NATIONAL ASSOCIATION OF
CHAIN DRUG STORES

NRF National
Retail
Federation

January 30, 2023
via Regulations.gov

Attn: Allison Cain
Stratospheric Protection Division
Office of Atmospheric Programs
U.S. Environmental Protection Agency
Mail Code 6205A
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Phasedown of Hydrofluorocarbons: Restrictions on the Use of Certain Hydrofluorocarbons Under Subsection (i) of the American Innovation and Manufacturing Act of 2020, Docket ID No. EPA-HQ-OAR-2021-0643

Dear Ms. Cain:

The Retail Industry Leaders Association (RILA), the National Retail Federation (NRF), the National Association of Chain Drug Stores (NACDS), and the Food Industry Association (FMI) (hereinafter, collectively, Joint Retail Associations or the Associations) appreciate the opportunity to jointly submit comments on the U.S. Environmental Protection Agency's (EPA or Agency) proposed Restrictions on the Use of Certain Hydrofluorocarbons Under Subsection (i) of the American Innovation and Manufacturing (AIM) Act of 2020,¹ 87 Fed. Reg. 76738 (December 15, 2022) (hereinafter, Proposed Rule).

Together, the Joint Retail Associations represent a broad cross-section of the retail industry and the U.S. economy, from large national retail chains to small businesses, grocers, and drug store chains. Collectively, the Associations' members sell food, medicines, household items, clothing, appliances, electronics, tools, auto parts, pet supplies, as well as a vast number of other essential consumer products that Americans use and rely on in daily life. While the retail industry is not among the largest contributors to greenhouse gas (GHG) emissions, it is nonetheless working diligently to address and reduce the climate change impacts related to retail operations.

The Joint Retail Associations will be significantly impacted by the Proposed Rule because their members both sell products containing hydrofluorocarbons (HFCs) and use HFCs in extensive food refrigeration and HVAC systems throughout their networks of distribution centers and stores across the United States. The Joint Retail Associations respectfully request that EPA revise its proposed Global Warming Potential (GWP) limits for certain sectors/subsectors, as well as revisit the reporting, recordkeeping, and associated labeling requirements as further

¹ 42 U.S.C. § 7675.

described below. Additionally, the Associations provide information for EPA to consider in response to its request for advance comments related to possible future regulations of retrofits.

BACKGROUND ON ASSOCIATIONS

RILA's members include the largest and most innovative U.S. retailers. RILA members account for more than \$1.5 trillion in annual sales, millions of American jobs, and more than 100,000 stores, manufacturing facilities, and distribution centers domestically and abroad. RILA and its members recognize that responding to the economic and moral imperatives of addressing climate change requires thoughtful and meaningful action. RILA members' efforts include building and retrofitting facilities and stores to increase energy efficiency and use of renewable energy, reducing waste and excess packaging, and streamlining and creating more efficient supply chain, transportation, and distribution systems to decrease GHG emissions.

As the food industry association, FMI works with and on behalf of the entire industry to advance a safer, healthier and more efficient consumer food supply chain. FMI brings together a wide range of members across the value chain — from retailers that sell to consumers, to producers that supply food and other products, as well as the wide variety of companies providing critical services — to amplify the collective work of the industry (www.FMI.org).

NRF, the world's largest retail trade association, passionately advocates for the people, brands, policies and ideas that help retail succeed. From its headquarters in Washington, D.C., NRF empowers the industry that powers the economy. Retail is the nation's largest private-sector employer, contributing \$3.9 trillion to annual GDP and supporting one in four U.S. jobs — 52 million working Americans. For over a century, NRF has been a voice for every retailer and every retail job, educating, inspiring and communicating the powerful impact retail has on local communities and global economies.

NACDS represents traditional drug stores, supermarkets, and mass merchants with pharmacies. Chains operate nearly 40,000 pharmacies, and NACDS' 80 chain member companies include regional chains, with a minimum of four stores, and national companies. Chains employ nearly 3 million individuals, including 155,000 pharmacists. They fill over 3 billion prescriptions yearly, and help patients use medicines correctly and safely, while offering innovative services that improve patient health and healthcare affordability. NACDS members also include more than 900 supplier partners and over 70 international members representing 21 countries.

EXECUTIVE SUMMARY

The Joint Retail Associations comments on the Proposed Rule cover the eight areas set forth below.

First, the Associations urge EPA to revise the proposed GWP limits for retail refrigeration units, cold storage warehouse systems, and transport refrigeration due to a lack of available replacement technology sufficient for a wide-scale retail industry transition and extraordinary cost burdens associated with these proposed limits. For the reasons discussed in comments below, the proposed limits are arbitrary and capricious and leave retailers with limited alternatives that are currently inadequate, not scalable, raise potential safety concerns,

and may not ultimately deliver net GHG emission reductions, particularly in warmer climates. Some areas of the U.S. also currently lack available service and repair technicians that have familiarity and expertise working with currently available alternatives (*i.e.*, CO₂ and A2L refrigerant systems). Additionally, disadvantaged communities and small businesses will be disproportionately burdened by the costs to implement current alternative refrigerant technology.

