



September 23, 2024

Stratospheric Protection Division
US Environmental Protection Agency Office of Atmospheric Protection Mailstop 6205A
1200 Pennsylvania Avenue NW, Washington, DC 20460

RE: Phasedown of Hydrofluorocarbons: Restrictions on the Use of HFCs under the American Innovation and Manufacturing Act in Variable Refrigerant Flow Air Conditioning Subsector— Proposed Rule Docket No. EPA-HQ-OAR-2021-0643

The National Multifamily Housing Council (NMHC) and National Apartment Association (NAA) have a significant interest in the availability and affordability of the building products and equipment that our residents rely on in their homes. Therefore, we submitted comments in February 2024 in response to the Environmental Protection Agency's (EPA) Proposed Rule on the Phasedown of Hydrofluorocarbons detailing the impacts of this rulemaking on the development, construction, renovation and operation of multifamily buildings. We offer these additional comments in support of the proposed transition extension for variable refrigerant flow (VRF) systems and to provide updated data on housing market conditions that demonstrates a need for a similar extension across all residential products. The nation faces critical housing challenges; therefore, we urge EPA to delay the transition deadline for all residential products for at least one additional year to align with the VRF extension and help boost housing supply and address affordability concerns.

For more than 26 years, NMHC and NAA have partnered on behalf of America's apartment industry. Our combined memberships are engaged in all aspects of the apartment industry, including ownership, development, construction, management and finance. One-third of all Americans rent their housing, and our industry plays a critical role in meeting the nation's housing needs by providing apartment homes for 40 million residents and contributing \$3.4 trillion annually to the economy.

We are deeply committed to addressing the nation's pressing housing needs, as the country faces serious obstacles in containing rising housing costs, maintaining affordable housing stock and delivering much-needed new supply. We therefore urge you to consider the impacts of this rulemaking on affordable housing preservation and housing production and ensure that requirements do not unnecessarily exacerbate America's acute housing challenges.

The Nation Continues to Face Critical Housing Challenges

There is a pressing need to address housing affordability shortfalls and boost housing supply nationwide. Federal efforts to improve the state of the nation's housing are ongoing and we support EPA's action to minimize undue regulatory burdens and costs in this rule by extending the transition deadline for certain equipment systems. However, residential housing providers will face substantially similar transition compliance challenges regardless of specific equipment choice. We encourage EPA to address the constructability and operations issues the multifamily sector faces broadly and further adjust the rule to extend the transition deadline for non-VRF, residential equipment to at least January 2027.

As specified in our past comment, it is essential that we build and maintain housing at all price points to address the nation's critical housing challenges and ensure economic stability for American households. According to recent research commissioned by NMHC and NAA, the U.S. needs to build 4.3 million new

apartment homes by 2035 to meet the demand for rental housing.¹ The Biden Administration recognized this immense need to bolster the nation’s housing production and outlined a strategy to improve housing supply conditions through the Housing Supply Action Plan in 2022.² The administration has since initiated numerous efforts to activate new housing construction and bring down housing costs.

In August, the White House reaffirmed its commitment to addressing the nation’s serious housing challenges, while acknowledging that there is more progress to be made. “Since launching its all-of-government Housing Supply Action Plan, the Biden-Harris Administration has been committed to using every available tool to build more housing and lower costs. President Biden and Vice President Harris have put building more homes at the center of their economic agenda because rents are lower and homes are more affordable when we build more housing.”³ This summer, Treasury Secretary Yellen similarly explained that the housing “supply crunch has led to an affordability crunch.”⁴

Considerations for Additional Extensions in the Residential Sector

In the proposed extension for VRF systems, EPA appropriately recognizes that the residential sector faces specific implementation challenges in meeting the existing transition deadline due to the extended planning period and duration of typical multi-unit projects and the design and installation complexity involved with these systems.⁵ We support EPA’s efforts to provide building owners with the flexibility necessary to address practical development and construction considerations when using VRF systems and alleviate undue costs and regulatory burdens. Moreover, the issues identified in EPA’s justification for this action are found across the multifamily sector. In particular, multifamily projects broadly face uncertain design, building code compliance and permitting, procurement and equipment installation

¹ Hoyt Advisory Services, “Estimating the Total U.S. Demand for Rental Housing by 2035.” (2022), <https://www.weareapartments.org/>.

