

July 15, 2021

SENT VIA EMAIL AND OVERNIGHT MAIL

Administrator Michael Regan
U.S. Environmental Protection Agency
1301 Constitution Avenue, NW
Washington, DC 20004
Email: Regan.Michael@epa.gov

RE: Petition for Rulemakings Regarding Hydrofluorocarbons Under the American Innovation and Manufacturing Act of 2020

Dear Administrator Regan:

The California Air Resources Board (CARB) and the Attorney General of California, the Attorneys General of Massachusetts, Connecticut, Delaware, the District of Columbia, Illinois, Maryland, Minnesota, New Jersey, North Carolina, Oregon, Vermont, and Washington, the City of New York, the Connecticut Department of Energy and Environmental Protection, the Delaware Department of Natural Resources and Environmental Control, the Maryland Department of the Environment, the Massachusetts Department of Environmental Protection, the New York State Department of Environmental Conservation, the Oregon Department of Environmental Quality, the Vermont Department of Environmental Conservation, and the Washington State Department of Ecology (collectively, the States) submit this petition for rulemaking pursuant to the Administrative Procedure Act (APA)¹ and the American Innovation and Manufacturing Act of 2020 (AIM Act).²

Hydrofluorocarbons (HFCs) are extremely potent greenhouse gases that proliferate in cooling systems, building foams, and aerosols, among other uses. Eliminating the production and consumption of HFCs is critical to addressing climate change. Therefore, the States respectfully request that the U.S. Environmental Protection Agency (EPA) use its AIM Act authority to: (1) reinstate the HFC prohibitions that it originally promulgated under the Clean Air Act's Section 612 Significant New Alternatives Policy (SNAP) program³; (2) promulgate additional federal standards, modeled on California's proposed standards, that further reduce HFC emissions from the largest HFC-consuming end-uses; and (3) at a minimum, reinstate the refrigerant management requirements for HFCs that were previously part of EPA's regulations under the Clean Air Act's Section 608 Refrigerant Management Program.⁴

¹ 5 U.S.C. § 553.

² 42 U.S.C. § 7675, Pub. L. 116-260, § 103.

³ See 42 U.S.C. § 7671k(a).

⁴ See *id.* § 7671(g).

1. Background

a. HFCs and their Federal Regulatory and Legal History

In 1987, the United States signed the Montreal Protocol, an international treaty that requires signatory nations to regulate the production and use of ozone-depleting substances (ODSs), which degrade the ozone layer in the Earth's stratosphere. To comply with the Montreal Protocol, in 1990 Congress amended the Clean Air Act to add Title VI,⁵ which authorizes EPA to protect the global ozone layer by phasing out the production and consumption of ozone-depleting substances.⁶ It also controls the use of certain ozone-depleting substances and their replacement substances (Section 612 authority)⁷ by imposing specific maintenance, reporting, repair, and disposal requirements on cooling equipment to prevent ozone-depleting emissions (Section 608 authority).⁸

Beginning in 1994, EPA used its Section 612 authority to regulate and phase out certain uses of ozone-depleting substances, principally chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs).⁹ Specifically, EPA created the SNAP Program, a listing system by which EPA identifies acceptable and unacceptable substitutes for CFCs and HCFCs—including HFCs—in certain end-uses,¹⁰ and establishes timelines by which those allowed substitutes must “replace” CFCs and HCFCs in those end-uses.¹¹ EPA also promulgated regulations under its Section 608 authority to develop a Refrigerant Management Program as it applied to ODSs. EPA's Section 608 Program provides that persons maintaining, servicing, repairing, or disposing of air-conditioning and refrigeration equipment containing more than 50 pounds of refrigerant must observe certain service practices that reduce emissions of ozone-depleting refrigerants.

ODSs have since been replaced with alternatives authorized under the SNAP program, including HFCs, in refrigeration and air conditioning equipment, insulation foam, and many other uses.¹² Unfortunately, although HFCs do not deplete ozone, they are powerful greenhouse gases,

⁵ Stratospheric Ozone and Global Climate Protection, S. 1630, 101st Cong., tit. VII (as passed by Senate, Apr. 3, 1990).

⁶ See 42 U.S.C. § 7671, et seq.

⁷ 42 U.S.C. § 7671k.

⁸ *Id.* § 7671g.

⁹ 40 C.F.R. Pt. 82, Subpt. G; 59 Fed. Reg. 13,044 (Mar. 18, 1994).