Second, EPA should extend the compliance timeframe for all retail refrigeration sectors/subsectors by seven years to January 1, 2032. For the reasons discussed in comments below, including the implementation burdens referenced above, this additional time is needed for newly required equipment to be incorporated into new store planning and for the development of new technologies that would provide retailers with more options for new equipment and more suitable alternatives.

Third, EPA should provide a formal mechanism in the Final Rule by which individual end users, including retailers, could seek extensions of specific subsector compliance timeframes. Mid-sized and regional retailers, and small businesses, not subject to or previously preparing to meet California Air Resources Board (CARB) requirements, may need beyond 2032 to come into compliance.

Fourth, EPA should adopt a phased-in approach in the Final Rule for all refrigeration and cooling units. This is necessary to alleviate implementation burdens and should include consistent GWP limits across applicable categories, and sufficient time for these alternative systems to be developed, demonstrated to work within the retail sector, and manufactured in sufficient quantity to serve the entire retail supply. During the necessary transition period, EPA should revise its GWP limit for retail refrigeration to a level that will allow retailers to continue the use of existing, readily-available low-GWP refrigerants (*e.g.*, R-513a and R-449a).

Fifth, EPA should extend compliance timeframe for certain aerosol product end uses to January 1, 2030, and provide flexibility for meeting aerosol labeling requirements. Consumer product aerosol applications needing an additional five years to transition to lower-GWP propellants include wound care sprays and topical coolant spray for pain relief. Additional time is also needed for several industrial applications upstream of the retail supply chain that are critical to the safety and efficacy of products sold to our members' customers, and the safe transport of these products to stores and distribution centers nationwide. Given the many federal and state requirements for aerosol product labeling, a one-size-fits-all labeling approach is not possible and EPA should allow for flexibility in the Final Rule.

Sixth, EPA should align with the Greenhouse Gas Reporting Programs annual reporting frequency and records retention requirements. Alignment with this existing reporting framework will reduce reporting burdens and minimize duplication. Additionally, the quarterly reporting frequency contemplated in the Proposed Rule would dramatically increase costs and resource burdens. These costs are further compounded when applied to retailer importers reporting on potentially tens of thousands of consumer products.

Seventh, EPA should include a two-year sell through period for residential appliance end uses. For the reasons discussed in comments below a one-year sell through period for these

consumer product applications would result in significant costs related to unsaleable inventory, including managing that inventory as hazardous waste.

Eighth, the Associations support EPA’s decision to not regulate retrofits of existing equipment in this rulemaking and raise issues for consideration for any future rulemaking implicating retrofits. If EPA proceeds with subsequent rulemaking that regulates retrofits, it should define the threshold for retrofitting. The replacement of refrigeration cases with similar equipment should not be considered a retrofit subject to future GWP limit restrictions. In any future rulemaking, EPA should allow for extended compliance deadlines for retail refrigeration units to prevent the closure of stores as retailers search for feasible and available replacement products.

Each of these areas is discussed in more detail below.

COMMENTS

The Associations and their member companies share the EPA’s concern about climate change and its impact on our communities. Retailers support the Agency’s efforts to reduce GHG emissions, including the HFCs that are the subject of EPA’s Proposed Phasedown as mandated under the AIM Act of 2020 and are working toward emission reduction targets in a manner that is cost-effective and minimizes impacts on consumers.

The Associations are providing the below shared comments to highlight areas in the Proposed Rule where revisions to GWP limits and compliance timeframes for certain sectors or subsectors are warranted due to current inadequacies and issues with available replacement technology, as well as recommendations on reducing burdens associated with reporting and recordkeeping requirements. Additionally, the Associations are providing input for EPA to consider on any future rulemaking related to the regulation of retrofits.

I. Several Proposed GWP Limits are Currently Unachievable for Retailers Due to Technological Infeasibility and other Near-term Transition Barriers

EPA should revise the GWP limits and/or compliance deadlines set forth in the Proposed Rule for retail refrigeration units, cold storage warehouse systems, transport refrigeration, and certain aerosol end uses because the proposed limits or compliance timeframes for these products and equipment, which the Associations’ members rely on to keep their businesses operational, will not be technologically feasible as proposed and would therefore be impossible for many retailers to implement. Further, even if the GWP limits proposed were feasible, meeting the associated compliance deadlines would create significant and unanticipated costs retailers associated with modifying existing operations and plans well underway for new store locations. For some retailers, the proposed GWP limits and compliance timeframes could potentially result in the closing of certain stores altogether.

A. Retail Refrigeration Units, Cold Storage Warehouse Systems, and Transport Refrigeration

EPA proposes to prohibit the import or domestic manufacture of retail refrigeration units, cold storage warehouse systems, and transport refrigeration containing HFCs with a GWP limit of 150 or greater by January 1, 2025, and to prohibit the sale and distribution of certain consumer products and commercial equipment containing HFCs above the GWP limit one year later. The Associations strongly advise EPA to reconsider both the GWP limit and associated date of compliance due to a lack of available replacement technology sufficient for a wide-scale retail industry transition and extraordinary cost burdens associated with these proposed limits.

