



February 9, 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: Technology Transitions Program Residential and Light Commercial Air Conditioning and Heat Pump Subsector— Interim Final 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 submit the following comments in response to the Environmental Protection Agency's (EPA) Interim Final Rule on the Phasedown of Hydrofluorocarbons. In addition to supporting EPA's climate goals, we are committed to addressing the nation's pressing housing needs. However, we face 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 undermine efforts to address America's acute housing challenges.

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. NMHC represents the principal officers of the apartment industry's largest and most prominent firms. As a federation of 141 state and local affiliates, NAA encompasses over 95,000 members representing more than 11.6 million apartment homes globally.

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. Though we encourage improved environmental performance in the residential sector, the upcoming refrigerant transition presents unique challenges for apartment providers and our residents.

We strongly support EPA's decision to extend the refrigerant transition period for residential air conditioning and heat pump products and appreciate EPA's recognition of the implementation challenges faced by this sector. EPA rightly acknowledges that typical, residential construction and development practices involve purchasing and equipment installation timelines that do not conform with EPA's original transition deadline. However, we urge EPA to consider specific constructability and operations issues in the multifamily sector that warrant further extension and adjustment of EPA's phasedown rule.

Critical Housing Shortages and Affordability Needs

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 This includes an existing shortage of 600,000 apartments stemming from underbuilding due in large part to the 2008 financial crisis. Further, underproduction of housing has translated to higher housing costs – resulting in a consequential loss of affordable housing units (those with rents less than \$1,000 per month), with a decline of 4.7 million affordable apartments from 2015-2020.

In fact, the total share of cost-burdened apartment households (those paying more than 30% of their income on housing) has increased steadily over several decades and reached 57.6% in 2021.² During this same period, the total share of *severely* cost-burdened apartment households (those paying more than half their income on housing) increased from 20.9 to 31.0%.³

Further, the Biden Administration has 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. The plan underscores that this national supply shortfall “burdens family budgets, drives up inflation, limits economic growth, maintains residential segregation, and exacerbates climate change.”⁴ And that “[r]ising housing costs have burdened families of all incomes, with a particular impact on low- and moderate-income families, and people and communities of color.”⁵ Of particular importance to this proposal, the plan specifically identifies the need to control materials costs and address supply chain challenges.

In addition, it’s important to understand the nation’s reliance on existing buildings to meet a significant portion of our affordable housing needs. Over one-quarter (25.3%) of all apartment units in the U.S. today were built between 1960 and 1979; nearly half (42.7%) were built prior to 1980.⁶ This housing segment is particularly impacted by new operational, maintenance and cost pressures and has distinct constructability challenges when faced with changing equipment, appliance and building code requirements compared to new apartment construction.

Considerations for an Additional Extension

EPA recognizes that the original refrigerant transition deadline for the residential sector would create a stranded inventory problem and that “the production and purchase of products or components that are unable to be sold to consumers is an economic and environmental outcome no parties desire.” However, the multifamily sector faces unique challenges and conditions that cannot be addressed in the new

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

² American Housing Survey, U.S. Census Bureau, “NMHC tabulations of 1985 American Housing Survey microdata.” (2021).

³ *Id.*

⁴ “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/>.

⁵ *Id.*

⁶ NMHC tabulations of 2022 American Community Survey public use microdata.

transition period and EPA should therefore consider a further transition extension.

First, EPA's new transition deadline does not appropriately accommodate the typical duration of multifamily construction projects. 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 seeks to mitigate stranded inventory problems with a one-year transition extension. However, the complexity and diversity of multifamily building types dictate construction schedules that exceed other residential construction timelines and can extend to 30 months or more according to industry survey data. 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 without new equipment purchases and/or significant design changes.

Multifamily construction is also 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 product procurement and pricing.

In addition, the multifamily industry currently faces challenging construction conditions that are resulting in pronounced construction delays that further strain multifamily project timelines. In a recent survey of apartment construction conditions, 84 percent of respondents reported experiencing construction delays according to NMHC's December 2023 Quarterly Survey of Apartment Construction and Development Activity.⁷ Since the conditions EPA means to address by this extension will continue to be present in multifamily construction beyond January 2026, we urge EPA to further extend the transition deadline for residential products.

Moreover, we encourage EPA to provide a longer transition period to allow for proper consideration of the use of A2L refrigerants in the national model building codes. The transition away from A1 refrigerants will result in a reliance on A2L refrigerants in residential construction. Significantly, the use of A2L refrigerants triggers considerable new building code requirements that will impact the design, construction and maintenance of multifamily buildings. Such provisions are specifically found in the International Mechanical Code (IMC) published by the International Code Council (ICC), which is part of the family of ICC national model codes (I-Codes) that serve as the basis for most state and local building codes. While existing code provisions specifically address the use of A1 refrigerants, the code does not account for the broad transition to A2L refrigerant use in residential construction. Moreover, 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.

Using the current I-Codes, accommodating the transition to A2L refrigerants in many multifamily buildings would impose undue construction requirements with an estimated cost of at least \$2,000 to \$2,500 per apartment unit. This estimate is exclusive of additional costs incurred by the loss of rentable square footage where existing code requirements would require unit reconfiguration. However, the ICC is currently in the process of updating the IMC. The ICC code development process allows for consideration of changing construction conditions and the use of A2L refrigerants will be addressed during this code development cycle. Yet, such changes will not appear until the 2027 I-Code editions are published. EPA should further postpone the transition to allow for the national model codes to

⁷National Multifamily Housing Council, "Quarterly Survey of Apartment Construction & Development Activity." (December 2023) <https://www.nmhc.org/research-insight/nmhc-construction-survey/2023/quarterly-survey-of-apartment-construction-development-activity-december-2023/>.

account for necessary changes and reconcile differing A2L requirements across the I-Codes and ASHRAE standards. We therefore urge EPA to delay the transition deadline for residential products for at least one additional year to align with the expected availability of the 2027 I-Code editions.

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

It is becoming increasingly difficult to build housing that is affordable to a wide range of income levels. While the apartment industry supports the goals of this refrigerant transition, maintaining housing affordability and availability are also key national priorities. We urge EPA to recognize that an additional transition extension is needed to meaningfully address specific challenges faced by the apartment industry and benefit the nation's renters. 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