

Overview of EPA Import Requirements for Ozone Depleting Substances (ODS) and Hydrofluorocarbons (HFCs)

December 2022

Agenda

- Ozone Depleting Substances (ODS)
 - What are ODS
 - What do the regulations require
 - How to file in ACE
- Hydrofluorocarbons (HFCs)
 - What are HFCs
 - What do the regulations require
 - How to file in ACE
 - Allowance program
 - HTS Codes
 - Administrative consequences
 - Reminders



- Overview
- Recap
- Resources
- Questions



ODS Requirements



Ozone Depleting Substances (ODS)

- Under the Clean Air Act and the Montreal Protocol, EPA is restoring the ozone layer through the phaseout of production and consumption of ODS
- The ozone layer:
 - Is the region of high ozone concentration in the stratosphere, 15-35 km above Earth's surface
 - Acts as an invisible shield & protects the Earth's surface from the sun's harmful ultraviolet (UV) radiation
 - Absorbs the portion of UV light called UVB which has been linked to many harmful effects, including skin cancers, cataracts, and harm to some crops and marine life
- For people in the United States born in the years 1890–2100, EPA estimates that full implementation of the Montreal Protocol is expected to prevent approximately:
 - 443 million cases of skin cancer
 - 2.3 million skin cancer deaths
 - 63 million cases of cataracts





ODS and Regulatory Overview

Common examples of ODS that are imported and exported include

| Chlorofluorocarbons (CFCs) |
|----------------------------|
| Carbon tetrachloride |
| Halon |

Hydrochlorofluorocarbons (HCFCs) Chlorobromomethane Methyl bromide Questions? Contact us at HFCAllocation@epa.gov

- Other than HCFCs, ODS were phased out with limited exceptions in the 1990s and early 2000s
- HCFCs were largely phased out by 2020, with the exception of two HCFCs (until 2030): HCFC-123 and HCFC-124
- Even while phased out, limited production and import may continue if the ODS will be:
 - transformed (i.e., used in the production of other chemicals)
 - used as a pesticide for quarantine or preshipment applications only applies to methyl bromide
 - recycled/reclaimed or destroyed requires a non-objection notice from EPA
 - used for an essential laboratory and analytical use

HTS Codes for ODS that are Imported/Exported

| HTS Code | Regulated Substance |
|----------------|---|
| • 2903.14.0000 | Carbon tetrachloride |
| • 2903.61.0000 | Methyl bromide (bromomethane) |
| • 2903.71.0100 | Chlorodifluoromethane (HCFC-22) |
| • 2903.72.0100 | Dichlorotrifluoroethanes (HCFC-123) |
| • 2903.74.0100 | Chlorodifluoroethanes (HCFC-142, -142b) |
| • 2903.76.0100 | Bromochlorodifluoromethane (Halon-1211), bromotrifluoromethane (Halon- 1301), and dibromotetrafluoroethanes (Halon-2402) |
| • 2903.79.1000 | Bromochloromethane |
| • 2903.79.9070 | Monochlorotetrafluoroethane (HCFC-124) |

A more complete list is included at <u>https://www.cbp.gov/document/publications/ace-tips-filing-epa-ods</u>



Steps for Filing of ODS in ACE

For steps for filing ODS in ACE see:

https://www.cbp.gov/document/publications/ace-tips-filing-epa-ods

Key Tips for filing:

- File with Entry (Cargo Release) or Entry Summary Certified for Cargo Release Not Entry Summary
- May proceed A May Proceed will be issued by EPA pending all applicable regulatory reviews.
- **Under Review** Your entry may be listed as "Under Review" while EPA conducts its regulatory review or if there is an error in your filing.
 - Ensure you have chosen the correct program code (ODS) and filed the required information.
- **Tagging DIS Image** If importing for destruction or for recycling/reclamation, upload of an image in the DIS that contains the non-objection notice (i.e., a letter from EPA). Label the image in the DIS as "EPA_NON_OBJECTION_NOTICE" so EPA can view it.