1. The Proposed GWP Limits are Arbitrary and Capricious

EPA proposes GWP limits of 150 GWP for large commercial refrigeration systems, 300 GWP for small commercial registration systems, and 700 GWP for HVAC systems. These limits appear to be based on limits proposed in petitions to the Agency by a number of groups, including National Resource Defense Council (NRDC), California Air Resources Board (CARB), International Institute of Ammonia Refrigeration (IIAR), Air-Conditioning, Heating, and Refrigeration Institute (AHRI), among others. The Proposed Rule, however, contains no analysis of why these limits are appropriate and necessary, or whether other options may be available to meet the statutory reduction obligations with significantly lower costs and risks.

For example, there is no analysis of why EPA deems a GWP limit of 700 to be appropriate for an HVAC system used in a supermarket but not for the refrigeration units used within that same supermarket. EPA has identified no fundamental difference between these different uses that justify such lower GWP limits for refrigerants used to chill food than for refrigerants used to cool customers.

Similarly, low-GWP refrigerants like R-513a (GWP 573) and R-449a (GWP 1282) exist, have been approved for use in retail establishments, and have been safely and reliably used within this sector for years. The proposed rule, however, focuses only on three refrigerants with GWPs under 150 (R-454c, R471a, and R-455a). These three refrigerants are being actively marketed by leading refrigerant manufacturers as the solution to the proposed rules – and yet, at the present time, these refrigerants have not been approved for use in a retail environment. Such an internal inconsistency with these limits, both over inclusive and under inclusive, absent any rational basis, is arbitrary and capricious.

The Proposed Rule's extremely low GWP limits for commercial refrigeration units leave retailers with only two choices: CO₂ systems; and A2L systems. Each of these options poses significant concerns in the retail environment.

2. The GWP limits and Compliance Timeframes are Not Aligned with Available, Adequate, and Scalable Replacement Technology

Based on the current marketplace, retailers will not have adequate replacement technology for retail refrigeration units available to meet the proposed GWP limits within the proposed

compliance timeframe. Changes in refrigerants within the retail sector raise a variety of concerns that may not be present in all sectors. Retail operations require reliable refrigeration 24 hours a day and 7 days a week (24/7) to ensure that the food and medicines they sell remain safe for human consumption and use. Moreover, these requirements encompass an extensive, complex network of farmers, manufacturers, and transportation companies – all of whom require that same degree of reliable, 24/7 refrigeration. A single break in this chain – one distribution company that cannot find appropriate refrigerants to service its refrigerated trucks, or one warehouse that cannot maintain its refrigeration system – will ripple through the entire supply chain, and ultimately harms the consumers who rely on retailers to provide a safe, consistent supply of food and medications.

The retail system also involves ongoing direct interaction with the general public. As a result, safety concerns that might be appropriately addressed in the industrial context (*e.g.*, through the use of appropriate personal protective equipment (PPE)) pose a more significant risk in the retail sector. Again, these concerns extend along the supply chain, including not just the retail brick-and-mortar stores, but also the thousands of refrigerated vehicles that supply those stores. As a result, any risks associated with the use of alternative refrigerants must be weighted more heavily in the retail context.

Currently, available systems that utilize low-GWP HFCs are significant and dramatic departures from the refrigeration system architectures that have dominated the U.S. supermarket refrigeration industry for decades. EPA’s proposed GWP limit will require most retailers with refrigeration units to use either CO₂ refrigeration technology or A2L refrigerants. CO₂ technology and A2L refrigerants have certain properties that make these products unsuitable for many retailers² to use as a replacement for currently existing refrigeration units. Additionally, without significant efficiency enhancements, these technologies are unlikely to significantly reduce overall emissions. Lastly, these complex systems come with higher procurement and installation costs, as well as increased costs of maintenance and safety training.

i. CO₂ systems.

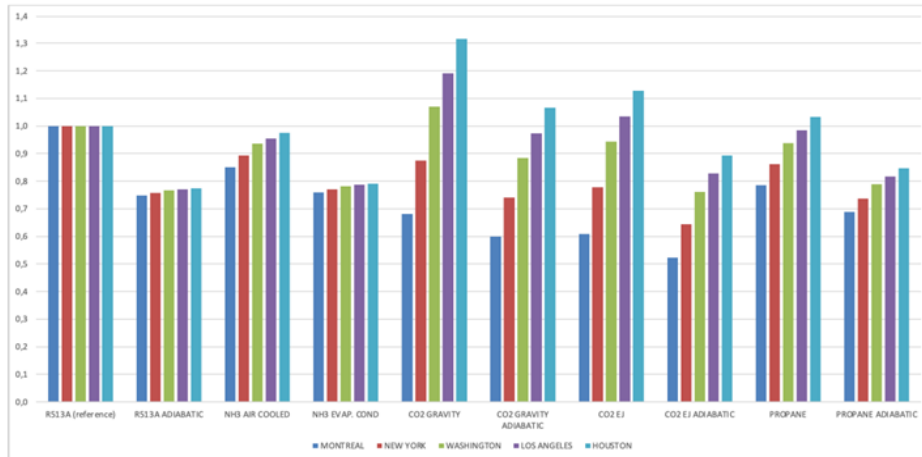
Transitioning to CO₂ technology by January 1, 2025, is not a viable alternative for existing retail refrigeration technology. First, the science around the benefits associated with the use of CO₂ technology is still an open question. While this technology meets the proposed GWP limits, these systems may require the use of much more energy to achieve the same degree of cooling (*see* Figure 1.):

² We note that mid-sized and regional retailers, including those that do not have a footprint in California, have not been preparing to meet related lower-GWP refrigerant transitions driven by CARB requirements and are naturally many steps behind the preparations of some of the largest retailers with locations in California or any California-based retail chains.

