

Working Group Meeting Webinar

Proposed 15-Day Changes to the Dec. 10, 2020 Amendments of California's HFC Regulation

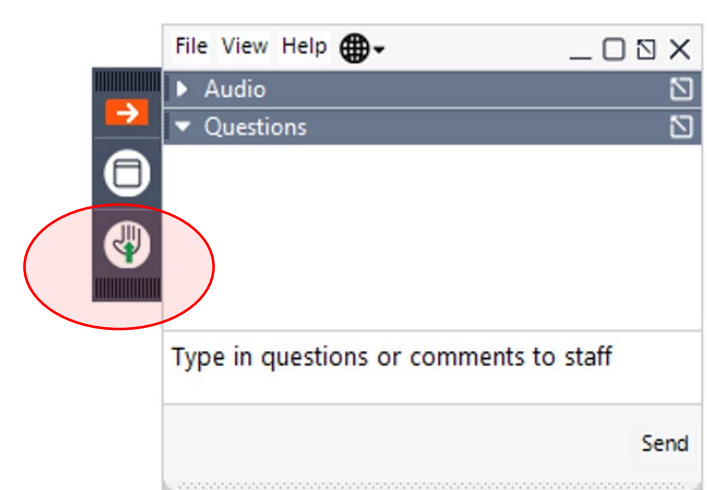
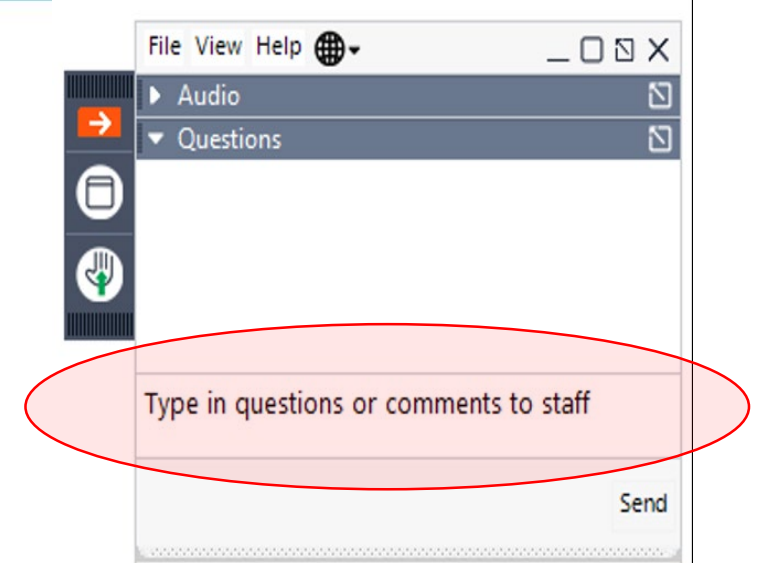
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California Air Resources Board
Research Division
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Submit your questions and comments via GoToWebinar

- Use question box.
- “Raise” your hand for follow up.



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Today's Agenda



- Update to the Proposed CARB HFC Regulation.
- Proposed 15-day Changes to Air Conditioning (AC) Section of Regulatory Text.
- Other Proposed 15-day Changes to Regulatory Text.
- Questions and Feedback.
- Next Steps.

Update on Proposed HFC Regulation



- In December 2020, Board approved proposed amendments to HFC regulation with some changes:
 - Delay effective dates for some air conditioning equipment types to give industry more time to update safety codes and standards.
 - OEMs committed to continue to work on safety codes and standards.
 - Reclaim refrigerant use requirement for equipment manufacturers.
- Board directed staff to:
 - Incorporate proposed changes and make available for public comment for at least 15 days.
 - Take final action to adopt the regulation.
- Today's Webinar – Industry input before the changes to the regulation are released for the 'formal' 15-day comment period.

Proposed 15-Day Changes for AC

- AC < 750 GWP delayed from Jan. 1, 2023 to Jan. 1, 2025.
- VRF/VRV < 750 GWP delayed from Jan. 1, 2023 to Jan. 1, 2026.
- No change in Jan. 1, 2023 effective date for smaller equipment that does not require building code updates.

Refrigerant Recovery, Reclaim, and Re-use Requirements (R4 Program) for Original Equipment Manufacturers (OEMs)

Certified Reclaimed Refrigerant Use



- For AC and VRF/VRV OEMs using > 750 GWP refrigerant in equipment manufactured in 2023 and 2024 for use in CA:
 - 10% of 'Initial Equipment Operating Charge' shall be certified reclaimed refrigerant.
- For VRF/VRV OEMs using > 750 GWP refrigerant in equipment manufactured in 2025 for use in CA:
 - 30% of 'Initial Equipment Operating Charge' shall be certified reclaimed refrigerant.