ODS Phaseout / Additional Information

In the United States, ozone-depleting substances (ODS) are regulated as class I or class II controlled substances.

- Class I substances, such as chlorofluorocarbons (CFCs) and halons, have a higher ozone depletion potential and have generally been phased out in the U.S.; this means no one can produce or import class I substances other than the exceptions listed previously (see slide 5).
- Class II substances are all hydrochlorofluorocarbons (HCFCs), which were transitional substitutes for many class I substances. New production and import of *most HCFCs were phased out as of 2020* with limited exceptions. The most common HCFC in use today is HCFC-22 or R-22. While it has been phased out, it is still used as a refrigerant in existing air conditioners and refrigeration equipment.

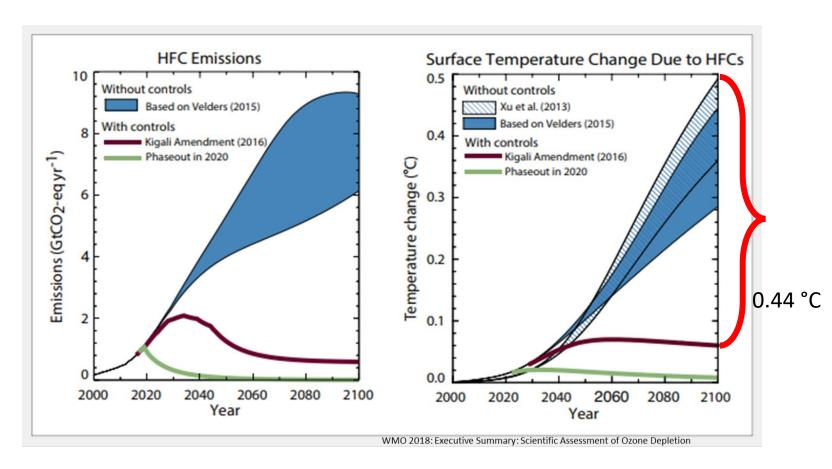


HFC Requirements



Hydrofluorocarbons (HFCs)

- HFCs are used as replacements for ozone-depleting substances (ODS) in refrigeration, air conditioning, foam blowing, aerosols, and fire suppression
- HFCs are climate-damaging greenhouse gases with global warming potentials (GWPs) hundreds to thousands of times higher than carbon dioxide (CO₂)
- Absent effective regulations, HFC use and emissions were expected to continue increasing rapidly worldwide





The American Innovation & Manufacturing (AIM) Act

- Lists 18 HFCs as regulated substances
- Phases down HFC production and consumption by 85% by 2036
- The AIM Act authorizes EPA to address HFCs in three main ways:
 - Phase down HFC production and consumption, including import, through an allowance allocation and trading program
 - Facilitate sector-based transitions to next-generation technologies through restrictions on HFCs
 - Promulgate certain regulations for purposes of maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment (Subsection h)



HFC Allocation Program

- EPA issued a final rule on September 23, 2021, (Framework Rule) that established the HFC Allocation Program and established the methodology for allocating allowances for 2022 and 2023
- EPA stated that we intended to revisit the allocation methodology in a subsequent rulemaking to be effective by October 1, 2023
 - Allowances issued October 1 of the prior year
- EPA has proposed a rule to establish how to allocate production and consumption allowances for 2024 and beyond
 - Proposed rule published 11/03/2022: See <u>https://www.epa.gov/climate-hfcs-reduction</u>

Phasedown Schedule

| Date | Percent of the baseline allowed |
|--------------|------------------------------------|
| 2022–2023 | 90% |
| 2024–2028 | 60% |
| 2029–2033 | 30% |
| 2034–2035 | 20% |
| 2036 & after | 15% |



