



Interpretive Statement on the Effective Date of Prohibitions Pertaining to Automatic Commercial Ice Machines

Policy Number:

Program Name: Climate Pollution Reduction Program, Fluorinated Gases Section

Date Issued: December 30, 2024

Purpose:

Under the authority granted in RCW 70A.60.040(3)(a), Ecology will refrain from enforcement of the January 1, 2025 effective date for the prohibition on certain hydrofluorocarbon (HFC) substances in Automatic Commercial Ice Machines (ACIMs). This includes both remote condensing units and stand-alone units as listed in WAC 173-443-040, Table 1. Ecology's suspension of the prohibition effective date applies only to ACIM manufacturers that remain in compliance with the federal requirements of the U.S. Environmental Protection Agency's (EPA's) Technology Transitions Rule in 40 CFR 84.54(a)(8)(i)-(ii) and (c)(14), published October 24, 2023 (88 FR 73205).

RCW 70A.60.040(3) states, in relevant part:

(3) The department may elect to refrain from or cease administering or enforcing a requirement of this chapter if the United States environmental protection agency adopts requirements that:

(a) Are substantially duplicative of the requirements of this chapter and that negate the additional emission reduction benefits of state implementation of any requirement of this chapter[.]

Ecology believes EPA's global warming potential (GWP) limit for certain self-contained ACIMs (beginning in 2026), combined with EPA's expanded scope of specific substances prohibited in the larger self-contained ACIMs and all remote condensing ACIMs (beginning in 2027), creates "substantially duplicative" requirements that will reduce emissions to a greater extent than implementation of Ecology's rule in 2025. Ecology concludes that compliance with EPA's rule would negate the additional emission reduction benefits of enforcing our rule's 2025 effective date for the prohibitions on specific hydrofluorocarbons in ACIMs in WAC 173-443-040 Table 1.

Application:

This interpretive statement applies to manufacturers, distributors, wholesalers, retailers, and buyers of Automatic Commercial Ice Machines (ACIMs).

Limitations

This Interpretive Statement is not a regulation. It is advisory only and not intended to be inclusive of, or address, every circumstance. On October 2, 2024, Ecology announced a rulemaking to amend Chapter 173-443 WAC, Hydrofluorocarbons and other fluorinated gases. These amendments include, but are not limited to, revisions to WAC 173-443-040 to modify the prohibitions for Automatic Commercial Ice Machines (ACIMs). An informal comment period begins in December 2024 through January 2025. Ecology expects to propose rule language in Summer 2025 and finalize it in late 2025.

Glossary

Automatic commercial ice machine means a factory-made assembly (not necessarily shipped in one package) that consists of a condensing unit and ice making section operating as an integrated unit, with means for making and harvesting ice; and may include means for storing ice, dispensing ice, or storing and dispensing ice (10 CFR 431.132).¹

Batch type ice machine means an ice machine having alternate freezing and harvesting periods (10 CFR 431.132).

Continuous type ice machine means an ice machine that continually freezes and harvests ice at the same time (10 CFR 431.132).

Remote condensing unit means a type of automatic commercial ice maker in which the ice-making mechanism and compressor are in separate sections (10 CFR 431.132).

Stand-alone unit means a self-contained type of automatic commercial ice machine in which the ice-making mechanism and storage compartment are in an integral cabinet (40 CFR 431.132).

Background

In 2021, the Legislature amended Chapter 70A.60 RCW to further reduce emissions of hydrofluorocarbons (HFCs) and other fluorinated greenhouse gases.² HFCs are air pollutants that threaten our environment because “they are hundreds to thousands of times more potent than carbon dioxide”.³ The law authorizes Ecology to adopt rules to address these pollutants.⁴ Ecology considers similar laws and regulations in other jurisdictions when developing such rules.⁵

Ecology’s rulemaking to amend Chapter 173-443 WAC, Hydrofluorocarbons and other fluorinated gases, began in August 2021. During rule development, Ecology worked with parties affected by the law using an iterative approach in developing rule language. Throughout 2022, Ecology published six iterations of draft rule language for informal review and comment.

¹ In the rulemaking process referenced above, Ecology will be revising its current definition of Commercial Ice Machines in WAC 174-443-030 to match the EPA’s definition in 10 CFR 431.132.

² See Laws of 2021, Ch. 315 (E2SHB 1050).

³ See RCW 70A.60.005(1).

⁴ See RCW 70A.60.005(2), .020(2), .030(1), .060(5), and .090.

⁵ See RCW 70A.60.020(5)(b), .030(7)(g), and .060(5).

