Interpretive Statement on the Effective Date of HFC Prohibitions About Data Center Cooling Equipment

Policy Number

Program Name
Climate Pollution Reduction Program, Fluorinated Gases Section

Date Issued
February 24, 2025

Purpose
Ecology has determined the need to exercise enforcement discretion regarding the effective date for prohibitions on certain hydrofluorocarbon (HFC) substances in data center refrigeration equipment categorized under the "Industrial process refrigeration excluding chillers (New)" category in WAC 173-443-040(2), Table 2. Ecology will refrain from enforcement of this restriction solely for data center industrial process refrigeration equipment from the current effective date of January 1, 2025, until January 1, 2027. Ecology is not exercising enforcement discretion for any other industrial process refrigeration equipment regulated by this category.

Application
This interpretive statement applies to manufacturers, distributors, wholesalers, retailers, and new data center refrigeration equipment owners under the category "Industrial process refrigeration excluding chillers".

Limitations
This Interpretive Statement is not a regulation. It is advisory only and not intended to include or address every circumstance.

Glossary
Industrial process refrigeration (IPR) means to cool or heat process streams at a specific location in manufacturing and other forms of industrial processes and applications such as chemical production, pharmaceutical, and petrochemical industries. This also includes equipment used in the generation of electricity and for large scale cooling of heat sources such as data centers and data servers.[1] IPR equipment that includes the use of a chiller is considered a separate type of refrigeration equipment from types that do not use a chiller.

[1] *See* Chapter 173-443-030 WAC. For reference, please note Ecology's definition of the IPR category matches the definition used by the U.S. EPA for "industrial process refrigeration systems". *See* 87 Fed. Reg. 76738 (Dec. 15, 2022), https://www.federalregister.gov/d/2022-26981/p-460.

Industrial process refrigeration systems are used to cool process streams at a specific location in manufacturing and other forms of industrial processes and applications used in, for example, the chemical production, pharmaceutical, petrochemical, and manufacturing industries. This also includes appliances used directly in the generation of electricity and for large scale cooling of heat sources such as data centers and data servers.[2]

Background

In 2021, the Washington State Legislature amended Chapter 70A.60 RCW to further reduce hydrofluorocarbons (HFCs) and other fluorinated greenhouse gas emissions.[3] HFCs threaten our environment because "they are hundreds to thousands of times more potent than carbon dioxide".[4] The law authorizes Ecology to adopt rules to address HFCs in new products and equipment as well as existing equipment.[5] Ecology considers similar laws and regulations in other jurisdictions when developing such rules.[6]

In August 2021, Ecology began rulemaking to amend Chapter 173-443 WAC, Hydrofluorocarbons, and other fluorinated gases. Ecology used an iterative approach in developing rule language. Throughout 2022, Ecology shared six iterations of draft rule language both by email and through public meetings for informal review and comment. Feedback was iteratively considered and incorporated into draft rule language where appropriate.

In December 2022, The U.S. Environmental Protection Agency (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).[7] EPA proposed new restrictions on the use of HFCs in products and equipment, including those used to cool data centers and data servers. EPA considered data centers as part of the industrial process refrigeration (IPR) subsector with Global Warning Potential (GWP) limits of[8]:

1. 150 for all substances used in industrial process refrigeration with refrigerant charge capacities of 200 pounds or greater;
2. 300 for all substances used in industrial process refrigeration with refrigerant charge capacities less than 200 pounds; and
3. 300 for all substances used in industrial process refrigeration high temperature side of cascade systems.

EPA proposed an effective date of January 1, 2025, for all three categories.[9]

[2] See 87 Fed. Reg. 76738 (Dec. 15, 2022), https://www.federalregister.gov/d/2022-26981/p-460
[3] *See* Laws of 2021, Ch. 315 (E2SHB 1050), https://lawfilesext.leg.wa.gov/biennium/2021-22/Pdf/Bills/Session%20Laws/House/1050-S2.sl.pdf
[4] *See* RCW 70A.60.005(1), https://app.leg.wa.gov/RCW/default.aspx?cite=70A.60.
[5] *See* RCW 70A.60.005(2), .020(2), .030(1), .060(5), and .090.
[6] *See* RCW 70A.60.020(5)(b), .030(7)(g), and .060(5).
[7] *See* 87 Fed. Reg. 76738 (Dec. 15, 2022), https://www.federalregister.gov/documents/2022/12/15/2022-26981/phasedown-of-hydrofluorocarbons-restrictions-on-the-use-of-certain-hydrofluorocarbons-under.
[8] *See* 87 Fed. Reg. at 76810–76811 (proposed 40 C.F.R. 84.56(a)(1)– (3)).
[9] *See* 87 Fed. Reg. at 76773 (proposed 40 C.F.R. 84.54(a)).

During the first half of 2023, Ecology reviewed EPA's proposed Technology Transitions Rule and revised its draft rule language for WAC 173-443 where appropriate. On July 13, 2023, Ecology published proposed rule language for public review and comment. The proposed rule included data center cooling equipment in the defined category of "Industrial process refrigeration." Ecology's proposed rule would regulate data centers as IPR placing a GWP limit of 150 on IPR equipment, excluding chillers, effective January 1, 2025.

These proposed restrictions were aligned with those proposed by the EPA (category 1 above). Ecology did not include EPAs proposed higher GWP limit of 300 for equipment with less than 200 pounds of refrigerant (category bullets 2 and 3, above) since Ecology has a variance process to address specialty equipment that might not be able to meet the GWP limit of 150 on a case-by-case basis. Ecology imposed a GWP limit of 150 on all equipment with 50 pounds or more of refrigerant.