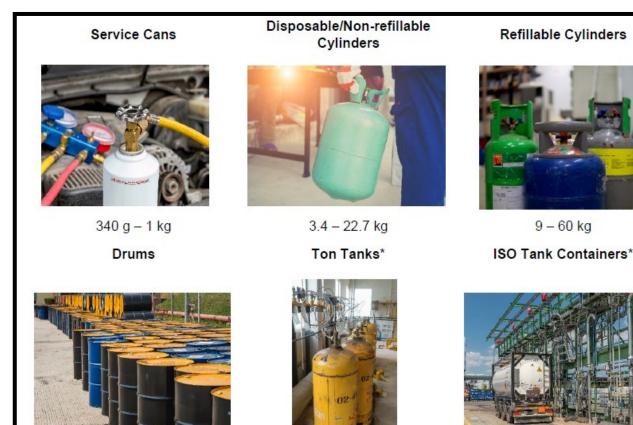
HFC Allowance Allocation Program

- To phase down HFC production and consumption, including import, EPA issues allowances to importers and producers of bulk HFCs, as well as entities that use HFCs in six applications
- Allowances are necessary for producing or importing bulk HFCs as of January 1, 2022
 - Producing HFCs requires both production and consumption allowances
 - Importing bulk HFCs requires consumption allowances
 - Application-specific allowances may also be used to produce or import HFCs for use in the six applications (e.g., metered dose inhalers) listed in the AIM Act
 - Allowance holders listed at <u>https://www.epa.gov/climate-hfcs-</u> <u>reduction/phasedown-hydrofluorocarbons-hfcs-issuing-allowance-allocations</u>



What's a bulk HFC?

- Under EPA's final rule, bulk means a regulated substance (i.e., an HFC listed under the AIM Act) of any amount that is in a container for the transportation or storage of that substance such as cylinders, drums, ISO tanks, and small cans. A regulated substance that must first be transferred from a container to another container, vessel, or piece of equipment in order to realize its intended use is a bulk substance
- Not determined by size or weight, e.g., an AC recharge kit is a bulk substance because the contents must first be transferred to realize its intended use



700 - 950 kg

18 – 20 MT

30 – 250 kg * These containers are generally refillable.

What is required for imports: allowances and documents?

- Effective January 1, 2022, allowances are required to import:
 - Any amount of **bulk** HFCs, including heels (i.e., residual amounts in containers), with limited exceptions
 - Used, reclaimed and/or recycled HFCs that are imported for any purpose except for destruction
 - HFC imports classified as U.S. goods returned
- Reporting is required

- Imports that do not require allowances, but do require prior notification to EPA:
 - Virgin HFCs intended to be transformed or destroyed*
 - Used HFCs intended to be destroyed*
 - HFCs that are transhipped, i.e., do not enter U.S. commerce and are exported within six months of import**

* Needs prior approval from EPA, called a non-objection notice

** Notification to EPA of transhipments required prior to leaving the foreign port upon export, as well as after leaving the U.S. upon re-export



Note: An HFC contained in a manufactured product such as an appliance, an aerosol can, or a foam is not a bulk substance.

Administrative Consequences

- EPA can take action to reduce an entity's allocated allowances for activities such as:
 - Submitting false, inaccurate, or misleading data (e.g., wrong HTS codes)
 - Importing HFCs without expending the requisite number of allowances
 - Failing to report required information
- EPA can apply a premium when determining allowance reductions
- More information can be found at:
 - <u>https://www.epa.gov/climate-hfcs-reduction/administrative-consequences-under-hfc-allocation-rule</u>
 - <u>https://www.federalregister.gov/d/2021-21030/p-602</u>