Feedback from parties were considered and incorporated into potential draft rule language where appropriate.

In December 2022, EPA proposed a new federal rule (known as the Technology Transitions Rule) to phase-out the use of certain HFCs nationwide, authorized by the American Innovation and Manufacturing Act of 2020 (AIM Act).⁶ EPA proposed new restrictions on the use of HFCs in products and equipment. In their rule, EPA proposed three categories of restrictions that apply to ACIMs⁷:

1. Blanket 150 GWP limit for all substances used in small standalone ACIMs;
2. Prohibition of the use of 30 specific substances in large standalone ACIMs; and
3. Prohibition of the use of 21 specific substances in all remote ACIMs.

EPA proposed an effective date of January 1, 2025, for all three of these ACIM-related restrictions.⁸

During the first half of 2023, Ecology reviewed EPA's proposed Technology Transitions Rule and revised the draft rule language where appropriate. On July 13, 2023, Ecology published proposed rule language for public review and comment. The proposed rule included a list of 30 specific substances restricted for use in standalone ACIMs and a list of 21 specific substances restricted for use in remote ACIMs, with an effective date of January 1, 2025, for both lists. These proposed restrictions were aligned with those proposed by the EPA (categories 2 and 3 above). Ecology did not include EPA's proposed GWP limit for small standalone ACIMs (category bullet 1, above).

On August 23, 2023, Ecology held a public hearing on the proposed rule. The next week, in response to requests, Ecology extended the public comment period from August 31, 2023 until September 10, 2023. Ecology ultimately received, considered, and responded to 42 comment submissions, most of which included several unique comments. No comments were received regarding ACIMs.

Six weeks after the public comment period closed, EPA published its Final Technology Transitions Rule.⁹ EPA's final rule delayed the effective dates for the ACIM restrictions. EPA extended the effective date for the 150 GWP limit by one year (to January 1, 2026) and the effective date for the substance-specific restrictions by two years (to January 1, 2027).¹⁰ The 150 GWP limit was expanded to include equipment with ice harvest rates of up to 1,000 pounds for batch ACIMs and up to 1,200 pounds for continuous ACIMs. In addition, EPA prohibited the use of eight additional substances in self-contained ACIMs with ice harvest rates greater than 1,000 pounds and one additional substance in all remote ACIMs with ice harvest rates greater than 1,200 pounds.¹¹ Because EPA's final rule was published at the very end of Ecology's

⁶ See 87 Fed. Reg. 76738 (Dec. 15, 2022).

⁷ See 87 Fed. Reg. at 76810–76811 (proposed 40 C.F.R. 84.56(a)(15)–(17)).

⁸ See 87 Fed. Reg. at 76809 (proposed 40 C.F.R. 84.54(a)).

⁹ See 88 Fed. Reg. 73098 (Oct. 24, 2023).

¹⁰ See 88 Fed. Reg. at 73170.

¹¹ See 88 Fed. Reg. at 73166.

rulemaking process, after the public comment period closed, Ecology was unable to incorporate EPA's final changes into the state rule.

In addition, rulemaking timelines in the Washington Administrative Procedure Act (APA) specify: "Rules not adopted and filed with the code reviser within one hundred eighty days after publication of the text as last proposed in the register shall be regarded as withdrawn. An agency may not thereafter adopt the proposed rule without refiling it in accordance with RCW 34.05.320."¹² Because Ecology proposed the rule on July 13, 2023, it needed to be adopted by January 9, 2024 or be deemed withdrawn, requiring Ecology to restart the rulemaking process.

Ecology's rule establishes the following restrictions on substances used in ACIMs¹³:

End-Use	Prohibited Substances	Effective Date
Automatic commercial ice machines - Remote condensing units (New and retrofit)	R-404A, R-507, R-507A, R-428A, R-422C, R-434A, R-421B, R-408A, R-422A, R-407B, R-402A, R-422D, R-421A, R-125/R-290/R-134a/R-600a (55.0/1.0/42.5/1.5), R-422B, R-424A, R-402B, GHG-X5, R-417A, R-438A, and R-410B	January 1, 2025
Automatic commercial ice machines - Stand-alone units (New and retrofit)	R-404A, R-507, R-507A, R-428A, R-422C, R-434A, R-421B, R-408A, R-422A, R-407B, R-402A, R-422D, R-421A, R-125/R-290/R-134a/R-600a (55.0/1.0/42.5/1.5), R-422B, R-424A, R-402B, GHG-X5, R-417A, R-438A, R-410B, R-407A, R-410A, R-442A, R-417C, R-407F, R-437A, R-407C, RS-24 (2004 formulation), and HFC-134a	January 1, 2025

¹² See RCW 34.05.335(3).