On August 23, 2023, Ecology held a public hearing on the proposed rule. In response to requests, Ecology extended the public comment period from August 31, 2023, until September 10, 2023. Six weeks after the public comment period closed, EPA published its Final Technology Transitions Rule.[10] EPA's final rule created a "separate subsector for data centers, information technology equipment facilities (ITEF), and computer room cooling equipment", extended the effective date for this subsector to January 1, 2027, and changed the GWP limit from 150 to 700 for both self-contained products and site-installed systems.[11]

In our public comment period, Ecology received, considered, and responded to 42 comment submissions, most of which included several unique comments. Ecology received 2 comments regarding data centers. Both comments incorrectly assumed Ecology categorized data centers as "air conditioning" or "other types of air conditioning" and asked Ecology to include data centers in the definition of "air conditioning equipment." As part of the November 2023 rule adoption, Ecology responded to these comments in the Concise Explanatory Statement:

> Ecology does not consider data center equipment as "air conditioning equipment" but instead includes this equipment in our definition of "industrial process refrigeration." This interpretation was consistent with EPA's proposed Technology Transitions Rule. While the final EPA rule separated data center cooling into a distinct category, Ecology is comfortable including this equipment as industrial process refrigeration under the state rule because it shares the complexity of these systems.

Because EPA's final rule was published at the end of Ecology's rulemaking process after the public comment period closed, Ecology was unable to incorporate EPA's final changes into the state rule. 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 was finalized and adopted on November 10, 2023.

[10] *See* 88 Fed. Reg. 73098 (Oct. 24, 2023), https://www.federalregister.gov/documents/2023/10/24/2023-22529/phasedown-of-hydrofluorocarbons-restrictions-on-the-use-of-certain-hydrofluorocarbons-under-the.
[11] See 88 Fed. Reg. at 73207 (summarizing the restrictions set forth in 40 C.F.R. 84.54(a)(11) and (c)(13)).
[12] *See* RCW 34.05.335(3), https://app.leg.wa.gov/RCW/default.aspx?cite=34.05.335.

Current Rule

Ecology's rule establishes the following restrictions on substances used in Data Centers[13]:

End Use	Criteria	Prohibited Substance	Effective Date
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	January 1, 2025

In comparison, EPA's rule establishes the following restrictions on substances used in Data Centers[14]:

End Use	Prohibited Substance	Effective Date
Self-contained products in data center, information technology equipment facility, and computer room cooling	Refrigerants with a GWP greater than 700	January 1, 2027
Data center, information technology equipment facility, and computer room cooling systems	Refrigerants with a GWP greater than 700	January 1, 2027

In the preamble to the adopted rule, EPA recognized "how defining categories of equipment consistently with other regulatory authorities can minimize confusion for stakeholders. However, while the California Air Resource Board considers IT cooling equipment to be part of residential and light commercial air conditioning (AC) and the Significant New Alternatives Program (SNAP) considers this equipment to be part of IPR, in this rulemaking EPA is establishing a separate subsector to enable EPA to evaluate the availability of substitutes for use in data center, information technology equipment facility (ITEF), and computer room cooling equipment together, independently of other similar equipment types."[15]

In addition to creating a separate category in the Technology Transitions rule, in their "Managing Use and Reuse" rule, EPA stated they consider data center, ITEF, and computer room equipment to be air conditioning equipment to set a leak rate, which is 10% for this category. Currently, Ecology's rule sets the IPR leak rate at 24%, which is superseded by the EPA requirement.

Ecology's rule considers data center cooling equipment as IPR for all purposes. This aligns with EPA regarding SNAP approved chemicals but places a higher leak rate on the equipment for the refrigerant management program (RMP). Building code updates are being made in Washington, allowing for the higher charge sizes required to run this powerful equipment using lower GWP refrigerants. Ecology understands that equipment testing following updated codes and approvals and subsequent production of new equipment following these codes will take time.

[13] *See* WAC 173-443-040(2), Table 2.
[14] *See* 88 Fed. Reg. at 73166 (summarizing the restrictions set forth in 40 C.F.R. 84.54(a)(11) and (c)(13)).
[15] Defined acronyms for AC, SNAP, and ITEF added to the original quote.

Conclusion

To address the current inconsistencies, delays in adopting building codes that would expand the use of low GWP refrigerants, and differences in requirements between state and federal rules, Ecology will:

1. Apply enforcement discretion to manufacturers until January 1, 2027, to restrict new stand-alone data center cooling equipment regulated under the category "Industrial process refrigeration excluding chillers." All newly installed equipment with 50 or more pounds of refrigerant with a GWP of 150 or greater will still need to register and participate in the state's refrigerant management program (RMP) during this enforcement discretion period and
2. To determine an appropriate long-term action regarding data centers, Ecology will:
    - Form a work group to include data center cooling equipment manufacturers and other relevant parties to understand both currently available and developing technologies and industry timelines needed to implement a low GWP restriction for data center equipment and
    - Evaluate the need to pursue rulemaking to codify implementable regulations to reduce emissions from data centers.

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ADA Accessibility

To request an ADA accommodation, contact Ecology by phone at 564-233-1616 or email at Heather.Curtis@ecy.way.gov, or visit https://ecology.wa.gov/accessibility. For Relay Service or TTY call 711 or 877-833-6341