HTS Codes for HFCs

- HTS Code Regulated Substance
- 2903.41.1000 Trifluoromethane (HFC-23)
- 2903.42.1000 Difluoromethane (HFC-32)
- 2903.43.1000 Fluoromethane (HFC-41), 1,2-difluoroethane (HFC-152) and 1,1-difluoroethane (HFC-152a)
- 2903.44.1010 Pentafluoroethane (HFC-125)
- 2903.44.1020 1,1,1-trifluoroethane (HFC-143a)
- 2903.44.1030 1,1,2-trifluoroethane (HFC-143)
- 2903.45.1000 1,1,1,2-Tetrafluoroethane (HFC-134a) and 1,1,2,2-tetrafluoroethane (HFC-134)
- **2903.46.1000** 1,1,1,2,3,3,3-Heptafluoropropane (HFC-227ea), 1,1,1,2,2,3-hexafluoropropane (HFC-236cb), 1,1,1,2,3,3hexafluoropropane (HFC-236ea) and 1,1,1,3,3,3-hexafluoropropane (HFC-236fa)
- **2903.47.1000** 1,1,1,3,3-Pentafluoropropane (HFC-245fa) and 1,1,2,2,3-pentafluoropropane (HFC-245ca)
- **2903.48.0000** 1,1,1,3,3-Pentafluorobutane (HFC-365mfc) and 1,1,1,2,2,3,4,5,5,5-decafluoropentane (HFC-4310mee)
- 2903.49.0000 Other (*Do not use this code if an HFC in the above list is in the chemical being imported*)

Blends containing the above list of HFCs are covered by HTS codes 3827.51.0000, 3827.61.0000, 3827.62.0000, 3827.63.0000, 3827.64.0000, 3827.65.0000, and 3827.68.0000. A more complete list is included at https://www.cbp.gov/document/fact-sheets/ace-tips-filing-epa-hfcs



HFC Blends

| HTS Code | HTS Code Description | Examples of Common HFC Blends | | |
|--------------------------------|---|-------------------------------------|--|--|
| Chapter 38 – HFC B | Chapter 38 – HFC Blends | | | |
| Mixtures containing | halogenated derivatives of methane, ethane or propane not elsewhere specified or included: | | | |
| 3827.51.0000 | Containing trifluoromethane (HFC-23) or perfluorocarbons (PFCs) but not containing chlorofluorocarbons (CFCs) or hydrochlorofluorocarbons (HCFCs): | R-508A | | |
| Containing other hydrogenetics | drofluorocarbons (HFCs) but not containing chlorofluorocarbons (CFCs) or hydrochlorofluorocarbo | ns (HCFCs): | | |
| | | R-404A | | |
| 3827.61.0000 | Containing 15 percent or more by mass of 1,1,1-trifluoroethane (HFC-143a) | R-507A | | |
| 3827.62.0000 | Other, not included in the subheading above, containing 55 percent or more by mass of pentafluoroethane (HFC- 125) but not containing unsaturated fluorinated derivatives of acyclic hydrocarbons (HFOs) | R-421A | | |
| | | R-422D | | |
| | Other, not included in the subheadings above, containing 40 percent or more by mass of pentafluoroethane (HFC-125) | R-407A | | |
| 3827.63.0000 | | R-410A | | |
| | | R-452A | | |
| 3827.64.0000 | Other, not included in the subheadings above, containing 30 percent or more by mass of 1,1,1,2-tetrafluoroethane (HFC-134a) but not containing unsaturated fluorinated derivatives of acyclic hydrocarbons (HFOs) | R-407C | | |
| 0007.05.0000 | Other, not included in the subheadings above, containing 20 percent or more by mass of difluoromethane (HFC-32) and 20 percent or more by mass of pentafluoroethane (HFC-125) | R-448A | | |
| 3827.65.0000 | | R-449A | | |
| | Other, not included in the subheadings above, containing substances of subheadings | R-450A | | |
| 2927 69 0000 | | R-452B | | |
| 3827.68.0000 | 2903.41 to 2903.48 | | | |
| | | | | |

