

I would rethink this.... remodels are a huge part of supermarket normal course of operations. they do big and small projects and modify existing equipment. If the regulations are too stringent on existing stores, the end users will keep running the same old equipment with high GWP refrigerants; but if they have a path which isn't as stringent as New facilities then they will typically do that.



HFC Rulemaking, Chapter 173-443 WAC November 17, 2022 Stakeholder Meeting Summary

Draft language review – stakeholder comments and Ecology responses

Definitions (Section 030)

“Chiller” Ecology revised to say that chillers used in supermarket systems are an indirect type of refrigeration. This change makes the GWP threshold and Refrigerant Management Program (RMP) apply to chillers used in supermarkets. Ecology also shared that changes to this definition (not yet shown in draft rule language) will add that chillers used in industrial process refrigeration will be considered an “other type of refrigeration” and will be subject to the GWP threshold and RMP requirements.

- Question about whether this changes the de minimis standards to be in the RMP.

This change does not alter the 50 lb. charge threshold for equipment to be subject to the RMP.

- Question about how chillers used in ice rinks counted toward the GWP limit. Chillers are used in ice rinks.

We haven’t tied chillers used in ice rinks to this definition, but we will consider it. Our statute specifically calls out ice rinks.

“Cumulative replacement” Ecology removed the 3-year time-period. This means that all cumulative changes after the rule is effective count when determining when the equipment changes make the equipment “new.”

- No questions/concerns

“New air conditioning equipment” Ecology revised the definition of “new” into two separate “new air conditioning equipment” and new refrigeration equipment” definitions. The specific criteria for cumulative replacements is changed from a percentage of capital cost of replacement to a specific percentage or number of components replaced (similar to California’s HFC rule).

“New refrigeration equipment” Same as above; except that Ecology is considering modifying the criteria in (b) for increases to compressor capacity that would make the equipment qualify as “new.”

Stakeholder comments about “new” equipment definitions:

- Item “b” should be based on how many pounds of refrigerant the system is using rather than on whether the compressor capacity was increased.
- Change “compressor” to “refrigeration system.”
- Agreement that there should not be a slow increase in the size of a store (piecemeal approach), but still avoid causing equipment to be sunsetted early.
- **General agreement that there is not a need to make a distinction between existing and new facilities.**

Ecology will meet with NASRC in three weeks to discuss in more detail and will continue to work on this language.

- Concern that the building codes will not be updated in time in Washington.

Air conditioning standards are done in Washington. We are tracking the progress for refrigeration.

- Question about whether having a permit before January 1, 2025 will be allowed for a system with a higher GWP.
- Comment that building permits should not be tied to this regulation. Permit timeframes are long.

Setting up drop dead dates by "permit date" have proven to work well in CARB's program. It worked well that if a facility has a permit before the effective date they could move forward, if not they have to meet the new restrictions. Most supermarkets remodels and new stores pull permits after the design process and very "late" in the game. I would re-think this statement.

The draft language includes exceptions for approved building permits, but we want to be thoughtful so that we do not create a loophole.

List of prohibited substances: (Section 040, Table 2):

- Refrigeration equipment (Table 2). Ecology moved the effective date for refrigeration equipment from January 2026 to January 2025. This change is based on revisions to the "new" equipment definitions.
 - AHRI will check with manufacturers. They have been preparing for a January 1, 2026 transition.

Refrigeration Management Program

Updates to RMP table since last meeting

- Notification. Ecology revised the notification timeframe for a leak rate threshold exceedance from 5 days to 30 days. This change was based on stakeholder feedback.
 - No questions/concerns
- Fees. Ecology shared initial recommendations. The fee amounts are as follows:
 - Large refrigeration systems and air conditioning systems (1,500+ lbs.)
 - \$370 annual fee
 - \$150 one-time implementation fee
 - Medium refrigeration systems and air conditioning systems (199 to 1,499 lbs.)
 - \$170 annual fee
 - \$75 one-time implementation fee
 - Small refrigeration systems and air conditioning systems (50 to 199 lbs.)
 - No fees

typically somewhere in the system they will; most likely at the Racks and in Walk-in Boxes. The ALD is not for leak mitigation but for life safety (LS) code requirements. I have not seen the LS ALD's be used successfully to identify leaks; sensitivity is essentially too high; they look for "emergency" or will turn into an "emergency" if action isn't taken ALD systems.

Q and A session on Automatic Leak Detection (ALD)

Ecology asked for feedback on the below questions. The purpose is to guide decision-making on potential ALD requirements and setting minimum concentration detection levels.

- Do all large (1500+ lbs.) refrigeration systems currently have ALD in place? Is it common to have ALD on other sizes of equipment?
- Is it common to have ALD on AC equipment? If so, what are the most common equipment charge sizes having ALD and what are the typical detections levels?
- CARB currently requires ALD with detection limits of 10 ppm. If Washington decides to align with CARB, what challenges do you foresee in meeting 10 ppm in Washington?

Stakeholder responses are not included in this summary.

- Several stakeholders asked for a follow-up meeting with Ecology about the specific RMP requirements.

Ecology will follow up with interested stakeholders on a date/time for the meeting.

Future stakeholder meetings

- Early January 2023

Installing leak detection at 10 ppm in enough areas to actually capture leaks is cost prohibitive to end users. The Life Safety (LS) ALD are expensive and provide no more than 20 monitoring points (Walk-ins, at compressor racks typically). to adequately monitor an entire store for leak mitigation an end user would need 10x that many points potentially, and those points would need to look at much lower concentrations than the LS ALD systems are currently being deployed.