Goal: Kick-start reclaim program with real verifiable reductions.

- Reclaimed R-410A refrigerant used in equipment can be recovered outside of California.
- Equipment with reclaimed refrigerant does not need to be sold into California.
- For AC OEMs with no manufacturing presence in U.S.
 - How could you comply with the reclaim use requirements?
- Are there other suggestions that meet the goal and agreement?

“Initial Equipment Operational Charge” means:

[Number of units entered into commerce into California] *

(Pounds of refrigerant charged into each type of equipment by the manufacturer “pre-charged”

+

Pounds of refrigerant charged into equipment in the field during installation).

- We are seeking input on developing default values on the typical amount of refrigerant added in the field during installation for:
 - Residential AC – Minimal to no field charge?
 - Commercial AC: Rooftop Units and other Packaged AC – Minimal to no field charge?
 - Commercial AC: Split Systems, Remote Systems – Typical field charge?
 - VRF/VRV – Typical field charge?

Due Dates for R4 Requirements



- For AC OEMs, reclaim refrigerant use requirements must be met before July 1, 2025.
- For VRF/VRV OEMs, reclaim refrigerant use requirements must be met before July 1, 2026.

Reporting and Recordkeeping Requirements for OEMs



Reporting Requirements for OEMs- Due Dates



- Initial Report due March 1, 2022 showing the estimated reclaimed refrigerant required (based on projected sales into California in 2023-2024 for AC, and 2023-2025 for VRF/VRV.)

Interim Progress Report due March 1, 2024.

- Final Report due July 31, 2025 must show that the reclaimed refrigerant use requirements have been met.
 - VRF/VRV Interim Progress Reports due March 1, 2024 and March 1, 2025.
 - VRF/VRV Final Report due July 31, 2026.

Reporting Requirements for OEMs (cont.)



- Number and type of AC equipment entered into commerce in California in 2023 and 2024; and 2023 - 2025 for VRF/VRVs.
- Type and quantity of all refrigerant used.
- Quantity of reclaimed R-410A used.
- Name and location of U.S. EPA certified reclaimer(s) and type and quantity (pounds) of reclaimed refrigerant purchased and used from each entity.
- Number and type of units with reclaimed refrigerant sold reported by location(s) of sale (where available).

Recordkeeping:

- Maintain records of all reported data.
- If using non-default factors for additional refrigerant charge in piping, maintain records of refrigerant added during field-charging.
- The calculations and spreadsheets used to create the reported information.

Other Proposed 15-Day Changes

- Interim progress step for retail food companies to meet company wide emission reduction target extended from January 1, 2026 to December 31, 2026.

- Clarification in the definition of “New Facility”.
- Added ice rink to the list of end uses.
 - A new ice rink (subject to < 150 GWP) includes an existing facility not previously used as an ice rink.

- Certified Reclaimed Refrigerant
- Dehumidifier
- Packaged Terminal Air Conditioner (PTAC)
- Packaged Terminal Heat Pump (PTHP)
- Portable Air Conditioner

- Room Air Conditioner or Wall Air Conditioner or Window Air Conditioner
- Variable Refrigerant Flow (VRF) or Variable Refrigerant Volume (VRV)
- Additional definitions:
 - Initial Equipment Operational Charge
 - Evaporator Temperature

CARB is seeking input on a definition of “evaporator temperature” to use (minimum evaporator temperature is used to determine GWP thresholds in chillers used for industrial refrigeration):

“Evaporator Temperature” means:

A: The boiling point/bubble point temperature of the refrigerant in the

evaporator. Or,

B: The temperature of the cooled fluid leaving the evaporator. Or,

C: Other: _____

Next Steps and Anticipated Timelines

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Informal Stakeholder Meetings; Informal Comments	February – March 2021
Draft Revised Regulation Text made available to public (“15-Day Notice”) which begins the Formal 15-Day Comment Timeframe	March – April 2021
Final Revised Regulation Text and Final Statement of Reasons (FSOR)	Before October 2021

[Informal comment submission by Friday, February 26, 2021 to HFCreduction@arb.ca.gov](mailto:HFCreduction@arb.ca.gov)

Feedback and Questions – Contact Us

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For more information, please visit:

<https://ww2.arb.ca.gov/our-work/programs/stationary-hydrofluorocarbon-reduction-measures>



Thank you for listening!
CARB welcomes your feedback.

