## Ozone Depleting Substances Technical Working Group

Meeting #5: June 25th



### Agenda – Meeting #5

- Topic #1 Revisions to point of origin requirements for refrigerants
- Topic #2 Foam sampling procedure
- Topic #3 Allow ODS destruction outside of the US
- Topic #4 Allow ODS sourcing from Canada
- Ecology's next steps in the rulemaking
- Public comment opportunity





#### **Topic: Point of Origin Requirements** (Refrigerants)

- Current: Point of Origin is location of aggregation or stockpiling to greater than 500 lbs, or the location where greater than 500 lbs were removed from service
- Considered change:
  - Adopt ACR 2.0 Point of Origin approach
    - Remove 500 lbs threshold
    - Point of origin is either 1) the location of the ODS prior to acquisition by the project proponent, 2) the location of recovery at an equipment de-manufacturing facility or 3) location of stockpile

#### CARB's protocol also requires...

 Identification of any refrigeration or air conditioning equipment by serial number, if available, or description, location, and function, if serial number is unavailable (for quantities greater than 500 pounds)

#### Significance of this change

- Projects would have significantly more points of origin, due to removal of 500 lbs threshold
- Proponents would not necessarily be required to track a refrigerant point of origin back to the unit(s) from which it was extracted

#### **Discussion: Point of Origin Requirements**

- What additional context or considerations related to this topic should Ecology be aware of?
- Are there supplies of ODS that would become more or less viable following adoption of this change?
  - For example:
    - Quantities >500 lbs where the equipment information is unavailable
    - Small quantities that would now require additional documentation
- How would this change impact project registration/verification activities?
- Does this change impact registry or verifier ability to review regulatory compliance in the chain of custody?

#### **Poll: Point of Origin Requirements**

• Should Ecology adopt the ACR ODS 2.0 Point of Origin approach for refrigerants?



#### **Topic: Foam Analysis Procedure**

- Current:
  - Sampling and lab analysis is required to determine blowing agent types and ratios
- Considered change:
  - Allow manufacturer specs to demonstrate high-GWP foam source composition (in line with ACR 2.0 protocol)

#### Foam Analysis: ACR Protocol Language

- Type and amount of blowing agent(s) in the intact foam may also [as an alternative to sampling] be determined based on manufacturer specifications (for appliances) and bill of materials (for buildings) that show the type(s) and quantities of blowing agent(s) originally used.
- The amount of blowing agent(s) remaining in the intact foam shall be determined using the applicable default emission (loss) rate at disposal published by US EPA in the most recent U.S. Inventory of Greenhouse Gas Emissions and Sinks.

# Foam Analysis: ACR Protocol Language continued

- If the foam stockpile is older than a year, the amount of remaining blowing agent in the stockpiled foam shall be determined by deducting the default annual leakage rate (for each 12-month year the foam remained in the stockpile) from the emission (loss) rate at disposal.
- The leakage and emission rates shall be based on most recent U.S. Inventory of Greenhouse Gas Emissions and Sinks published by the US EPA.

#### Foam Protocol Revisions discussed to date

- Revised cumulative emissions values
- Additional eligible substances
- Revised sampling procedure

#### **Discussion: Topic 2 Context**

- What additional context or considerations related to this topic should Ecology be aware of?
- How would this change impact foam destruction activities?
  - Does this meaningfully reduce developer costs?
  - Does this meaningfully reduce quantification rigor?
- Taken together with other foam revisions discussed (revised leak rates, additional eligible substances) do these revisions change the financial viability of foam destruction?

#### **Discussion: Topic 2**

• Should Ecology adopt ACR's ODS 2.0 foam sampling approach?



#### **Topic: Allow ODS destruction outside of the US**

- Current:
  - ODS destruction is required to take place in the US
  - ODS destruction facilities are required to meet CAA and NESHAP standards, and have a valid Title V permit, which limit destruction to US facilities
- Considered change:
  - Broaden eligibility requirements to allow for destruction outside the US, based on eligibility criteria in ACR 2.0 ODS protocol

#### **Topic: Location of ODS destruction facilities**

- There is significantly more ODS destruction capacity in the EU and Asia than in the US\*
- As of 2021 there are no destruction facilities open for commercial destruction in Canada, and 2 facilities in Mexico\*

• \*Source: <u>April 2021 ODS Destruction in the United States and</u> <u>Abroad Report.pdf (epa.gov)</u>

#### Topic: Eligible Destruction Facilities in CARB Protocol

- (a) The end fate of the ODS must be destruction at either:
  - (1) An approved hazardous waste combustor subject to the RCRA and with a RCRA permit for the ODS destruction facility stating an ODS destruction efficiency of at least 99.99%; or
  - (2) A transformation or destruction facility that meets or exceeds the Montreal Protocol's TEAP standards provided in the Report of the Task Force on Destruction Technologies.
    - (A) A facility must demonstrate DRE of 99.99% and emission levels consistent with the guidelines set forth in the TEAP report.
    - (B) A facility must have been certified by a third party no more than three years prior to the offset project commencement date and must show that it maintains its operational status as stated in the certification.
- (b) A destruction facility must meet any applicable requirements under CAA and NESHAP standards, as well as all applicable federal, state, and local laws.
- (c) The destruction facility **must have a valid Title V air permit**