¹⁰ 60 Fed. Reg. 31,092, 31,092-101 (June 13, 1995). These sectors include: refrigeration and air conditioning; foam blowing; solvent cleaning; fire suppression and explosion protection; sterilants; aerosols; adhesives, coatings, and inks; and tobacco expansion.

¹¹ 42 U.S.C. §§ 7671c, 7671d.

¹² See, e.g., 59 Fed. Reg. 44,240-01 (Aug. 26, 1994); 60 Fed. Reg. 38,729 (July 28, 1995); 61 Fed. Reg. 4,736 (Feb. 8, 1996); 63 Fed. Reg. 28,251 (May 22, 1998); 64 Fed. Reg. 68,039 (Dec. 6, 1999); 67 Fed. Reg. 47,703 (July 22, 2002); 67 Fed. Reg. 77,927 (Dec. 20, 2002); 68 Fed. Reg. 50,533 (Aug. 21, 2003); 72 Fed. Reg. 56,628 (Oct. 4, 2007); 73 Fed. Reg. 33,304 (June 12, 2008); 74 Fed. Reg. 21 (Jan. 2, 2009); 74 Fed. Reg. 50,129 (Sept. 30, 2009); 75 Fed. Reg. 34,017 (June 16, 2010); 77 Fed. Reg. 33,315 (June 6, 2012); 78 Fed. Reg. 29,034 (May 17, 2013); 79 Fed. Reg. 62,863 (Oct. 21, 2014); 80 Fed. Reg. 19,454 (Apr. 10, 2015); 80 Fed. Reg. 42,053 (July 16, 2015); 80 Fed. Reg. 42,870 (July 20, 2015); 81 Fed. Reg.

with relative climate forcing (a measurement of how effectively they heat the atmosphere) that can be thousands of times greater than carbon dioxide. In the United States, HFC emissions are increasing more quickly than emissions of any other greenhouse gas, and they are projected to triple by 2030.¹³ New global scenarios show that baseline (or business-as-usual) annual emissions of HFCs could reach 4.0–5.3 billion metric tons of carbon dioxide equivalent in 2050.¹⁴ The Intergovernmental Panel on Climate Change indicates that immediate action to drastically reduce HFCs is needed to mitigate the most severe risks of catastrophic climate change.¹⁵

Because HFCs are potent greenhouse gases, in 2015, EPA promulgated a SNAP Program final rule, Rule 20,¹⁶ that listed certain HFCs as prohibited in certain end-uses and required manufacturers to use other alternatives that pose lower overall risk to human health and the environment. EPA followed that rule in 2016 with Rule 21,¹⁷ which took the same steps with other HFCs and end-uses. Also in 2016, EPA extended the requirements of the federal Refrigerant Management Program under its Section 608 authority to end-uses utilizing HFCs.¹⁸ These rules also became critical components of the United States' plans to comply with the 2016 Kigali Amendment to the Montreal Protocol, which President Biden has committed to ratify.¹⁹ The Kigali Amendment adds HFCs to the Montreal Protocol by setting deadlines and percentages for countries from different economic groups to phase out and replace HFCs.

Despite their importance in addressing climate-damaging HFCs, many of EPA's HFC restrictions were short-lived. In response to EPA's placement of HFCs on the prohibited SNAP list in 2015, two chemical manufacturers, Mexichem Flour, Inc. and Arkema, Inc., challenged SNAP Rule 20 in *Mexichem v. U.S. EPA*, 866 F.3d 451 (D.C. Cir. 2017).²⁰ The D.C. Circuit Court of Appeals granted the manufacturers' petitions and partially vacated Rule 20 to the extent it required manufacturers to replace HFCs with a substitute substance. The majority held that, while EPA could bar *new* uses of HFCs, it could not require a manufacturer to stop using a previously authorized HFC. *Id.* at 459. Shortly thereafter, Mexichem and Arkema challenged

32,241 (May 23, 2016); 81 Fed. Reg. 86,778 (Dec. 1, 2016); 83 Fed. Reg. 38,969 (Aug. 8, 2018); 83 Fed. Reg. 50,026 (Oct. 4, 2018); 85 Fed. Reg. 79,863 (Dec. 11, 2020), 86 Fed. Reg. 2,444 (May 6, 2021).

¹³ See EPA Web Archives, *EPA Finalizes Rule to Reduce Climate-Damaging HFCs*, July 2, 2015, <https://archive.epa.gov/epa/newsreleases/epa-finalizes-rule-reduce-climate-damaging-hfcs.html#>.