HFC PHASEDOWN American banoviden & Manufacturing (MM) Act

Do not use 3827.69.0000 (Other) if the blend includes a regulated HFC

Advance Notification Requirement for Import

The following information is required to be electronically filed through ACE 14 days prior to importation:

| Required Information per 40 CFR 84.31(c)(7) |
|---|
| Cargo Description |
| Quantity and Unit of Measure |
| Weight and Unit of Measure |
| Port of Entry |
| Scheduled Entry Date |
| HTS code and description |
| Origin Country |
| Importer Name and Importer Number |
| Consignee Entity Name |
| CAS Number(s) of the HFC(s) imported and, for HFCs that are in a mixture, either the ASHRAE numerical designation of the refrigerant or the percentage of the mixture containing each HFC |
| If importing HFCs for transformation or destruction, a copy of the non-objection notice issued consistent with §84.25 |
| If importing HFCs as a transhipment, a copy of the confirmation documenting the importer reported the transhipment consistent with §84.31(c)(3)(i) |



For steps for filing HFCs in ACE see:

https://www.cbp.gov/document/fact-sheets/ace-tips-filing-epa-hfcs

Under EPA's HFC requirements, all imports, regardless of value or size, must be reported no later than 14 days prior to importation. You will need to file a Partner Government Agency (PGA) Message Set

Key Tips for filing:

- File with Entry (Cargo Release) or Entry Summary Certified for Cargo Release Not Entry Summary
- May proceed A "may proceed" will be issued by EPA pending all applicable regulatory reviews.



Steps for Filing of HFCs in ACE (cont.)

Key Tips for filing (cont.):

- **Under Review** Your entry may be listed as "Under Review" while EPA conducts its regulatory review or if there is an error in your filing.
 - Ensure your client has sufficient allowances to allow for the import.
 - Ensure you have chosen the correct program code (ODS) and filed the required information, including uploads to DIS.
- To streamline the review and clearance process for your imports, we recommend consistently using one importer of record (IOR) number for an importer and submitting the <u>HFC Importer of Record Report</u> annually



Steps for Filing of HFCs in ACE (cont.)

Filing DIS images - For HFC blends, upload an image in the DIS that contains either the CAS numbers and ASHRAE numerical designation for the blend or the CAS numbers and percentage of the mixture containing each regulated substance. Label the following:

- 1. Non-Objection Notice (Label as "EPA_NON_OBJECTION_NOTICE")
- 2. CAS number(s) and ASHRAE numerical designation
- 3. CAS number(s) and percentage of the mixture containing each regulated substance (Label (2) and (3) as "EPA_IMPORT_OF_ODS").

Additional information:

- FTZ and Transhipments If your HFC shipment is going to enter an FTZ or be transhipped through the U.S., you will need to file in ACE no later than 14 days prior to the shipment entering an FTZ or for in-bond entry/transhipments.
- Low Value Goods Filers who are importing low value goods can report this information by participating in and filing Type 86 entries with the required information for HFC filings.

Examples of Documents to Upload in the DIS

Example Non-Objection Notice Received from EPA; Label the image uploaded to the DIS as "EPA_NON_OBJECTION_NOTICE"

John Smith AIM UAT ICF Company 10 6572 Arlington Blvd Suite 407 Falls Church, Virginia 22045

February 18, 2022

Dear Mr. Smith,

This letter serves as a "non-objection notice" by the U.S. Environmental Protection Agency (EPA) in response to your petition received on February 8, 2022 to import regulated hydrofluorocarbons (HFCs) for use in a process resulting in transformation or destruction (Report ID: TDPET_2022_00083_01, Alias: Test100), consistent with the information in the enclosed table (see attached list).

Please inform the EPA of the exact date of the shipment and the name of the vessel once they have been determined. Also, please be advised that this non-objection notice permits AIM UAT ICF Company 10 to import the undermentioned quantity of HFCs as one individual shipment only.

This letter confirms the EPA's receipt of the information required in a petition to import regulated substances, as outlined in 40 CFR 84.25(a)(1). A copy of your petition and this non-objection notice must accompany the shipment through U.S. Customs and Border Protection. In addition, AIM UAT ICF Company 10 must submit a quarterly importer report to EPA, as required per 40 CFR 84.31(c)(1), to report the amounts and types of HFCs imported into the United States.