Figure 1.³



• SYSTEMS ENERGY CONSUMPTION EVALUATION



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While the use of current CO₂ technology would allow for compliance with the GWP limits, the resulting energy inefficiency in warm climates may offset most, if not all, of the carbon reduction gains from HFC replacement.

CO₂ systems installed in warm climates achieve parity with traditional systems *only* when complex proprietary controls and water-cooling enhancements are added, putting a disproportionate burden on regional end users located in warm climate zones. These added controls also raise some additional concerns for many retailers:

- Adiabatic (water cooled) gas cooler uses water to assist with heat rejection and reduce energy consumption. However, these energy savings come at the cost of increased water consumption, which poses significant environmental concerns particularly in areas of the country that are historically arid or face recurring periodic droughts. Furthermore, the water required for these systems must be treated with chemicals to prevent fouling, which are eventually flushed to wastewater, thus adding additional loading to public utility systems and potentially requiring the installation of additional treatment controls. The complexity of these systems also gives rise to additional costs for components, maintenance, and operation.
- CO₂ ejectors reduce energy usage by adaptively redirecting CO₂ flow through the system. These systems, however, are highly complex; to date very few have been

³ Source: ATMOsphere America Summit Presentation by Dorin (June 2022), available at <https://atmo.org/announcement/refrigeration-case-studies-session-2/>.

installed in the US, and the contractor base with experience in these systems is extremely limited. In addition, very few companies manufacture these kinds of systems, and these manufacturers are presently located in Europe and rely on proprietary controllers and algorithms.⁴

- Parallel compression systems utilize additional compressors to optimize compression cycles, improving efficiency. However, the addition of additional compressors necessarily increases the costs of these systems.

In the most aggressive models, CO₂ energy consumption reaches parity with R-513A in a warm, humid climate *only* when *all three* advanced CO₂ technologies are utilized. As a result, the energy inefficiency of these systems would offset most, if not all, of the carbon reduction gains from HFC replacement – and this parity would be obtained only at significant additional cost.

Further, at the present time, CO₂ systems are not reliable, and therefore, cannot be used as a substitute for the HFCs currently in use in retail refrigeration, cold storage warehouses, and refrigerated transport operations— operations that, as mentioned above, require reliable refrigeration 24/7 in order to ensure that refrigerated foods are processed, transported, stored, and sold in a manner that ensures they remain safe for consumption. As noted above, only a limited number of these systems exist – particularly those with the additional controls necessary to mitigate the energy inefficiency of such systems. The run-time of the systems that do exist is not compatible with the 24/7 operation required by the retail sector.

Lastly, it is difficult to accomplish leak detection with CO₂ refrigeration systems. Leaks are also rapid and are generally catastrophic to system performance. This vulnerability may create expensive repairs and significant costs from system failures.

Even if the retail sector may ultimately be able to convert to CO₂ systems, the limited time prior to the proposed January 1, 2025, compliance date will not allow the entirety of the retail industry to do so safely and effectively. The retail sector will not have time to develop and test different systems and system architectures to ensure that these systems meet all of the sector’s reliability, performance, and safety requirements. As a result, even assuming that sufficient equipment can be designed, manufactured, and installed by the compliance date, retailers will be forced to install untested, unreliable equipment that was not designed for use in a retail environment. This abrupt transition will result in frequent supply chain disruptions that prevent consumers from receiving the safe refrigerated foods and medicines they rely on.

ii. A2L systems.

Like CO₂, A2L systems will not be reliable and adequate replacement technology by January 1, 2025. Currently, A2L systems are prohibited from use in this quantity within supermarkets by

⁴ See e.g., Danfoss, Case Stories: The Danfoss Multi Ejector range for CO₂ refrigeration: design, applications and benefits (Oct. 22, 2018) *available at* <https://www.danfoss.com/en/service-and-support/case-stories/dcs/the-danfoss-multi-ejector-range-for-co2-refrigeration/#:~:text=Danfoss%20Ejector%20Design-.Danfoss%20ejector%20design,or%20liquid%20to%20the%20receiver>. Again, the complexity of these systems adds to the cost for components, maintenance, and operation.

the International Building Code (IBC). Even assuming the IBC adopts standards for the use of A2Ls in a supermarket application at the earliest possible date (2024), these standards must then be adopted by states and localities before they can be added to the local building code.⁵

In addition, even if building codes allowed the use of A2L refrigerants within the retail sector, the manufacturers who provide refrigeration systems do not have commercially available A2L equipment fit for use in the retail sector. While some vendors are working on remote condensing unit options below 300 GWP, there are currently no additional commercial product offerings available – and in any event, the vast majority of retailers have not had the opportunity to evaluate the effectiveness of any low-GWP systems in their stores, distribution centers, or refrigerated transportation.