#### Topic: Eligible Destruction Facilities in ACR Protocol

- ODS destruction efficiency of at least 99.99% (or 95% for ODS destroyed from intact foam) and:
- A destruction facility in the U.S. must meet all applicable monitoring and operational requirements under CAA and NESHAP standards (as well as all applicable federal, state, and local laws that apply)
- A destruction facility in Canada must meet all applicable monitoring and operational requirements under Canadian Environmental Protection Act (CEPA) (as well as all applicable federal, state, and local laws that apply)
- A destruction facility in countries other than U.S. and Canada must meet all applicable monitoring and operational requirements (as well as all applicable federal, state, and local laws that apply)

#### **Discussion: Topic 3 Context**

- What additional context or considerations related to this topic should Ecology be aware of?
- Is the flexibility to destroy ODS outside of the US given that ODS must be sourced from the US and there are no destruction facilities in Canada - useful for developers?
- Do Title V permits/CAA/NESHAP standards establish a more rigorous regulatory standard that TEAP compliance?
- Should emissions from ODS transport, currently typically estimated using a default factor multiplied by weight need to be adjusted for international transport?

#### **Discussion: Topic 3**

• Should Ecology allow ODS destruction outside of the US?



#### **Direct Environmental Benefits (DEBs)**

- All Offsets issued by Ecology must provide Direct Environmental Benefits to the State (RCW 70A.65.170(2)(a))
- All in-state projects are considered to provide DEBs to the State
- Out-of-state projects may apply to Ecology to receive DEBs designation, as in California's market
- ODS projects are considered to provide DEBs to the state of Washington if a portion of destroyed material is sourced from within Washington state

#### **Topic: Allow ODS Sourced from Canada**

- Current:
  - Eligible materials must be sourced from the US or its territories
- Considered:
  - Eligible materials must be sourced from the US or its territories, or Canada

#### **Regulatory landscape**

- Refrigerant Management Canada (RMC) Program
  - Charges a levy on CFC and HCFC sales, proceeds of levy funds destruction of ODS
  - Levy funds are administered by RMC which has right to claim any carbon offsets generated by this destruction
  - There are some restrictions on what refrigerants are eligible for subsidized destruction through the program
  - The levy applies to companies that annually import more than 100 kg of halocarbons for use as a refrigerant in non-domestic refrigeration or stationary AC systems or that manufacture or reclaim halocarbon for use as a refrigerant in nondomestic refrigeration or stationary AC systems
- Quebec Cap-and-Trade ODS protocol
  - Allows credit issuance for the destruction of CFC's and some HCFC's
  - RMC has been issued offset credits through the program, in addition to other developers

#### **Discussion: Topic 4 Context**

- What additional context or considerations related to this topic should Ecology be aware of?
- Can WA state credit issuance for destruction of refrigerants eligible for free destruction in Canada's RMC program be considered additional?
- Not all ODS in Canada is eligible for the RMC program. Are RMC ineligible ODS potentially a significant source of material for destruction?
- Are there other federal or provincial programs in Canada that impact ODS lifecycle management?

#### **Discussion: Topic 4**

- Should Ecology allow credit issuance from any ODS sourced from Canada?
- Should Ecology allow credit issuance from RMC ineligible ODS sourced from Canada?

#### Next steps

- No additional meetings planned
- We may reach out individually with additional questions in the coming months
- Ecology will prepare a decision report outlining our proposed approach to revise this protocol
- We will seek input from the Environmental Justice Offset Working Group over this summer
- We intend to distribute the decision report and, as applicable, a draft protocol in late Summer/Fall for public comment

#### **Rule Development Timeline\***

#### June 2024

#### August 2024

Technical Working Group completes its work Environmental Justice Working Group provides input on considered revisions

## September 2024

Ecology releases draft decision report and draft protocol for public comment

#### Winter 2024

Incorporating public comments, Ecology will file preliminary rule language – "102"

\*Timeline is tentative and subject to change.

## Thank you for your work!

## **Public Comment Opportunity**

#### **Guidelines for providing public comment**

- Up to two minutes per person
- Host will unmute you and begin timer
- Please keep the comments related to offsets and ozone depleting substances
- Ecology will not respond to comments in this meeting
- To submit written comments, use our <u>digital comment</u> <u>platform</u>
- Please use "raise hand" button to indicate that you wish to provide a comment



## **Thank You!**

Contact: CCAOffsets@ecy.wa.gov