¹⁴ G.J. Velders, et al., *Future atmospheric abundances and climate forcings from scenarios of global and regional hydrofluorocarbon (HFC) emissions*, 123 ATMOS. ENVIRONMENT 200 (2015).

¹⁵ J. Rogelj et al., Intergovernmental Panel on Climate Change, *Chapter 2: Mitigation pathways compatible with 1.5°C in the context of sustainable development*, in GLOBAL WARMING OF 1.5°C 2-38 (2018), <http://ipcc.ch/report/sr15/>.

¹⁶ 80 Fed. Reg. 42,870 (July 20, 2015); see 40 C.F.R. Pt. 82, Subpt. G.

¹⁷ 81 Fed. Reg. 86,889 (Dec. 1, 2016); see 40 C.F.R. Pt. 82, Subpt. G, App. V.

¹⁸ 40 C.F.R. Pt. 82, subpt. F; 81 Fed. Reg. 82272-01 (Nov. 18, 2016).

¹⁹ Although the Kigali Amendment became effective in 2019, during the Trump Administration, the United States did not ratify the Amendment.

²⁰ Petitioners argued that EPA lacked authority to require manufacturers to replace HFCs with alternative substances, and that the decision to remove HFCs from the acceptable SNAP list was arbitrary and capricious.

Rule 21,²¹ in *Mexichem II*, arguing the *Mexichem I* decision applied to Rule 21. The court agreed and partially vacated Rule 21 to the same extent as Rule 20.²²

In response, EPA issued a “guidance document” in 2018,²³ explaining that it would not apply Rule 20 even to the extent the D.C. Circuit’s *Mexichem* decision had not vacated it. A multi-state coalition led by New York, along with the Natural Resources Defense Council, successfully challenged this guidance document in *New York v. Wheeler*,²⁴ on the grounds that it went well beyond the *Mexichem* decision and was issued without proper notice and comment.²⁵

Then in 2020, over the objections of many of the undersigned States, EPA rescinded important parts of the Section 608 Refrigerant Management Program requirements.²⁶ Pursuant to the new regulation, entities that own or operate refrigeration and air conditioning appliances using HFCs no longer face restrictions on the servicing of appliances or the sale of refrigerant to certified technicians.

b. State, Congressional, and Biden Administration Response

In the face of these efforts to roll back critical federal HFC regulations, there have been several recent efforts to strengthen limits on HFC emissions across the country. For instance, states responded to the vacuum of federal HFC regulation with a flurry of legislation and regulations to backstop the SNAP Program as it applies to HFCs produced and used in their states. At least 10 states, including, California,²⁷ Washington,²⁸ Vermont,²⁹ Maryland,³⁰ New York,³¹ New Jersey,³² Virginia,³³ Delaware,³⁴ Massachusetts,³⁵ and Colorado,³⁶ have either adopted or are in the process of adopting laws or regulations that prohibit the sale and manufacture of HFC-containing products and equipment by certain dates. HFC prohibitions at the state level demonstrate that the States share a substantial interest in protecting the health of our residents and natural resources from the risks of harmful HFC emissions.³⁷

²¹ *Mexichem Flour v. EPA* (Case No. 17-1024, consolidated with 17-1030).

²² *Mexichem Fluor v. EPA*, 760 F. App’x 6 (D.C. Cir. 2019).

²³ 83 Fed. Reg. 18,431 (Apr. 27, 2018).

²⁴ *New York v. Wheeler*, Case No. 18-1174 (consolidated with *NRDC v. Wheeler*, Case No. 18-1172).

²⁵ *Nat. Res. Def. Council, et al. v. Wheeler*, 955 F.3d 68 (D.C. Cir. 2020).

²⁶ 85 Fed. Reg. 14,150 (Apr. 10, 2020).

²⁷ S.B. 1013; Cal Code Regs., tit. 17, § 95371 et seq.

²⁸ H.B. 1112; Ch. 173-443 WAC.

²⁹ 10 V.S.A. § 586; Vt. Code R. 12 031 003, Ch. 38 [Lexis].

³⁰ COMAR Ch. 26.11.33.

³¹ 6 NYCRR Part 494.

³² N.J. Stat. Ann. 26:2C-60 to -67.

³³ H.B. 30 (Chapter 1289, Item 378).

³⁴ 7 Del. Admin. Code 1151.

³⁵ 310 CMR 7.76.

³⁶ Regulation 22.

³⁷ See also *Nat. Res. Def. Council*, 955 F.3d at 77 (finding “the release of HFCs contributes to climate change” that harms states).