Perhaps of even greater concern, A2Ls raise significant health and safety concerns, including increased flammability and possibility of injury or death due to the increased hydrogen fluoride gas generated from A2L ignition. Further, A2L compositions are concentrated with R-1234Yf – an HFO that can be categorized as a PFAS substance. Thus, requiring facilities to transition to A2L systems would directly contradict the Agency’s current efforts to *reduce* use of PFAS. Further, as noted above, the retail sector is unique in the sheer number of face-to-face interactions its facilities have with the general public. PPE and standard operating procedures may appropriately address the risks associated with the use of these materials in the industrial sector, but they cannot adequately protect the thousands of customers who visit every local grocery stores weekly.

Indeed, almost all of the compliant refrigerants under the Proposed Rule present safety concerns above and beyond those encountered with traditional supermarket systems:

- R-717 (Ammonia) – Toxicity
- A2L and A3 – Flammability
- A2L – PFAS and HF production
- R-744 (CO₂) – High Pressure

Flammability. A2Ls are flammable, with flame propagation burning velocity less than 10cm per second.⁶

⁵ In Texas, for example, the legislature meets every two years, meaning that if the IBC adopts standards for A2L refrigerants in 2024, the State would not be able to adopt these standards until 2026. While this is unlikely (indeed, current Texas law still incorporates 2015 ICC standards), local governing bodies would then need to adopt the codes on their own timelines. Thus, it is literally impossible for retail operations within Texas to transition to A2L refrigerants within the short timeframe allotted by the proposed regulations.

⁶ See ACHR News, “The Burning Issues Involving A2L Refrigerants,” (Nov. 2, 2020) *available at* <https://www.achrnews.com/articles/144002-the-burning-issues-involving-a2l-refrigerants>. In this Country, there is a growing body of research warning about the flammability of A2Ls in a retail environment. *See also*, NFPA, Evaluation of the Fire Hazard of ASHRAE Class A3 Refrigerants in Commercial Refrigeration Applications (Report; October 2017) *available at* <https://www.nfpa.org/-/media/Files/News-and-Research/Fire-statistics-and-reports/Hazardous-materials/RFA3refrigerantsGexcon.pdf>; and AHRTI, Benchmarking Risk by Whole Room Scale Leaks and Ignitions Testing of A2L Refrigerants Final Report (June 2017), *available at* https://www.ahrinet.org/sites/default/files/2022-07/AHRI_9007-01_Final_Report_1.pdf.

Toxicity. Mild exposure to refrigerant chemicals is generally harmless. Poisoning is rare except in cases of misuse or exposure in a confined space. However, the quantity of hydrogen fluoride (HF) gas is generated from the ignition is considered hazardous without PPE. Due to the flammability nature, the levels HF gas from A2L refrigerant has a higher risk. HF gas is an extremely dangerous substance and can cause injury or death when encountered by humans.⁷

PFAS/TFA. A2Ls are composed of R-1234Yf (GWP less than 1) along with other synthetic blends of refrigerants. R-1234Yf is an HFO that falls under the scope of PFAS. Currently, five EU countries (*Germany, the Netherlands, Norway, Sweden, and Denmark*) have announced intention to submit a joint proposal to restrict PFAS.⁸

Given the relative novelty of systems relying on these alternatives, local building codes do not contain standards delineating how companies can appropriately mitigate these additional risks.

The Associations and their members understand and support EPA's end goal of reducing the use of refrigerants that contribute to global warming. EPA must do so, however, in a manner that does not simply replace one risk with another.

Finally, the Proposed Rule as drafted places a disproportionate burden on retailers to find and implement compliant solutions and bear the cost of the significant infrastructure investments necessary to use compliant refrigerants once they are found and approved – a burden that is particularly infeasible given the 3% average profit margin within the supermarket industry. The Proposed Rule may also put retailers' employees and the public at risk with the use of unproven, novel technologies that are not currently approved for use in an environment that millions of members of the public visit every day.

⁷ See HPAC, "AHRI releases study on fire safety and A2L refrigerants," (March 19, 2021), available at <https://www.hpacmag.com/heating-plumbing-air-conditioning-general/ahri-releases-study-on-fire-safety-and-a2l-refrigerants/1004131539/>; see also Science, "Things I Won't Touch" (blog post) available at <https://www.science.org/content/blog-post/things-i-won-t-touch-1>.

⁸ See R744., "Certain HFCs and HFOs are in PFAS Group that Five EU Countries Intend to Restrict," (July 23, 2021) available at <https://r744.com/certain-hfcs-and-hfos-are-in-pfas-group-that-five-eu-countries-intend-to-restrict/#:~:text=As%20defined%20by%20the%20five%20countries%2C%20PFAS%20cover,an%20atmospheric%20degradation%20product%20of%20HFO-1234yf%20and%20HFC-134a>; "German Environment Agency Says HFOs Should be Replaced by NatRefs," (May 26, 2021) available at <https://r744.com/german-environment-agency-says-hfos-should-be-replaced-by-natrefs/>; see also CAREL, "Will PFAS be a barrier to the use of HFO refrigerants," (March 18, 2021) available at <https://www.carel.com/blog/-/blogs/will-pfas-be-a-barrier-to-the-use-of-hfo-refrigerants->.