If new information is brought to the EPA's attention which shows that this non-objection notice was issued based on false or misleading information, the agency has the right to revoke and void the nonobjection notice, pursue all means to ensure that the regulated substance is not imported into the United States, take appropriate enforcement actions, and apply administrative consequences. Example for Filing CAS Number (Step 6); Label the image uploaded to the DIS as "EPA_IMPORT_OF_ODS"

| EPA | IMPORT | OF_ODS | 5 |
|-----|--------|--------|---|
| _ | | | |

| Chemical Name | CAS Number |
|---------------|------------|
| HFC-134a | 811-97-2 |
| | 00. 2 |

Examples for Filing CAS Numbers or ASHRAE Number for Blends (Step 8); Label the image uploaded to the DIS as "EPA_IMPORT_OF_ODS"

EPA_IMPORT_OF_ODS

| CAS Numbers | Composition |
|-------------|-------------|
| 75-10-5 | 50% |
| 354-33-6 | 50% |

EPA_IMPORT_OF_ODS

R-410A

CAS Numbers

75-10-5

354-33-6

Reminder - Instructions and examples of images to upload to DIS are available in a tip sheet found at https://www.cbp.gov/document/factsheets/ace-tips-filing-epa-hfcs

Proposed Rules



Proposal: Allowance Allocation Methodology for 2024 and Later Years

- Proposed revisions to the HFC Allocation program requirements published November 3, 2022
- Primary focus is to establish the methodology for allocating HFC allowances for 2024 through 2028
- Also proposing to amend the consumption baseline to reflect updated data and to make other adjustments based on lessons learned from implementation of the program
- Comments on the proposed rule must be received on or before December 19, 2022

https://www.federalregister.gov/documents/2022/11/03/2022-23269/phasedown-ofhydrofluorocarbons-allowance-allocation-methodology-for-2024-and-later-years



Import-relevant Proposal: Highlights

Decrease advance notice timeline

- Reduce the timeline from 14 days before the date of importation to 5 days for truck, rail, air, and other non-sea arrivals
- Taking comment on whether to reduce the timeline for marine vessels to 10 days
- Advance reporting
 - Add reporting elements, such as container numbers and certificate of analysis
- IOR numbers
 - Require importers of HFCs to report the IOR number(s) they intend to use annually and information on subsidiaries, entities majority owned and/or controlled by the same individual(s)



Import-relevant Proposal: Highlights (cont.)

• Proposals on heels

- Require that imports of heels must be filed using HFC HTS codes, not HTS codes for U.S. Goods Returned, empty containers, or empty cylinders
- Proposing ways to address imports of heels when the volume/weight of the heel isn't known at the time of import
- Requests for Additional Consumption Allowances (RACAs)
 - Require additional information to receive a refund of allowances when HFCs are exported, including internal transaction numbers (ITNs) for all shipments regardless of monetary value