At the national level, in December 2020, Congress passed the AIM Act through the Congressional Appropriations Act of 2021 (H.R. 133). Section 103, Division S of the AIM Act authorizes and requires EPA to regulate HFCs in multiple ways. First, it requires EPA, within 270 days of enactment, to establish a program to phase down the production and consumption of HFCs over a 15-year period in a manner consistent with the Kigali Amendment.³⁸ As particularly relevant here, the Act also authorizes EPA to restrict the use of certain HFCs in certain applications and otherwise manage the transition to HFC substitutes as well as to establish sector-based use restrictions.³⁹ Any person may petition EPA to promulgate regulations to restrict use of HFCs, and EPA must respond to the petition within 180 days. If EPA grants a petition, EPA must promulgate the final rule within two years of granting the petition.⁴⁰ Lastly, the Act authorizes EPA to establish standards for the management and reclamation of HFCs used as refrigerants, such as in equipment servicing and repair, and for the recovery of “used” HFCs for purification and resale.⁴¹

The Biden Administration has also prioritized combatting climate change. On January 20, 2021, President Biden issued Executive Order 13990, which stated the Administration’s policy and commitment to reduce greenhouse gas emissions and instructed the heads of all agencies to review existing regulations and policies issued under the Trump Administration that may be inconsistent with climate goals. President Biden also issued Executive Order 14008, which states the Administration’s policy to “deploy the full capacity of its agencies to combat the climate crisis.” More recently, President Biden announced a goal for the United States to achieve a 50–52 percent reduction from 2005 levels in economy-wide net greenhouse gas pollution in 2030.⁴²

c. AIM Act Rulemaking Petitions and Next Generation Substitutes with Lower Warming Potentials

In light of the urgent need to address HFCs and the new authority to do so that the AIM Act provides, environmental groups and industry alike urged EPA to take action. On April 13, 2021, petitioners submitted multiple rulemaking petitions to EPA under the AIM Act:

- (1) Petition submitted by Natural Resources Defense Council (NRDC) and its co-petitioners—“*Petition to Reinstate Hydrofluorocarbon (HFC) Prohibitions from the SNAP Rules 20 and 21 Under the AIM Act*”;
- (2) Petition submitted by the Environmental Investigation Agency (EIA) and its co-supporters—“*Technology Transitions Under Subsection (i) of the American Innovation and Manufacturing Act of 2020 (AIM Act)*”;

³⁸ EPA has already proposed a program to implement this requirement. *Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program under the American Innovation and Manufacturing Act*, 86 Fed. Reg. 27,150 (May 19, 2021).

³⁹ 42 U.S.C. § 7675(i)(1).

⁴⁰ *Id.* § 7675(i)(3).

⁴¹ *Id.* § 7675(h).

⁴² *The United States’ Nationally Determined Contribution 1*, 6 (2021), <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/United%20States%20of%20America%20First/United%20States%20NDC%20April%202021%20Final.pdf>.

- (3) Petitions submitted by the Air Conditioning, Heating & Refrigeration Institute (AHRI)—“*AHRI Petition Technology Transition under the AIM Act of 2020 (Air Conditioning)*” and “*AHRI Petition for Technology Transition under the AIM Act of 2020 (Commercial Refrigeration and Chillers)*”; and,
- (4) Petition submitted by Association of Home Appliance Manufacturers (AHAM)—“*Petition for Technology Transition Under the American Innovation and Manufacturing Act of 2020.*”

Together, these petitions requested that EPA swiftly reinstate the HFC prohibitions previously established by SNAP Rules 20 and 21 and adopt additional requirements that CARB had proposed on a California state-wide basis.⁴³

Industry’s support for the AIM Act and stronger HFC prohibitions reflects its development of lower-GWP substitutes including hydrofluoroolefins (HFOs)—next generation synthetic substitute gasses for use in equipment currently using HFCs.

2. Petition for Rulemakings Under the AIM Act, § 103(i) (H.R. 133) and 5 U.S.C. § 553(e)

Building on the already submitted rulemaking petitions and recognizing the urgent need to reduce HFC production and consumption to address the climate crisis, the States respectfully submit this rulemaking petition pursuant to the AIM Act and the APA to urge EPA to take steps now to prohibit the use of certain HFCs in certain end-uses and to reduce emissions of HFCs during maintenance, repair, and disposal of refrigeration equipment.