3. Proposed GWP Limits and Compliance Timeframes Will Subject Retailers to Significant Cost Burdens

As proposed, the GWP limits and compliance timeframes set forth in the Proposed Rule will result in significant costs for retailers. Pre-construction planning for a new grocery store – including contracting with vendors for various refrigeration equipment and for technicians to install and service the equipment – often begins two years in advance of the beginning of construction. EPA’s proposed compliance date of January 1, 2025 would impact many retailers build outs of future stores for which they are already well into the planning process. Preparing to meet *new* requirements for *new* refrigeration equipment in less than two years would require substantial revisions to existing plans or, alternatively, abandonment of the proposed store. Furthermore, given the small profit margins throughout the retail industry, complying with the Proposed Rule could change the cost analysis enough to make a proposed new store financially unviable.

The costs associated with remodeling existing systems in retail refrigeration units, cold storage warehouses, and refrigerated transport systems are even more significant. Remodeling a refrigeration system at an existing store may be as much as double the cost of designing and installing a system at an entirely new location, given the existing site constraints that must be managed.

Given the long lead times necessary to design stores and order equipment and the limited current availability of systems compliant with the proposed regulations, the Associations propose that the implementation date for all the retail food refrigeration sectors/subsectors in the Proposed Rule at Table 4⁹ be extended to January 1, 2032. Extending the compliance deadline by 7 years¹⁰ would allow for the newly required equipment to be incorporated into new store planning and for the development of new technologies that would provide retailers with more options for new equipment and more suitable alternatives.

4. Additional Time is Needed for Service and Repair Technicians to be Trained on New Technology

Retailers with stores and facilities in rural areas and socioeconomically disadvantaged areas face the additional problem of a technician shortage, especially technicians with expertise in servicing CO₂ systems and other newer HVAC/R technologies. The Proposed Rule would force retailers that plan to open new stores, or remodel existing stores, to use equipment and refrigerant that requires specialized technician expertise to maintain and service.

The entire United States already faces a dearth of the qualified technicians that are required to ensure that refrigeration systems are properly operated and managed in compliance with existing

⁹ See Proposed Rule at 87 Fed. Reg. 76773, Table 4 – Proposed HFC Restrictions and Compliance Dates by Subsector.

¹⁰ We note that some regional retailers not subject to or previously preparing to meet California CARB requirements may need as long as a 10-year extension. We recommend EPA include a mechanism for individual end users to seek extensions to compliance deadlines in the Final Rule.

regulatory requirements.¹¹This severe shortage would become orders of magnitude more serious if the rule was adopted as proposed – particularly in areas with lower population density and/or economically disadvantaged areas, where retailers already struggle to find qualified technicians.

5. Disadvantaged Communities Will Bear Disproportionate Impacts of an Expedited Transition

In light of EPA’s prioritization of environmental justice, the Agency should consider that those living in socioeconomically disadvantaged communities are most likely to bear the costs of the Proposed Rule. Disadvantaged communities often do not have the resources to support extensive retail operations, and those stores that exist in these communities often operate on slim margins – even below the 3% average margin across the supermarket sector. On the other hand, basic business principles indicate that upgrades and investments most often go to the locations where the company can expect a return on its investment. Furthermore, as noted above, disadvantaged communities are already struggling with a technician shortage, and it is impossible to open a store that uses refrigeration and air conditioning equipment that cannot be maintained.

Retail operations in disadvantaged communities are the most likely to experience supply disruptions and even store closures as a result of the limited availability of equipment and trained personnel and the significant costs associated with bringing existing stores into compliance with the new requirements. Even in a best-case scenario— where upgrades are available and implemented in a timely manner and technicians are available for necessary service—retailers may be forced to pass costs for these technology transitions down to consumers in the form of higher prices to help keep stores open. This additional burden seems particularly inappropriate when consumers are already struggling to cope with the higher inflation the country is currently experiencing.

6. Implementation Burdens and Challenges Will be Heightened for Small Businesses

The impacts of the Proposed Rule will be heightened for small businesses. Many retailers are small, independent shops, or small chains with only a few locations. One member company has indicated that upgrading a single location to comply with the proposed rule will cost approximately \$2,000,000. The vast majority of small retailers simply do not have the resources to commit to upgrades of this magnitude – particularly given the average 3% margin across the entire supermarket sector. Furthermore, even if a small, independent retailer can afford such an upgrade, it will have more limited access to the small supply of equipment that is currently available, as larger retail chains have greater purchasing power to compete for the limited stock available.

¹¹ See <https://www.achrnews.com/articles/146238-hvacr-industry-must-work-harder-to-retain-technicians>; <https://www.contractingbusiness.com/residential-hvac/article/21123518/technician-shortage-solutions-opportunities>; <https://www.hvacinformed.com/insights/pandemic-hvac-labor-shortage.1654853368.html>.