² “President Biden Announces New Actions to Ease the Burden of Housing Costs.” (May 16, 2022), <https://www.whitehouse.gov/briefing-room/statements-releases/2022/05/16/president-biden-announces-new-actions-to-ease-the-burden-of-housing-costs/>.

³ White House, “FACT SHEET: Biden-Harris Administration Takes New Actions to Lower Housing Costs by Cutting Red Tape to Build More Housing.” (August 13, 2024), <https://www.whitehouse.gov/briefing-room/statements-releases/2024/08/13/fact-sheet-biden-harris-administration-takes-new-actions-to-lower-housing-costs-by-cutting-red-tape-to-build-more-housing/>.

⁴ U.S. Dept. of Treasury, “Remarks by Secretary of the Treasury Janet L. Yellen in Minneapolis, Minnesota.” (June 2024), <https://home.treasury.gov/news/press-releases/jy2428>.

⁵ EPA, “Proposed Rule Phasedown of Hydrofluorocarbons: Restrictions on the Use of HFCs under the American Innovation and Manufacturing Act in Variable Refrigerant Flow Air Conditioning Subsector.” (June 26, 2024), 89 FR 53373. “Multi-unit residential and commercial new construction buildings must be planned well in advance, including plans for the heating and cooling systems intended to be installed in that new construction. Builders may order those planned heating and cooling systems in concert with the planning process without knowing when those systems will be installed. As noted by stakeholders, installation of these systems is often one of the final steps in construction. EPA acknowledges that it may therefore be the case that for new construction planned to occur in 2026, builders may have already designed and received a permit ahead of the issuance of the 2023 Technology Transitions Rule, for a building that contains a heating and cooling system that is planned to be installed in that new construction. Specifically, EPA recognizes that for construction planned to occur in 2026, components of residential and light commercial air conditioning and heat pump systems using VRF with regulated substances may have already been incorporated into the design of the building, received a permit from the appropriate authority having jurisdiction, and ordered by builders, such that the VRF system equipment associated with these projects are at risk of being stranded.”

conditions related to this sector's transition to A2L refrigerants by January 2026.

In our earlier comments, we detailed that both common multifamily building practices (including typical project duration and equipment pre-purchasing) and externalities (like the lack of consistent A2L requirements across building codes) could result in an inability to complete already permitted construction or install purchased equipment despite every intention to do so. Therefore, we reiterate our request to extend the transition deadline for both VRF and non-VRF residential systems. These challenges include:

- **Multifamily Construction Times Stand Near Record Highs.** The multifamily industry continues to face challenging construction conditions that are resulting in pronounced construction delays that further strain multifamily project timelines. In a June survey of apartment construction conditions, 70% of respondents reported experiencing construction delays over the previous three months according to NMHC's Quarterly Survey of Apartment Construction and Development Activity.⁶ While this marks a small improvement from March survey data (where 81% of respondents reported delays), a majority of multifamily construction and development companies have reported experiencing construction delays in every round of the survey since its inception in April of 2020.

In EPA's proposed VRF extension, EPA acknowledges that residential construction practices involve the prepurchase of refrigerant-containing equipment at a project's outset for installation at the appropriate construction phase and has sought to mitigate stranded inventory problems with amendments to this rule's transition deadlines. New residential construction data from the Census Bureau suggest that multifamily construction times have been swelling in recent years.⁷ An analysis of data from 2003 indicates construction times of around one year. Census data then shows that the number of multifamily units under construction began increasing much faster than starts and completions sometime around 2013, with construction times rising to around 1.7 years by 2018 and 2019. Finally, in 2023 the ratio of units under construction to starts and completions implies multifamily construction times of well over two years.