As noted above, under section 103, subsection (i)(3) of the AIM Act, any person may petition EPA to promulgate a rule to restrict use of regulated substances, and EPA must grant or deny the petition within 180 days of receipt of the petition. EPA shall base its determination on a list of factors including, without limitation, best available data, the availability of substitutes (taking into account a variety of issues like commercial demands, consumer affordability, and safety), the overall economic costs and environmental impacts relative to historical trends, and the remaining phase-down period of the regulated substances. Additionally, the APA allows for interested persons to petition for the issuance, amendment, or repeal of a rule.⁴⁴

Pursuant to AIM Act section 103 and the APA, the States make three rulemaking requests of EPA, detailed below. In support of this Petition, the States request that EPA review CARB’s Initial Statement of Reasons (Attachment A) and Standardized Regulatory Impact Assessment (SRIA) report (Attachment B), both of which are incorporated herein by reference and were prepared for CARB’s December 10, 2020 Board hearing, in which it approved HFC regulations. These documents reflect the best available information about HFCs, and the States

⁴³ The States support the requests by NRDC and EIA, as well as those by AHRI and AHAM to the extent they ask EPA to promulgate regulations reinstating the HFC restrictions in Rules 20 and 21 and adopting California’s stricter requirements for HFCs. The States do not support the more relaxed deadlines and standards that AHRI and AHAM proposed as part of their requests.

⁴⁴ 5 U.S.C. § 553(e).

believe they will be useful to EPA in its analysis of this petition and consideration of the factors enumerated in the AIM Act.

a. EPA Should Reinstate HFC Prohibitions Established in SNAP Rules 20 and 21.

The States respectfully request that EPA use its new AIM Act authority to create regulations that effectively reinstate the HFC prohibitions that were established in SNAP Rules 20 and 21,⁴⁵ and also make clear that those HFC prohibitions apply to motor vehicle air conditioning.⁴⁶ In so doing, EPA should not include any language that would limit states' ability to further limit or phase out the use of HFCs in their jurisdictions.

The AIM Act provides EPA with expansive authority to set requirements to reduce HFC use and emissions through end-use application prohibitions on certain HFCs.⁴⁷ This authority permits EPA to address the regulatory gaps created by the *Mexichem* decision and subsequent rollbacks by the prior administration. The SNAP Program provided rules for all original equipment manufacturers (OEMs) and other users of HFC-using equipment within a regulated end-use that those OEMs and users understood and, for the most part, followed. Now, notwithstanding the *Mexichem* decision, there is no question that EPA has broad authority to regulate HFCs under the AIM Act. Crafting regulations that restore the requirements of SNAP Rules 20 and 21, as the States propose, would eliminate the ill effects of *Mexichem* and would clear the confusion and uncertainty for OEMs and other users left in *Mexichem*'s wake. It would ease the significant burden on the States that endeavor to backstop the partially vacated SNAP rules, and it would reverse the increase of HFC emissions in States that did not create their own backstop programs to address the regulatory gaps *Mexichem* caused.

The provisions the States request to be reinstated set dates certain by which entities are prohibited from using HFCs in certain end-uses. In reinstating these requirements, it is critical that EPA not select later compliance dates than those provided in Rules 20 and 21. Any later dates would be unnecessary and would lock in the harmful effects of emissions of short-lived climate pollutants for many years. Alternatives to HFCs for these end-uses are readily available and are already being used in multiple states, as explained above. There is no reason to prolong the harmful emissions of these substances.

⁴⁵ As mentioned above, NRDC submitted a rulemaking petition on April 13, 2021, with the same request. The States support that petition. AHAM and AHRI submitted similar rulemaking petitions the same day, with requests for later deadlines for certain end-uses. The States do not support these later dates and urge EPA to keep the dates established under the SNAP Program.

⁴⁶ 40 C.F.R. Pt. 82, Subpt. G, App. B. States that have subsequently adopted or considered adopting state-level SNAP equivalents have excluded motor vehicle air conditioning for various reasons. Thus, it is particularly important that EPA clarify that its regulations cover this end-use.

⁴⁷ 42 U.S.C. § 7675(i).

b. EPA Should Issue Additional Federal Standards Modeled On the HFC Requirements CARB Has Proposed and Intends to Adopt.

