Definitions (Section 030)

“Chiller” Ecology added text that chillers used for comfort cooling are considered air conditioning and chillers used for industrial process refrigeration (IPR) are considered refrigeration except for purposes of the maximum GWP thresholds in Section 040. Ecology shared the Washington HFC statutory definitions for “air conditioning” and “refrigeration equipment” as the basis for this change.

- No significant concerns raised.

“Industrial process refrigeration” Ecology added text that chillers used for industrial process refrigeration are considered refrigeration except under the maximum GWP thresholds in Section 040.

- Question about whether some businesses will not know they are included in the refrigerant management program (RMP) and whether Ecology researched where these chillers are used.
  - We have looked into types of business in the state – specifically for air conditioning, and for cold storage and frozen storage. Grocery stores should know they are included. We may be not seeing the manufacturing that is not in the food industry.

“Comfort cooling” Ecology added a definition to distinguish comfort cooling from air conditioning.

- Question about whether industrial process refrigeration using a chiller would have a GWP under these definitions.
  - IPR using a chiller would not have a GWP threshold, but will be subject to the RMP.

“Consumer” Ecology added a definition to clarify that small cans of refrigerant (< 2 lbs.) may not be sold, including to MVAC technicians. This is based on statutory language and aligns the definition (in concept) to CARB.

- Some stakeholders were concerned about adding MVAC technicians as consumers and want to have follow up discussions. One stakeholder supported Ecology’s interpretation.

“Stand-alone unit” Ecology added text that removes commercial ice machines. This also removes commercial ice machines from requirements under Section 040.

- Question about whether this also applies to smaller ice machines. Concern that there are commercial ice makers that use refrigerants with a GWP below 150 and they should not be excluded.
  - We will look into this issue and may add a size threshold.
- Question about whether this includes residential heat pump water heaters.
  - Heat pumps includes those that cool or heat for industrial processes, refrigeration, or air conditioning – meaning conditioning the air in a room, not hot water heaters. We will make sure this is clear.
- Question about whether Ecology will differentiate between self-contained and other ice makers. Up to four or five hundred pounds of ice per day versus large equipment.
  - We will discuss this internally and may add a size threshold.
List of prohibited substances: (Section 040, Tables 2, 3, and 4)

- All refrigeration equipment (table 2). Ecology moved the effective date for all refrigeration equipment, except for ice rinks, to January 1, 2026. We are coordinating with the State Building Code Council (SBCCD) about adoption of the new standards.
  - Question about whether a grocer with a refrigeration rack containing more than 50 pounds and must replace components during a 3-year period (exceeding 50% of capital cost) must meet the 150 GWP threshold.
    - Yes, if it contains more than 50 pounds in a single circuit.
- Commercial ice machines (table 2). Ecology removed commercial ice machines from SNAP-like and maximum GWP thresholds requirements through revision of “stand-alone unit” definition.
  - Concern that smaller ice machines should not be excluded. Low-GWP alternatives are available.
    - We will look into this and may clarify a size threshold.
  - Question about whether Ecology will move back the date if the SBCC adopts the new standards by January 1, 2023.
    - It is not our intention to do that.
- Other types of air conditioning (table 3). Ecology moved the effective date for “other types of air conditioning” from January 1, 2025 to January 1, 2026.
  - No significant concerns raised.
- Chillers: (table 4). Ecology removed chillers from the maximum GWP thresholds under Table 4.
  - No significant concerns raised.

Refrigeration Management Program – Introduction

Ecology reviewed the key components of the RMP:

- Registration
- Reporting
- Recordkeeping
- Leak inspections

Ecology must establish an RMP under RCW 70A.60.030.

The RMP will apply to refrigeration and air conditioning systems having a charge size of 50 or more pounds in a single circuit. We expect it to begin in January 2024.

Exemptions will include systems that use low-GWP refrigerants and that do not use an ODS, Class I or Class II substance. Systems with auto leak detection installed will be exempt from regular leak detection requirements.

Breakdown of RMP components

Registration: Phased in based on charge size. All sized systems having 50 or more pounds of refrigerant in a single circuit must register with the program. We will model CARB’s RMP by having three sizes:

- Small: 50 to 199 pounds
- Medium: 200 to 1,499 pounds
- Large: 1,500+ pounds

Washington’s size thresholds will likely be 1,500+ pound charge for a large system and 200 to 1,400 pound charge for a medium system. CARB considers a large system as 2,000+ pound charge and a medium system as 200 to 1,999 pound charge.

Reporting: Will apply to equipment owners/operators and to refrigerant wholesalers, distributors, and reclaimers.
**Recordkeeping:** Will apply to equipment owners/operators and to refrigerant wholesalers, distributors, and reclaimers. We have not yet determined what records will be included.

The law allows Ecology to establish service requirements for technicians, which may include recordkeeping, needing to be EPA certified, and prohibiting the addition of refrigerants to a system with a known leak, etc.

**Leak inspections:** Frequency will be based on system size and when a significant amount of refrigerant is added. We have not yet determined what “significant” means.

We expect the frequency to be monthly for large systems, quarterly for medium systems, and annually for small systems.

**Leak repair:** Must occur within a specified time period. We have not yet determined what that is, but it will likely match CARB timeframes. Washington will have a leak threshold – as the law requires. We have not yet determined the thresholds, but it must reflect greater emission reductions than EPA thresholds.

**Other RMP items that we will be working on in the coming weeks**

**Exemptions:** If and how to allow for exemptions for some program requirements and who is eligible.

**Fees:** How much and who should pay. The fees should cover the cost of the program and that will depend on the number of systems across the state and the cost of the program.

**Consistency with other states and federal programs:** The law requires that the RMP be consistent with other programs, to the extent practicable.

**Stakeholder questions/comments**

- Ecology may not enforce RMP requirements until the leak report is submitted. Is that correct?
  - Yes. We are working on the leak report now. We will have a stakeholder meeting on this report on July 27, 2022 at 9 a.m. PDT.
- What reporting will wholesalers and distributors be required to do?
  - We have not yet determined that.
- Ecology should clarify that auto leak detection equipment should be installed and “functioning correctly.”
  - We will clarify that.

**Future stakeholder meetings**

- August 16, 2022 – This meeting will move to a later date. Please check the HFC rulemaking webpage (https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/WAC-173-443-455) for updates.
- September 29, 2022 – This meeting will move to a later date. Please check the HFC rulemaking webpage (https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/WAC-173-443-455) for updates.

All meeting times are 9:30 a.m. to noon PDT.