

## FACT SHEET

# Petitions to Restrict Use of Certain HFCs under Subsection (i) of the American Innovation and Manufacturing (AIM) Act

### What are HFCs?

Hydrofluorocarbons (HFCs) are potent greenhouse gases (GHGs) developed and manufactured as replacements for ozone-depleting substances (ODS). These fluorinated chemicals have no known natural sources. They have global warming potentials (GWPs) (a measure of the relative climatic impact of a GHG) that can be hundreds to thousands of times greater than that of carbon dioxide (CO<sub>2</sub>). Unlike ODS, HFCs do not deplete the stratospheric ozone layer.

### What are the Impacts of HFCs on the Environment?

HFCs are extremely powerful GHGs that accelerate climate change, which threatens society with costly health and environmental impacts such as floods, wildfires, drought, and increasingly severe weather events. More information on climate change can be found at:

<https://www.epa.gov/climate-change>.

### Where are HFCs used?

Climate-damaging HFCs are used in many of the same sectors where ODS have been used: primarily in air conditioning and refrigeration, and also in fire suppression, solvents, foam blowing, and aerosols.

### Why are HFCs Increasing in Use?

Absent regulation addressing HFCs, the use of HFCs was expected to continue to increase, which would also increase emissions of these climate-damaging chemicals. The use of HFCs has been increasing due to the global demand for refrigeration and air conditioning, and because they are the primary substitutes for ODS, which are being phased out worldwide due to the global agreement the *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol).<sup>1</sup>

### What is the AIM Act?

The American Innovation and Manufacturing (AIM) Act of 2020 provides EPA specific authority to address HFCs, including to: (1) phase down HFC production and consumption<sup>2</sup> of listed

---

<sup>1</sup> More information on the Montreal Protocol can be found at: <https://www.unep.org/ozonaction/who-we-are/about-montreal-protocol>

<sup>2</sup> "Consumption" is the amount of HFCs newly added to the U.S. market through production and import, minus exports and destruction.

HFCs through an allowance allocation and trading program, (2) establish requirements for the management of HFCs and HFC substitutes in equipment (e.g., air conditioners); and (3) facilitate sector-based transitions away from HFCs.

## What is a Regulated Substance?

Certain HFCs are listed as regulated substances under the AIM Act. More information is available at: <https://www.epa.gov/climate-hfcs-reduction/aim-act>.

## How does the AIM Act Support Sector-based Transitions Away from HFCs?

Entitled “Technology Transitions,” subsection (i) of the AIM Act provides authority for EPA to promulgate rules restricting (either fully, partially, or on a graduated schedule), the use of HFCs in sectors or subsectors where they are used. EPA can either initiate a rulemaking on its own accord, or a person may petition EPA to promulgate a rule to restrict the use of HFCs in certain sectors or subsectors.



Once EPA receives a petition under subsection (i), the AIM Act directs the Agency to make the petition publicly available within 30 days of receipt and grant or deny the petition within 180 days of receipt. For petitions which are granted, EPA must complete a rulemaking within two years of the date the petition was granted.

## How are Petitions under Subsection (i) Evaluated?

When carrying out a rulemaking or making a determination to grant or deny a petition submitted under subsection (i), EPA shall, to the extent practicable, factor in:

- the best available data;
- the availability of substitutes for use of the regulated substance that is the subject of the petition, in a sector or subsector, taking into account technological achievability, commercial demands, affordability for residential and small business consumers, safety, consumer costs, building codes, appliance efficiency standards, contractor training costs, and other relevant factors, including the quantities of regulated substances available from reclaiming, prior production, or prior import;
- overall economic costs and environmental impacts, as compared to historical trends; and
- the remaining phase-down period for regulated substances.

## What Does it Mean for EPA to Grant or Partially Grant a Petition?

Granting or partially granting a petition means that EPA intends to address the requests raised in the petition in a future rulemaking. Granting a petition does not mean the Agency will propose or finalize requirements identical to those requested in the petition.

## Will EPA Consider Negotiated Rulemaking?

Before proposing a rule for the use of a regulated substance in a sector or subsector, EPA is required to consider using a negotiated rulemaking process that follows the procedures provided for in the “Negotiated Rulemaking Act of 1990.”<sup>3</sup> If EPA elects not to use this procedure, an explanation of that decision must be published before the commencement of the rulemaking process. If the Administrator negotiates a rulemaking, the completion of that rulemaking will be given priority, to the extent practicable, over rulemakings under subsection (i) that are not negotiated.