In addition to reinstating the requirements of SNAP Rules 20 and 21, the States respectfully request that EPA use its AIM Act authority to further restrict the use of harmful HFCs in new equipment or products in the largest HFC-consuming and -emitting sectors: stationary refrigeration and air conditioning (AC).⁴⁸ Pursuant to its AIM Act authority, EPA can and should issue regulations that limit the use of HFCs with a global warming potential (GWP) that exceeds a certain level in specified subsectors, and establish a refrigerant reuse, recovery, and reclaim program. For a model of how to do so, EPA need look no further than the standards that the CARB Board approved on December 10, 2020, and that it intends to adopt, which are incorporated by reference herein and attached as Attachment C.⁴⁹

CARB's proposed regulations are intended to reduce the demand for high-GWP HFCs across major end-use sectors to the largest extent currently feasible in each sector. CARB's proposed regulations provide the most ambitious yet feasible HFC-reduction strategy in the country. They reflect the most up-to-date information available, are supported by robust data gathered during CARB's rulemaking process, and follow years of extensive consultation with regulated stakeholders about feasibility. They also incorporate sufficient compliance time to accommodate necessary updates to safety standards and building codes.

Specifically, together with CARB's existing regulations, CARB's proposed standards will do the following:

- Make it a violation, after certain compliance deadlines, for anyone to sell, rent, install, or use any product or equipment containing prohibited substances;
- List substances that are prohibited from use in certain end-uses⁵⁰ and the dates by which those end-uses may no longer use such prohibited substances;
- Add GWP limits for new equipment under certain end-uses,⁵¹ while allowing flexibility for existing retail food facilities to attain a company-wide GWP target by either attaining a weighted average GWP or reducing their GWP potential by a certain date;
- Establish a Refrigerant Recovery, Reclaim, and Reuse (R4) Program to enhance the use of reclaimed high-GWP refrigerants. This program will require AC manufacturers to use at least 10 percent reclaimed R-410A (an HFC-blend with a GWP of 2088) in

⁴⁸ EIA submitted a petition on April 13, 2021, making this same request. The States support that petition.

⁴⁹ Cal. Code Regs., tit. 17, §§ 95371-95379 (as proposed), Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Stationary Air-Conditioning, and Other End-Uses, Modifications to the Proposed Regulation Order, https://ww2.arb.ca.gov/sites/default/files/classic/regact/2020/hfc2020/15dayatta.pdf?_ga=2.233551454.1953607013.1621543282-1232853637.1558394411.

⁵⁰ End-uses include refrigeration, vending machines, foam systems used to manufacture, aerosols-propellants, air conditioning, and chillers.

⁵¹ All air conditioning equipment, variable refrigerant flow systems, chillers, refrigeration systems containing more than 50 pounds of refrigerant in cold storage warehouses, ice rinks, industrial process refrigeration, and retail food refrigeration.

new equipment or in servicing existing equipment and also provides an early action credit option for those who comply before the deadlines;

- Add flexibility by providing a variance process in the event of impossibility or force majeure events; and,
- Provide for recordkeeping, disclosure, labelling, and reporting requirements.

CARB's proposed regulations offer a meaningful template that EPA may use to mitigate HFC emissions substantially. Specifically, CARB's analysis has shown that requiring use of lower-GWP refrigerants in new commercial and industrial refrigeration systems and cutting the use of HFCs in existing products and equipment, as CARB's proposed regulations require, is expected to reduce the emissions from the commercial and industrial refrigeration end-uses by nearly 40 percent below business-as-usual levels by 2040 in California.⁵² Moreover, the requirement that the GWP of refrigerants used in new AC equipment be below 750 is expected to reduce emissions from the AC sector by 50 percent below business-as-usual levels by 2040 in California.⁵³ Finally, new requirements regarding the use of reclaimed refrigerant promotes better recovery of refrigerant from equipment, which lowers end-of-life leak rates and results in a more resource-efficient economy. The actions CARB has taken are critical now because each year of deferred action "locks in" emissions of high-GWP refrigerant for a given product or piece of equipment's entire lifetime, which can be over 15 to 20 years.

The States request that EPA promulgate regulations on a nationwide basis that are modeled on CARB's proposed regulations, more particularly described in Attachments A, B, and C. The AIM Act authorizes this type of action,⁵⁴ and it is imperative that HFC-intensive sectors like supermarkets, which can feasibly transition to use the safest and most climate-friendly refrigerants available, do so. CARB's proposed standards facilitate that transition and reflect the best available data while also considering the availability of substitutes based on technological feasibility, commercial demands, affordability, safety, consumer costs, building codes, efficiency standards, training costs, and other relevant factors. Furthermore, as CARB's analysis demonstrates, *see* Attachment B, the overall economic cost of such regulations is minimal compared to the harm of taking no action. And, as EPA phases down the production and consumption of HFCs over the next 15 years, implementation of nationwide regulations modeled on CARB's would improve the effectiveness of that phasedown. CARB's regulations essentially "lock-in" the potential reductions from the national HFC phasedown by reducing HFC demand while the national phasedown reduces their supply. Thus, nationwide regulations modeled on CARB's regulations would help actualize the vast emission and climate benefits expected from the national HFC phasedown in the shortest timeframe possible. For these reasons, EPA should use CARB's proposed regulations as a model for federal standards.