¹³ See WAC 173-443-040(1), Table 1.

In comparison, EPA's rule establishes the following restrictions on substances used in ACIMs¹⁴:

TABLE 4—HFC RESTRICTIONS FOR AUTOMATIC COMMERCIAL ICE MACHINES				
ACIM type	Batch or continuous	Harvest rate	HFC restriction	Compliance date
Self-contained	Batch	Less than or equal to 1,000 pounds ice per 24 hours.	GWP less than 150	January 1, 2026.
Self-contained	Continuous	Less than or equal to 1,200 pounds ice per 24 hours.	GWP less than 150	January 1, 2026.
Self-contained	Batch	Greater than 1,000 pounds ice per 24 hours.	Listed blends prohibited: R-402A, R-402B, R-404A, R-407A, R-407B, R-407C, R-407F, R-408A, R-410A, R-410B, R-411A, R-411B, R-417A, R-417C, R-420A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-428A, R-434A, R-437A, R-438A, R-442A, R-507A, HFC-134a, R-125/290/134a/600a (55/1/42.5/1.5), RB-276, RS-24 (2002 formulation), RS-44 (2003 formulation), GHG-X5, G2018C, Freeze 12.	January 1, 2027.
Self-contained	Continuous	Greater than 1,200 pounds ice per 24 hours.	Listed blends prohibited: R-402A, R-402B, R-404A, R-407A, R-407B, R-407C, R-407F, R-408A, R-410A, R-410B, R-411A, R-411B, R-417A, R-417C, R-420A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-428A, R-434A, R-437A, R-438A, R-442A, R-507A, HFC-134a, R-125/290/134a/600a (55/1/42.5/1.5), RB-276, RS-24 (2002 formulation), RS-44 (2003 formulation), GHG-X5, G2018C, Freeze 12.	January 1, 2027.
Remote condenser	All	All	Listed blends prohibited: R-402A, R-402B, R-404A, R-407B, R-408A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-438A, R-442A, R-507A, R-125/290/134a/600a (55/1/42.5/1.5), RS-44 (2003 formulation), GHG-X5.	January 1, 2027.

Ecology's rule does not contain GWP limits for substances used in ACIMs. In contrast, EPA's rule imposes a GWP limit (150) on substances used in self-contained ACIMs with up to 1,000- and 1,200-pound harvest rates, batch and continuous, respectively, beginning January 1, 2026.¹⁵

Although EPA's effective date for prohibitions is up to two years later than Ecology's, the scope of those prohibitions is broader under EPA's rule. For large self-contained (or standalone) ACIMs with harvest rates greater than 1,000 and 1,200 pounds for batch and continuous ACIMs, respectively, EPA's rule prohibits the use of eight additional substances that are not prohibited under Ecology's rule: R-411A, R-411B, R-420A, R-426A, RB-276, RS-44 (2003 formulation), Freeze 12, and G2018C.¹⁶ For all ACIMs with a remote condenser, EPA's rule prohibits one additional substance compared to Ecology's rule: RS-44 (2003 formulation).¹⁷

The authorizing statute allows Ecology to refrain from enforcing requirements of the rule as written, under certain conditions that Ecology concludes are applicable here.

¹⁴ See 88 Fed. Reg. at 73166 (summarizing the restrictions set forth in 40 C.F.R. 84.54(a)(8) and (c)(14)).

¹⁵ See 40 C.F.R. 84.54(a)(8)(i).

¹⁶ See 40 C.F.R. 84.54(a)(8)(ii), compared to WAC 173-443-040(1) Table 1

¹⁷ See 40 C.F.R. 84.54(c)(14), compared to WAC 173-443-040(1) Table 1.

RCW 70A.60.040(3) provides, in relevant part:

(3) The department may elect to refrain from or cease administering or enforcing a requirement of this chapter if the United States environmental protection agency adopts requirements that:

(a) Are substantially duplicative of the requirements of this chapter and that negate the additional emission reduction benefits of state implementation of any requirement of this chapter; or

Ecology believes EPA's 150 GWP limit for certain self-contained ACIMs (beginning in 2026), and EPA's expanded scope of specific substances prohibited in the larger self-contained ACIMs and all remote condensing ACIMs (beginning in 2027), creates "substantially duplicative" requirements that will reduce emissions to a greater extent than implementation of Ecology's rule in 2025. Ecology concludes that full compliance with EPA's current rule negates the emission reduction benefits of enforcing our rule's 2025 effective date for the prohibitions on specific substances in ACIMs.

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