



COOLING & HEATING

January 10, 2025

Gopika Patwa
Ch 173-443 Rulemaking Lead
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Mitsubishi Electric US
1340 Satellite Blvd.
Suwanee, GA 30024

Dear Gopika Patwa,

Mitsubishi Electric US (MEUS), a leading U.S. based manufacturer of high efficiency all-climate heat pumps and Variable Refrigerant Flow systems (VRF), appreciates the opportunity to provide initial comments on the proposed revisions to Chapter 173-443 WAC Hydrocarbons. We acknowledge WA DOE's role and authority to schedule step downs in the Global Warming Potential (GWP) of refrigerants to lessen their impact on the environment. We seek to provide insight on impacts of the current prohibition date for VRF systems and thoughtfully recommend full alignment with California and the EPA on prohibition dates and allowances to avoid disrupting progress electrifying and decarbonizing the built environment in Washington State.

One of the key technologies available today to eliminate fossil fuel use in multi-family buildings, schools, and light commercial structures is VRF heat pump systems. Much like our all-climate heat pumps used in homes across the country to provide efficient comfort year-round, our larger VRF systems can provide reliable heating and cooling during increasingly common and extreme heat dome and polar vortex. While keen to provide best outcomes for end users, we are also committed to both environmental stewardship and regulatory compliance. As part of our ongoing efforts, Mitsubishi Electric is deeply engaged in the extremely complex, costly and lengthy process of transitioning our offered equipment to lower GWP refrigerants with enhanced leak detection and mitigation functionality as is required by US and state code.

Recall a few years before the EPA issued AIM Act Technology transition rules, California Air Resources Board established timelines and methodologies for transitioning to use of lower GWP refrigerants. While California's prohibition date for VRF is 1/1/2026, this date is a prohibition on use of VRF components manufactured after 1/1/2026 for use with GWP>750 refrigerants. While ahead of the pack, California's rule avoids disruption to installers, designers, manufacturers, distributors, and building developers by establishing a rule that does not prevent installation of inventoried equipment manufactured before a prohibition date.

In the current version of Chapter 173-443 WAC, VRF systems with a GWP greater than 700 have the same prohibition date as California (1/1/2026), but place prohibition on installation instead of date of manufacture creating a far shorter timeline for manufacturers, designers, and property developers to adjust. While the 1/1/2026 prohibition date in Chapter 173-443 was at the time of issue in December 2023 aligned with the EPA AIM Technology Transition Final Rule in October 2023, the EPA shortly thereafter issued notice of intent to

revise the timeline for VRF. Finally in December 2024, EPA published the long-expected VRF Direct Final Rule extending the date of new installations of VRF systems to 1/1/2027 where all components are manufactured and imported before 1/1/2026. They also provided an additional year to 1/1/2028 for VRF projects where granted a local building permit prior to 10/5/2023. The combination of extensions provided by the EPA alleviates real economic harm to local distribution and installers, keeps momentum on decarbonization efforts given the multi-year timeline for new commercial building construction while keeping to a process that shifts us to lower GWP refrigerants with haste.

Meanwhile this past December 24th, 2024, the New York State Department of Environmental Conservation (NYSDEC) published an amended Part 494 regulation to revise timelines for refrigerant prohibitions. While NYCDEC also set an end date of 1/1/2026 for new VRF installations, they only provided a one-year exemption for VRF systems where a building permit was issued by a local jurisdiction before the effective date of the rule (1/9/2025). This exemption and one year extension for permitted systems provides some relief relative to a sharp end date of 1/1/2026, but far short of the blanket extension to 1/1/2027 and permitted extension to 1/1/2028 as provided by EPA. Even though this would appear to be latitude compared to the original proposal, the negative impact of the NY rule is already being felt with forecast reduction in the total number of heating system transitions away from fossil fuel systems in commercial building structures in 2025 and costly uncertainty on steps ahead for the largest VRF projects that have been in motion for years, but now need to be complete by 1/1/2027. We urge WA DOC to fall in with CA and EPA instead.

In summary: Expecting a significantly negative environmental and economic impact to the effort to electrify schools, multi-family buildings and small commercial building in Washington in 2025 and 2026 under the current VRF prohibition date in Chapter 173-443 relative to prohibitions set forth by the EPA in their VRF Final Direct Rule, we encourage the Department of Ecology staff to amend the VRF prohibition date and rules to allow new installation of VRF systems until 1/1/2027 where components are manufactured before 1/1/2026, and until 1/1/2028 where building permits have been issued locally before 10/5/2023.

We greatly appreciate your efforts to effectively administer programs and regulations to reduce emissions that contribute to climate change. Mitsubishi Electric is committed to being a part of the solution and provide our comments in hope of speeding the transition from fossil fuels to electrification for a better future for our communities, families, and planet. Please let us know if you have any follow-up questions or if we can be of further assistance.

Sincerely,



Dana Fischer
Director of Regulatory Strategy