7. EPA Should Adopt a Phased-In Approach to Alleviate the Aforementioned Implementation Burdens

In light of all the reasons addressed above, EPA should consider adopting a phased-in approach in the Final Rule for all refrigeration and cooling units. This approach should include consistent GWP limits across applicable categories, and provide sufficient time for these alternative systems to be developed, demonstrated to work within the retail sector, and manufactured in sufficient quantity to serve the entire retail supply chain. Further, to maximize environmental protection during this necessary transition period, the Associations propose that EPA revise its GWP limit for retail refrigeration to a level that will allow retailers to continue the use of existing, readily-available low-GWP refrigerants like R-513a and R-449a.

B. Aerosol Product End Uses

EPA proposes to prohibit the manufacture and import of new aerosol products containing HFCs with a GWP over 150 by January 1, 2025. There are many common aerosol household products that contain small amounts of HFC as a propellant, ranging from personal care products to spray adhesives.¹² Additionally, there are industrial and manufacturing aerosol applications upstream in the supply chain that are critical to the safety and efficacy of consumer products sold by many of the Associations' members. The Associations are providing the below comments on issues related to the compliance timeframes for certain aerosol applications, as well as the Agency's proposed labeling requirements as applied to aerosol products. In doing so, our comments incorporate by reference the more detailed comments submitted by the Household & Commercial Products Association (HCPA) on the issues associated with compliance timeframes for certain aerosol end uses and the labeling requirements.

1. Additional Time is Necessary for the Transition of Certain Aerosol Products

It is the Associations' understanding that the vast majority of HFC-containing aerosol consumer products are currently meeting or are on track to meet the 150 GWP limit by January 1, 2025. However, for reasons discussed in further detail in HCPA's comments, there are some aerosol applications that will need a longer time to transition. The Associations echo HCPA's request for a compliance date of January 1, 2030, for these applications.

Aerosol applications needing an additional five years to transition to lower-GWP propellants include wound care sprays and topical coolant spray for pain relief which are sold to consumer by many U.S. retailers. Additionally, HCPA cites several industrial applications, many of which may be upstream of the retail supply chain and critical to the safety and efficacy of products sold

¹² Our Joint Retail Association 2021 comments on the HFC Phasedown notes several examples, including: Personal care products (e.g., antiperspirants/deodorants; hairspray; mousse; dry shampoo; foot powder spray; temporary hair color spray); insect killer; anti-static fabric sprays; spray adhesives; and party streamer string. The above list of examples is not intended to be exhaustive and merely illustrates the wide range of manufactured products and consumer product applications where HFCs may be present in small amounts. *See* RILA et al., Comment letter re: Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program Under the American Innovation and Manufacturing Act, (July 7, 2021), Docket ID No. EPA-HQ-OAR2021-0044, Comment ID: EPA-HQ-OAR-2021-0044-0201.

to our members' customers, and the safe transport of these products to stores and distribution centers nationwide. These include certified organic pesticides; cleaning products for removal of grease, flux and other soils from electrical equipment or electronics; products for sensitivity testing of smoke detectors; and sprays for aircraft maintenance.

2. EPA Should Provide Flexibility for Meeting Aerosol Labeling Requirements

The Associations and their members share EPA's goal of providing transparent, clear, and meaningful information to consumers and workers that use aerosol products. In the Final Rule, EPA should account for the complex set of existing labeling requirements for aerosol products, including ingredient disclosure and other federal and state level requirements, that make creating a one-size fits all approach to aerosol products not possible.

As discussed in further detail in HCPA's comments, several federal agencies¹³ regulate aerosol products depending on the application. These requirements include mandates regarding the disclosure of intentionally added ingredients, including the propellant. Additionally, several states with restrictions on the use of high-GWP HFCs have state-specific disclosure requirements.¹⁴ Listing the GWP on the product label for aerosol products would complicate compliance with these existing labeling requirements under these state and federal authorities without providing meaningful information to the average consumer and worker for which a GWP value would be of little meaning without additional context.

The Associations encourage EPA to provide flexibility and options for manufacturers and marketers of products, including retailers, for the aerosol labeling requirements contemplated in the Proposed Rule. Many of the options outlined in HCPA's comments are more feasible and practical for manufacturers to implement, including providing access to Safety Data Sheets (SDS) or links (*i.e.*, via on-product symbols or codes, such a quick response (QR) codes), where consumers can review GWP information. For any imported aerosol consumer products, retailers will need sufficient time to work with their manufacturing partners to implement changes to any online disclosures, as depending on the retailer's product assortment the changes would need to be applied across thousands of stock keeping units (SKUs).

II. Reporting and Recordkeeping

Our 2021 Joint Retail Association comments on the Proposed HFC Phasedown¹⁵ discuss the complexities and resource burdens associated with reporting on imported products when potentially tens of thousands of individual product SKUs may be implicated depending on the HFC-containing products (from appliances to aerosol products) that an individual retailer carries.