Please consult the proposed rule to review other import-relevant provisions



AIM Act Subsection (i): Technology Transitions

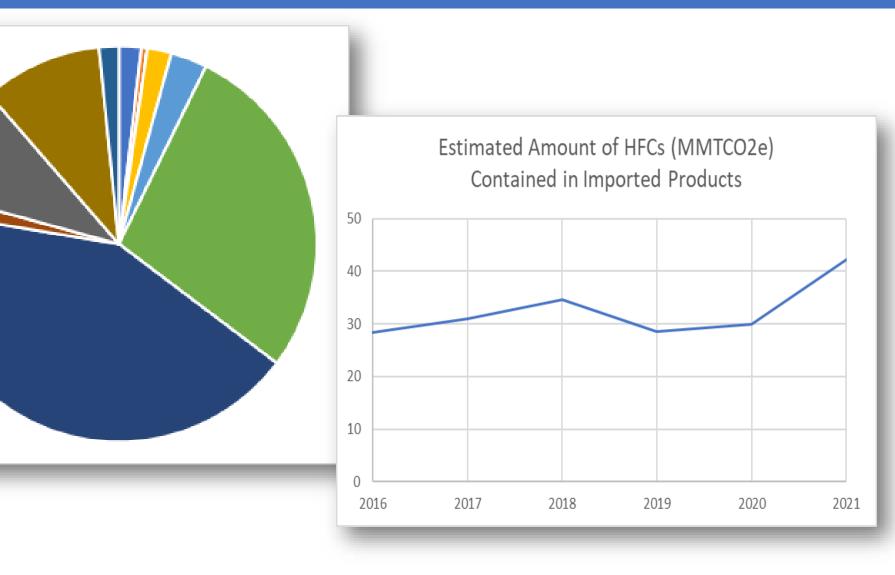
- EPA issued a proposed rule to restrict the use of HFCs in certain sectors and subsectors (published today, 87 FR 76738)
- The rule covers products and equipment in three sectors:
 - Air-conditioning, refrigeration and heat pumps
 - Aerosols
 - Foams





Imported Products Containing HFCs

- Stand-alone/Self-contained Refrigeration Systems
- Vending Machines
- Refrigerated Food Processing and Dispensing Equipment
- Transport Refrigeration
- Household Refrigerator-Freezers
- Small A/C Appliances
- Residential and Commercial A/C
- Aerosols
- Polyurethane Foam Products
- Passenger Car A/C
- Light- & Heavy-duty Truck A/C





Technology Transitions Overview

- Proposed rule restricts the use of certain HFCs in:
 - Three sectors and around forty subsectors
 - Sets GWP limits for most subsectors
 - Restricts specific HFCs or HFC blends for some refrigeration subsectors
- Proposes consistent treatment of domestically manufactured and imported products
 - Prohibitions would take effect in either 2025 or 2026 depending on sector or subsector
- Other provisions include labeling products and reporting and recordkeeping requirements



Technology Transitions Rule was released today

- 45-day public comment period, ends Jan 30th
- EPA will be hosting a hearing on the proposed rule on December 30th

EPA intends to finalize Technology Transitions rule in summer 2023



Recap and Resources





- EPA restricts the import of ODS and HFCs and requires reporting in ACE
 - In the cargo description, include the name or refrigerant number and the net weight in kilograms
- More information required for HFCs, including 14-day advance reporting
- Failure to file accurately could result in administrative consequences
- Two proposed rules issued that could affect imports of HFCs and products containing HFCs
- Contact us with questions at <u>HFCAllocation@epa.gov</u>



ACE Filing Reminders

ODS

- ✓ Select correct government agency code (ODS) - flagged in ACE (EP1)
- ✓In the cargo description, include the ODS name or refrigerant number and the net weight in kilograms
- ✓Label the image uploaded to the DIS as "EPA_IMPORT_OF_ODS" so EPA can view it.

HFC

- ✓ Select correct government agency code (ODS*) - flagged in ACE (EP1)
- ✓ In the cargo description, include the HFC name or refrigerant number and the net weight in kilograms
- ✓ Label the image uploaded to the DIS as "EPA_IMPORT_OF_HFC" so EPA can view it.
- ✓ File 14 days in advance of arrival with entry filing for HFC



*EPA expects to add an HFC-specific government agency code in future

Resources

• Fact Sheet for Importers of HFCs:

https://www.epa.gov/system/files/documents/2021-11/hfcallocation-rule-importer-requirements-fact-sheet.pdf

- Tips Sheet for Filing HFC Imports in ACE: <u>https://www.cbp.gov/document/fact-sheets/ace-tips-filing-epa-hfcs</u>
- Tips Sheet for Filing ODS Imports in ACE: <u>https://www.cbp.gov/document/publications/ace-tips-filing-epa-ods</u>
- HFC Phasedown website:

https://www.epa.gov/climate-hfcs-reduction

If you have a question about a shipment or whether it is an HFC or ODS, please contact:

HFCAllocation@epa.gov