⁵² CARB, Initial Statement of Reasons, Executive Summary (Oct. 20, 2020), attached as Attachment A.

⁵³ *Id.*

⁵⁴ *See* 42 U.S.C. § 7675(i)(1).

c. EPA Should, At a Minimum, Restore Federal Section 608 Refrigerant Management Program Requirements As They Pertain to HFCs.

The States also request that EPA restore the HFC-related requirements that EPA established in 2016 under its Section 608 authority by (1) rescinding its 2020 regulation that eliminated leak inspection, leak repair, retrofitting, reporting, and maintenance of records requirements relating to HFC refrigerants in appliances with 50 pounds or more of HFCs (85 Fed. Reg. 14,150 (Mar. 11, 2020)); and (2) by engaging in a rulemaking under the AIM Act that would, at a minimum, reestablish the requirements of EPA’s Section 608 Refrigerant Management Program as they apply to HFCs, *see* 81 Fed. Reg. 82,272-01 (Nov. 18, 2016).

The existing Section 608 Refrigerant Management Program focuses on reducing harmful emissions from refrigeration and air conditioning systems, which are the largest sources of HFC emissions. Indeed, large commercial refrigeration systems in the aggregate are responsible for extensive emissions. In California alone, there are roughly 6,800 facilities with systems that contain more than 50 pounds of high-GWP HFC refrigerants. Based on data reported to CARB, these systems often contain hundreds to thousands of pounds of refrigerant and can leak an average of 10 to 20 percent of the refrigerant on an annual basis.⁵⁵ Refrigerant leaks at these facilities can occur frequently during appliance servicing and maintenance due to the common practice of re-charging leaky, poorly designed, or poorly maintained appliances. Reducing leaks through best management practices required by the Refrigerant Management Program not only reduces harmful emissions but also saves refrigeration equipment owners and operators money because they do not need to purchase as much replacement refrigerant.

Many of our States submitted comments opposing EPA’s 2020 regulation rescinding the HFC requirements under its Refrigerant Management Program.⁵⁶ Some of our States also challenged EPA’s 2020 regulation in the D.C. Circuit.⁵⁷ As we have explained in our prior comments and in litigation, EPA’s decision to rescind the HFC refrigerant management requirements is unlawful and will result in unnecessary emissions of harmful greenhouse gases. There is no practical reason to exclude HFCs from these critical management requirements. Indeed, because EPA has previously regulated HFCs within its Refrigerant Management Program, it knows how to do so and understands that such regulation is feasible. Moreover, even if EPA’s existing authority to regulate HFCs under Section 608 of the Clean Air Act were uncertain (it is not), EPA now certainly has authority to do so under the AIM Act. Subsection (h) specifies that EPA “shall promulgate regulations to control, where appropriate, *any practice, process, or activity* regarding the servicing, repair, disposal, or installation of equipment (including requiring, where appropriate, that any such servicing, repair, disposal, or installation be performed by a trained technician meeting minimum standards)”

⁵⁵ Based on data reported to CARB via the Refrigerant Registration and Reporting System (R3), 2012-2018.

⁵⁶ Comments of Massachusetts, California, by and through the Attorney General and California Air Resources Board, Delaware, Illinois, Iowa, Maine, Maryland, Minnesota, by and through its Minnesota Pollution Control Agency, New Jersey, New York, North Carolina, Oregon, Vermont, Virginia, Washington, and the District of Columbia, EPA-HQ-OAR-2017-0629-0300 (Nov. 14, 2018), <https://www.regulations.gov/comment/EPA-HQ-OAR-2017-0629-0300>.

⁵⁷ *New York, et al. v. Wheeler*, Case No. 20-1151 (D.C. Cir. filed May 11, 2020).

Given the breadth of EPA’s AIM Act authority, refrigerant management requirements should be at least as stringent as—if not more stringent than—the refrigerant management requirements issued under Section 608. The States therefore respectfully request that EPA immediately engage in rulemaking under the AIM Act to establish a robust refrigerant management program for HFCs.

