Complying with California and Washington's Refrigerant Phaseout Requirements

By this time, everyone has heard about the EPA's AIM Act passed on December 27, 2020 and the subsequent Technology Transitions Program that limits the use of climatedamaging hydrofluorocarbons (HFCs) in specific technology sectors and subsectors, such as foam, aerosols, and refrigeration, air conditioning, and heat pumps. While these regulations will impact the entire United States, there are also regulations in place in California and Washington that also impact the space conditioning products we rely on to cool our homes, offices, ice arenas and food distribution network.

On January 1, 2022, a new California final regulation order (<u>Title 17, Division 3, Chapter 1</u>, <u>Subchapter 10, Article 4, Subarticle 5, Sections 95371-95379 of the California Code of</u> <u>Regulations</u>) went into effect mandating the phasedown of a multitude of refrigerants in various application with differing effective dates. The categories that most effected Madison Air companies are:

General End-Use	Specific End-Use	Prohibited Substances	Effective Date
Air-conditioning Equipment	Room/wall/window air- conditioning equipment, PTACs, PTHPs, portable air- conditioning equipment, and residential dehumidifiers (new)	Refrigerants with a GWP of 750 or greater	1/1/2023
Air-conditioning Equipment	Other air-conditioning (new) equipment, residential and nonresidential	Refrigerants with a GWP of 750 or greater	1/1/2025
Other Refrigeration	Refrigeration equipment (new), containing more than 50 pounds refrigerant	Refrigerants with a GWP of 150 or greater	1/1/2022

Likewise, on November 30, 2023, Washington State's Department of Ecology adopted a new rule to phase out hydrofluorocarbons (HFCs) and other fluorinated greenhouse gases (WAC 173-433). Modeled after California's regulation, Washington's regulation also phases

out various refrigerants from a multitude of applications over time. The categories that most effected Madison Air companies are:

End-Use	Criteria	Prohibited Substances	Effective Date
Room air conditioners and residential dehumidifiers (New)	New air conditioning equipment	Refrigerants with a GWP of 750 or greater	1/1/2024
Room air conditioners and residential dehumidifiers (Retrofit)	Retrofit air conditioning equipment	Refrigerants with a GWP of 750 or greater	1/1/2029
Other types of air conditioning equipment used in residential and nonresidential applications (New)	New air conditioning equipment	Refrigerants with a GWP of 750 or greater	1/1/2026
Other types of air conditioning equipment used in residential and nonresidential applications (Retrofit)	Retrofit air conditioning equipment	Refrigerants with a GWP of 750 or greater	1/1/2029
Industrial process refrigeration excluding chillers (New)	New refrigeration equipment with a full charge of more than 50 pounds of refrigerant	Refrigerants with a GWP greater than 150	1/1/2025

For most of our products, Madison Air companies have chosen to transition to R-454B to comply with the requirements of CA, WA and the AIM Act.

With the finalization of California and Washington state's new rules, additional requirements have been implemented in the labeling, record keeping and reporting requirements for HVAC equipment.

New Labeling Requirements for CA and WA

Both California and Washington have implemented new requirements for the information that must be displayed on the side of HVAC equipment continuing refrigerant. The table below provides a summary using the wording exactly as it appears in the two rules.

Likewise, there will be additional requirements required by the EPA's AIM Act when it is finalized. When complete, this article will be updated with that information.

Labeling Requirements

California: §95375 (c)(4)(A)	Washington: WAC 173-443-075 (3)(a)
The type of refrigerant	Chemical name, or American Society of Heating and Air Conditioning Engineers (ASHRAE) designation, of the substance(s) used or contained in the equipment
-	The GWP, labeled as "global warming potential," of the substance(s) used or contained in the equipment*
Where available, the refrigerant charge size in ounces, pounds, grams, or kilograms	Refrigerant charge size in ounces, pounds, or kilograms**
The date of manufacture indicating, at a minimum, the four-digit year of manufacture	Date of manufacture or import. For field- erected or field-charged equipment, this is the date of first charge
Existing labels meeting the above requirements may be used. For built-up systems, existing equipment component labels may be used	Existing labels meeting the above requirements may be used

* Currently using values from AR5, but manufacturers will have to update when WA state moves to AR6

** For field erected/charged equipment, the installer must affix a label with the total charge.

New Record Keeping Requirements for CA and WA

Just like labeling, the two states have implemented new requirements for the information that must be retained by the manufacturers of HVAC equipment continuing refrigerant. The table below provides a summary using the wording exactly as it appears in the two rules.

California: §95375 (c)(4)(B) Washington: WAC 173-443-075 (4)(a) The sector or subsector of the equipment Name and address of the person Name of company or retailer to whom purchasing the equipment at the time of the equipment was sold or otherwise distributed purchase Telephone number and email address of the person purchasing the equipment at The bill of lading the time of purchase, if provided to the manufacturer Model and serial number of the equipment. When the affected equipment is part of an assembly without an individual serial number, the serial number of each component must be recorded. If the Model and serial number equipment or a component does not have an individual serial number or the serial number is inaccessible after assembly, the physical description must be recorded in enough detail for positive identification Date of manufacture of the equipment Date of manufacture or import Date of sale of the equipment The invoice The refrigerant type(s) the equipment is Refrigerant type the equipment is designed to use designed to use and its GWP value The refrigerant and full charge capacity of the equipment, where available

Record Keeping Requirements

These records do not need to be submitted, but rather retained in the event of an audit.

New Reporting Requirements for CA on the use of Reclaimed R-410A

In an effort to jump start the reclaimed refrigerant market, California requires manufacturers to use R-410A that has been reclaimed following AHRI Standard 700 by an <u>EPA-Certified</u> <u>Refrigerant Reclaimer</u>. That refrigerant must be used in the manufacture of new or service of existing HVAC equipment.

The amount of refrigerant each company is required to purchase is based upon the average amount of refrigerant that was in units sold into California during 2018 and 2019 and the type of equipment to be sold into California. Further information on this calculation can be found in § 95376 of the regulation.

California requires three reports be submitted by each company to monitor their progress:

1/1/2023: Initial Baseline Report - The amount of refrigerant shipped into CA during 2018 and 2019 and the subsequent quantity of reclaimed refrigerant that must be purchased.

1/1/2024: Annual Report – Report quantity of reclaimed refrigerant used in new equipment or servicing equipment in the field.

1/1/2025: Final Report - Report quantity of reclaimed refrigerant used in new equipment or servicing equipment in the field.

The state of Washington does not have any additional reporting requirements.

At the current time, EPA's AIM Act is proposing reporting requirements. When their requirements are finalized, this article will be updated.

For further information, we encourage you to review the regulations and associated information distributed by each state:

California: https://ww2.arb.ca.gov/rulemaking/2020/hfc2020

Washington: https://ecology.wa.gov/regulations-permits/laws-rules-rulemaking/closedrulemaking/wac-173-443-455

WA Guidebook: https://apps.ecology.wa.gov/publications/SummaryPages/2314025.html