## What Petitions Has the Agency Received and What is their Status?<sup>4</sup>

On October 7, 2021, the Administrator granted ten petitions in full and partially granted one petition submitted under subsection (i) of the AIM Act, meeting the statutory deadline for the earliest petitions received by EPA. EPA is also issuing a notice in the *Federal Register* to inform stakeholders about these determinations. The status of all petitions received as of October 1, 2021, are summarized in the table below.

Petitioner	Receipt Date	Topic of Petition	Status
Air-Conditioning, Heating, and Refrigeration Institute (AHRI), <i>et al.</i>	April 13, 2021	“Restrict the Use of HFCs in Residential and Light Commercial Air Conditioners”	Granted
Air-Conditioning, Heating, and Refrigeration Institute (AHRI), <i>et al.</i>	April 13, 2021	“Restrict the Use of HFCs in Certain Commercial Refrigeration Equipment”	Granted
Association of Home Appliance Manufacturers (AHAM)	April 13, 2021	“Restrict the Use of HFCs in Certain Air Conditioners and Dehumidifiers”	Granted
Environmental Investigation Agency (EIA), <i>et al.</i>	April 13, 2021	“Restrict the Use of HFCs in Certain Stationary Refrigeration and Air Conditioning End-uses”	Granted
Natural Resources Defense Council (NRDC), <i>et al.</i>	April 13, 2021	“Replicate HFC Prohibitions from SNAP Rules 20 & 21”	Granted

<sup>3</sup> Subchapter III of chapter 5 of title 5, United States Code

<sup>4</sup> The most up-to-date list of petitions received by the Agency can be found at: <https://www.epa.gov/climate-hfcs-reduction/petitions-under-aim-act>

Petitioner	Receipt Date	Topic of Petition	Status
Institute for Governance & Sustainable Development (IGSD)	May 3, 2021	“Prohibit the Sale of HFCs in Consumer Recharge Containers for Motor Vehicle Air Conditioning Systems and Consumer Appliances; Restrict the Use of HFCs in Products Earning the Voluntary Energy Star Label”	Under Review
DuPont	May 10, 2021	“Replicate SNAP Rule 20 with Regard to the Phase-out of HFC-134a in Extruded Polystyrene Boardstock and Billet (XPS) End-use”	Granted
DuPont	May 10, 2021	“Replicate SNAP Rule 21 with Regard to Rigid Polyurethane Low-pressure Two-component Spray Foam (2K-LP SPF) End-use”	Granted
American Chemistry Council’s Center for the Polyurethanes Industry (CPI)	May 26, 2021	“Replicate SNAP Rules 20 and 21 HFC prohibitions for the Polyurethane Industry”	Granted
International Institute of Ammonia Refrigeration (IIAR), <i>et al.</i>	June 3, 2021	“Restrict the Use of HFCs in Certain Refrigeration End-Uses”	Granted
Household & Commercial Products Association (HCPA) and National Aerosol Association (NAA)	July 6, 2021	“Replicate SNAP Rules 20 and 21 HFC prohibitions for Aerosol Propellants”	Granted
California Air Resources Board (CARB), <i>et al.</i>	July 15, 2021	“Replicate HFC Prohibitions from SNAP Rules 20 & 21 and Issue Additional Federal Standards”	Partially Granted/ Under Review
Air-Conditioning, Heating, and Refrigeration Institute (AHRI), <i>et al.</i>	August 19, 2021	“Restrict the Use of HFCs in Certain Commercial Refrigeration Equipment”	Under Review

### Where Can I Find More Information on Petitions?

Information on petitions submitted under subsection (i) of the AIM Act can be found at: <https://www.epa.gov/climate-hfcs-reduction/petitions-under-aim-act>. EPA has established two dockets at <https://www.regulations.gov> related to petitions submitted under subsection (i) of the AIM Act. The petitions submitted under subsection (i) and other relevant material submitted by the public related to these petitions are available in Docket ID No. EPA-HQ-OAR-2021-0289.

Petitions that were granted on October 7, 2021, and documents related to their consideration are available in Docket ID No. EPA-HQ-OAR-2021-0643.



## Additional Resources

Protecting Our Climate by Reducing Use of HFCs: <https://www.epa.gov/climate-hfcs-reduction>

Greenhouse Gas Reporting Program: <https://www.epa.gov/ghgreporting/fluorinated-greenhouse-gas-emissions-and-supplies-reported-ghgrp>

Contact EPA: [spdcomment@epa.gov](mailto:spdcomment@epa.gov)

Office of Air and Radiation (6205T)  
October 2021