The American Innovation and Manufacturing (AIM) Act

Sector Workshops

MARCH 11-12, 2021
Agenda

- Welcome & Introductions
- The AIM Act and First Actions
- HFC Application
- Open Dialogue
- Closing
Hydrofluorocarbons (HFCs)

- HFCs are used as replacements for ozone-depleting substances (ODS) in sectors including refrigeration, air conditioning, foam blowing, and fire suppression.
- HFCs are potent greenhouse gases with global warming potentials (GWPs) hundreds to thousands of times higher than carbon dioxide (CO₂).
- HFC use is growing rapidly worldwide.

![Graph showing Global Warming Potentials and Ozone Depleting Potentials of CFCs, HCFCs, and HFCs](image-url)
A global HFC phasedown is expected to avoid up to 0.5°C of global warming by 2100.
The American Innovation & Manufacturing (AIM) Act

The AIM Act establishes three main types of regulatory programs:

- Phase down HFC production and consumption
- Facilitate transition to next-generation technologies
- Management of HFCs

Certain provisions are similar to provisions in CAA Title VI, but there are clear differences, including:

- Includes a limited state pre-emption clause
- Provides targeted small business technology grants
Important 2021 statutory deadlines:

- 270 days after enactment EPA to issue phasedown regulations = September 23
- Less than 200 days to go
- By October 1st allocate allowances for 2022

<table>
<thead>
<tr>
<th>Date</th>
<th>Caps: Consumption &amp; Production</th>
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<tbody>
<tr>
<td>2022–2023</td>
<td>90 percent</td>
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<tr>
<td>2024–2028</td>
<td>60 percent</td>
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<td>2029–2033</td>
<td>30 percent</td>
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<td>2034–2035</td>
<td>20 percent</td>
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<td>2036 &amp; after</td>
<td>15 percent</td>
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HFC Phasedown Allocation Rulemaking

- Rule will stand up allocation program
- Provide the methodology for distributing allowances
- Account for application-specific allowances listed in the Act:
  - metered dose inhalers
  - defense sprays
  - structural composite preformed polyurethane foam for marine & trailer use
  - etching of semiconductor material or wafers & cleaning of chemical vapor deposition chambers
  - mission-critical military needs
  - onboard aerospace fire suppression
EPA authorized to restrict use of HFCs on a sector or subsector basis to support transition to next-generation technologies

EPA must consider using negotiated rulemakings
  - If not using negotiated rulemaking, EPA must publish explanation

Specified timelines:
  - grant or deny petitions within 180 days
  - promulgate final rules within 2 years from granting a petition
Management of HFCs

- EPA will establish a program for maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment, and ensuring safety of technicians and consumers
  - Establish regulations to control, where appropriate, practices, processes, or activities regarding the servicing, repair, disposal, or installation of equipment
  - Consider using authority to increase opportunities for reclaiming HFC refrigerants
- EPA may coordinate with any other similar regulations (e.g., CAA 608 regulations)
- Subject to appropriations, EPA shall establish a grant program for small businesses for purchase of recycling, recovery, or reclamation equipment for HFC substitutes (e.g., HFO-1234yf), including for servicing motor vehicle air conditioners
First Actions: Notice of Data Availability (NODA)

- NODA published 2/11/21; comment period closed 2/25/21
- Provided information on HFC production and consumption between 2011 and 2013 as reported to the GHGRP
- Identified potential data gaps and requested comments on areas of additional information
- Provided preliminary information on HFCs for some of the specific applications allowed under the AIM Act for allocations
- Data will inform the establishment of U.S. HFC baselines for production and consumption
First Actions: HFC Phasedown Allocation Rulemaking

- NPRM allocation rule
- Fast-tracked, planned signature late April/early May
  - Planning for a 45-day comment period
- Rule will stand up allocation program, list entities receiving allowances, and set up methodology for distributing allowances
  - Amounts of application-specific allocations to be issued
- EPA will issue a benefits-costs analysis and other technical support documents
Structural Composite
Preformed Polyurethane Foam
For Marine and Trailer Use
HFC Use

- Structural composite preformed polyurethane (PU) foam transitioned to HFC-134a as replacement for HCFCs
- In 2015, manufacturers began to evaluate alternative foam blowing agents for structural composite preform PU foams; according to the industry, no viable alternatives have yet been identified.
- In 2020, industry estimates that 28 metric tons (MT) of HFC-134a blowing agent was used in the structural composite preformed foam market.
- The use of HFC-134a blowing agent in structural composite preformed PU foam for marine and trailer use is expected to continue in the U.S. due to performance issues with alternatives.
- By 2025, EPA estimates that, absent transition to alternatives, 28.3 MT of HFCs are projected to be in use for this sector.
  - Reclaimed HFCs could offset need for newly produced/imported HFCs.
Reminders

- Unless called to speak, please keep your speaker on **MUTE**
  - If joining by phone, unmute by entering *6

- During Q&A session:
  - Raise your **HAND** to ask to speak
  - Open **CHAT** to submit questions or ask to speak
  - Please indicate your **NAME** and **AFFILIATION**
  - Please be mindful of time to allow others opportunity to ask questions or speak

- If your internet connection is unstable, turning off your **VIDEO** might help
Questions for Discussion

- Is the estimated amount of HFCs for composite structural preformed PU foam reasonable? What has been the trend in the past (e.g., last five years)?

- What trends do you foresee in the future use of HFCs or alternatives for composite structural preformed PU foam (e.g., next five years)?
  - What growth rate do you anticipate generally for composite structural preformed PU foam in marine manufacturing? In trailer manufacturing? For composite structural preformed PU foam using HFCs?

- How do HFCs move through the supply chain from the producer or importer until they are incorporated into boats or trailers? Could reclaimed HFC-134a be used?

- What alternative blowing agents and alternative technologies do you see in the future for composite structural preformed PU foam? What challenges remain in finding and implementing alternatives?

- What relevant data is EPA seeking for this application?

- How can information be submitted to EPA?
Closing