Moreover, industry survey data reflects that the complexity and diversity of multifamily building types broadly dictate construction schedules that exceed other residential construction timelines and can extend to 30 months or more. Given this typical multifamily timeline, it is foreseeable that there are multifamily construction projects currently underway that will be unable to meet the Interim Final Rule's January 2026 installation deadline for non-VRF systems without new equipment purchases and/or significant design changes.

- **Manufacturing and Procurement Uncertainty.** Multifamily construction continues to be constrained by certain manufacturing conditions that limit our ability to plan for and execute the transition. Many manufacturers are yet to test or produce the equipment needed to be compliant with the transition, which creates uncertainty in building design, product procurement and pricing.
- **National Model Building Codes Can Not Address Refrigerant Inconsistencies Until 2027.** The transition away from A1 refrigerants will result in a reliance on A2L refrigerants in

⁶ National Multifamily Housing Council, "Quarterly Survey of Apartment Construction & Development Activity." (June 2024), <https://www.nmhc.org/research-insight/nmhc-construction-survey/>.

⁷ "NMHC Market Trends." (August 2024), <https://www.nmhc.org/research-insight/market-trends/2024/nmhc-market-trends-august-2024/>.

residential construction, which triggers considerable new building code requirements that will impact the design, construction and maintenance of multifamily buildings. While existing code provisions specifically address the use of A1 refrigerants, the most commonly used International Code Council (ICC) national model codes do not account for the broad transition to A2L refrigerant use in residential construction and compliance with current ICC criteria would conflict with other building criteria for the use of A2L refrigerants like that found in ASHRAE Standard 15 - Safety Standard for Refrigeration Systems. ICC's current requirements would also impose undue construction requirements and force unit reconfigurations with an estimated cost of at least \$2,000 to \$2,500 per apartment unit, which is exclusive of losses related to reductions in rentable square footage or unit totals. In addition, these redesign issues can cause significant delays and complications where jurisdictions premise initial project approvals and permitting on the construction of a specific number of dwelling units. Duplication of the public approval process or re-permitting could result in particularly lengthy delays. While our industry and others are currently seeking accommodations within the ICC's International Mechanical Code, such changes would not appear until the 2027 I-Code editions are published.

- **Existing Buildings May Face Unique and Costly Reconstruction Challenges.** Finally, existing buildings (including recently completed buildings) will face serious obstacles where an equipment replacement forces the use of A2L refrigerant. Unamended code requirements would prompt potentially significant construction in occupied units, raise concerns about space availability and increase rents due to retrofit and reconstruction costs. Multifamily properties will be substantially impacted where the necessary replacement of one failed air conditioner in an apartment building could trigger extensive work in all the units above and/or below the replacement unit to install required shafts and shaft ventilation related to A2L refrigerant use. While EPA has specified that retrofits are not required for already installed equipment, the nature of the reconstruction work needed in a typical multifamily building at the time of a singular system replacement will lead to the premature and costly retirement of other functional equipment. In addition, workforce training is essential in multifamily communities and staff will need to understand the operation and maintenance considerations where A2L refrigerants are in use. A further amendment of the transition deadline will provide additional time for apartment housing providers to explore solutions for existing buildings and manage workforce training efforts.

Conclusion

While the apartment industry supports the goals of this refrigerant transition, maintaining housing affordability and availability are also key national priorities. We support EPA's existing efforts to alleviate the refrigerant transition burden for housing providers, but urge EPA to recognize that an additional transition extension applying to all residential systems and equipment is needed to meaningfully address specific challenges faced by the apartment industry and benefit the nation's renters. Accordingly, we request that EPA extend the installation deadline for VRF systems and also act on our previously-submitted comment on the Interim Final Rule by providing a similar extension for non-VRF HVAC systems. We are committed to working with policymakers to further climate goals while supporting the creation of more housing, preserving affordability and ensuring that every American has a safe, quality place to call home.

Respectfully Submitted by:

National Multifamily Housing Council

National Apartment Association