¹³ Aerosolized pesticides are regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); food, drugs and personal care products are regulated by the Food and Drug Administration (FDA). The U.S. Consumer Product Safety Commission (CPSC) regulates aerosol consumer products that are not regulated by EPA or FDA, and these are labeled in accordance with the Federal Hazardous Substances Act (FHSA). The Occupational Safety and Health Administration (OSHA) regulates aerosol products used in workplace settings, and these are labeled in accordance with their hazard communication standard (HCS).

¹⁴ Colorado, Delaware, Maryland, Massachusetts, New Jersey, Rhode Island, Virginia and Washington.

¹⁵ See generally *supra* footnote 12.

Given this established complexity, and time and resources required, a quarterly reporting frequency would be overly burdensome. The Associations recommend that EPA revise the requirement in the Final Rule to an annual reporting requirement.

In addition to mitigating the costs associated with quarterly reporting, an annual frequency is also appropriate as it is aligned with EPA's existing GHG Reporting Program requirements under Section 114 of the Clean Air Act. Alignment with this existing reporting and recordkeeping framework, including the three-year records retention requirements already included in the Proposed Rule, will reduce reporting burdens and minimize duplication. Likewise, the Associations recommend that the reporting cycle and timeframes for report submissions mirror those in the existing GHG Reporting Program.

III. A Two-Year Sell Through Period is More Appropriate for Certain Consumer Products

A one-year sell through provision contemplated by the Proposed Rule is insufficient when applied universally across the many consumer product categories within the scope of the Proposed Rule. In particular, residential appliances like refrigerators, air conditioners, and dehumidifiers, may remain in retailers' inventories for longer than one year. Additionally, if retailers are faced with a glut of unsaleable inventory of higher-GWP HFC appliances after a one-year sell through has expired, many of those products could be classified as hazardous waste under the Resource Conservation and Recovery Act (RCRA) and trigger any applicable treatment, storage and disposal requirements under that authority and any similar state requirements. Management of these unsaleable products as hazardous waste would create significant additional obligations and costs for retailers¹⁶ and would also unnecessarily burden the nation's hazardous waste treatment, storage and disposal infrastructure, which has limited existing capacity in hazardous waste incinerators and landfills.

Given that the conversion of unsaleable inventory to hazardous waste would create significant additional costs for retailers and additional environmental burdens, the Associations request that EPA include a two-year sell through provision for these residential appliances in its Final Rule.

IV. Future Regulation of Retrofits

The Associations supports EPA in its decision to not regulate retrofits of existing equipment in the Proposed Rule. The current technology for retrofitting existing commercial refrigeration units for the grocery sector is using HFO refrigerant blends which have a GWP of approximately 1400. Retrofits require the facility to replace parts such as lubricants and gaskets to allow the system to work without significant leaks. Further lowering of the GWP limits in a future retrofit regulation would likely strand existing equipment until new technology replacement refrigerants are developed. As discussed above, these replacement refrigerants are not yet available.

Stranding existing equipment in stores will be detrimental to retailers, including small businesses. Applying GWP limits to retrofitted equipment may result in retailers closing stores as

¹⁶ The regulatory requirements for hazardous waste generators vary based on the volume of hazardous wastes generated at a given time.

they become non-profitable due to a negative return on investment. Alternatively, converting stores to a CO₂ or other system could cost millions of dollars per store.¹⁷

The Associations request that EPA define the threshold for retrofitting, including whether adding a limited number of refrigeration cases to an existing system can cause the case to be categorized as retrofitted equipment. The Associations submit that if cases are replaced with similar equipment, this process should not be considered a retrofit subject to future GWP restrictions. Further, the Associations request that EPA, if and when it does determine that retrofit regulations are necessary, allow for extended compliance deadlines for retail refrigeration units to prevent the closure of stores as retailers search for feasible and available replacement products.

CONCLUSION

The Joint Retail Associations share EPA's concerns about climate change and wish to reiterate their support of EPA's efforts to reduce GHG emissions to the environment. However, the Proposed Rule will force retailers to reconsider opening or upgrading stores and facilities in rural, geographically isolated, and economically disadvantaged areas, many of which depend on food retailers for fresh food and job opportunities, because of difficulties in maintaining equipment associated with those stores. The Proposed Rule will also strand plans for stores that have been in place for years, and will cost all retailers, including small businesses, millions of dollars.

The Associations appreciate this opportunity to provide comments on their shared input on key elements within the Proposed Rule that have implications for retailers. The Associations and their members look forward to further engagement with EPA during this rulemaking process and other forthcoming regulatory actions on refrigerants.

If you have any questions or wish to discuss our request, please contact Susan Kirsch, Vice President, Regulatory Affairs, RILA at susan.kirsch@rila.org / (202) 866-7477; Jonathan Gold, Vice President, Supply Chain and Customs Policy, NRF at goldj@nrf.com / (202) 626-8193; Stephanie Harris, Chief Regulatory Officer & General Counsel, FMI at sbharris@fmi.org / (202) 220-0614; and Mary Ellen Kleiman, Senior Counsel and Vice President, Legal Affairs, NACDS at MKleiman@nacds.org / (703) 837-4327.

Respectfully submitted,

Retail Industry Leaders Association

National Retail Federation

The Food Industry Association

National Association of Chain Drug Stores

¹⁷ One Association member estimated the cost of replacement at \$2 million per store.