3. Conclusion

EPA must take prompt action through its expansive authority under the AIM Act to tackle climate change by reducing HFC emissions. The actions that the States request are necessary to achieve the Biden Administration’s goals to combat climate change. EPA has previously taken action under its SNAP Program and Refrigerant Management Program to limit HFC emissions, and now California and many of the undersigned States have gone further by prohibiting HFCs in additional end-uses and limiting the permitted GWP of HFCs in specified end-uses. The experiences of our States demonstrate that such regulatory options are feasible, result in quantifiable emission reductions, and are low-cost, particularly compared to the significant costs of harm caused by climate change. The States urge EPA to use its AIM Act authority to reinstate the HFC prohibitions that it had established under the SNAP Program, promulgate additional federal standards, modeled on California’s proposed standards, that further reduce HFC emissions from the largest HFC-consuming end-uses, and establish a robust refrigerant management program for HFCs, as described herein.

Please contact Elizabeth Scheehle at Elizabeth.Scheehle@arb.ca.gov or by telephone at 916-322-7630 should you have any questions.

Sincerely,

**FOR THE CALIFORNIA AIR
RESOURCES BOARD**

/s/ Richard W. Corey
RICHARD W. COREY
Executive Officer
California Air Resources Board
1001 “I” Street
Sacramento, CA 95814

FOR THE STATE OF CALIFORNIA

ROB BONTA
Attorney General
/s/ Megan K. Hey
DAVID A. ZONANA
GARY E. TAVETIAN
Supervising Deputy Attorneys General
MEGAN K. HEY
JULIA K. FORGIE
Deputy Attorneys General
Office of the Attorney General
300 South Spring Street
Los Angeles, CA 90013
(213) 269-6000
megan.hey@doj.ca.gov
*Attorneys for State of California and
California Air Resources Board*

FOR THE COMMONWEALTH OF MASSACHUSETTS

MAURA HEALEY
Attorney General

/s/ Megan M. Herzog
TURNER H. SMITH
Assistant Attorney General & Deputy Chief
MEGAN M. HERZOG
Special Assistant Attorney General for
Climate Change
EMILY K. MITCHELL
Assistant Attorney General
Office of the Attorney General
Environmental Protection Division
One Ashburton Place, 18th Fl.
Boston, MA 02108
(617) 727-2200
megan.herzog@mass.gov

FOR THE STATE OF CONNECTICUT

WILLIAM TONG
Attorney General

/s/ Jill Lacedonia
JILL LACEDONIA
Assistant Attorney General
Office of the Attorney General
165 Capitol Avenue
Hartford, CT 06106
(860) 808-5250
Jill.Lacedonia@ct.gov

FOR THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION

/s/ Martin Suuberg
MARTIN SUUBERG
Commissioner
Massachusetts Department of Environmental
Protection
1 Winter Street, 2nd floor
Boston, MA 02108

FOR THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

KATHERINE S. DYKES
Commissioner
Connecticut Department of Energy and
Environmental Protection

/s/ Kirsten S.P. Rigney
KIRSTEN S.P. RIGNEY
Legal Director
79 Elm Street
Hartford, Connecticut 06106

FOR THE STATE OF DELAWARE

KATHLEEN JENNINGS
Attorney General

/s/ Christian Douglas Wright
CHRISTIAN DOUGLAS WRIGHT
Director of Impact Litigation
Delaware Department of Justice
820 N. French Street
Wilmington, DE 19801
(302) 577-8600
christian.wright@delaware.gov

**FOR THE OFFICE OF THE ATTORNEY
GENERAL FOR THE DISTRICT OF
COLUMBIA**

KARL A. RACINE
Attorney General

/s/ David S. Hoffmann
DAVID S. HOFFMANN
Assistant Attorney General
Office of the Attorney General for the District
of Columbia
400 Sixth St. NW
Washington, D.C. 20001
(202) 442-9889
david.hoffmann@dc.gov

**FOR THE DELAWARE DEPARTMENT
OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**

/s/ Angela D. Marconi
ANGELA D. MARCONI
Air Quality Division Director,
Delaware Department of Natural Resources
and Environmental Control
100 W. Water Street, Suite 6A
Dover, DE 19904

FOR THE STATE OF ILLINOIS

KWAME RAOUL
Attorney General

/s/ Jason E. James
JASON E. JAMES
Assistant Attorney General
MATTHEW DUNN
Chief, Environmental Enforcement/
Asbestos Litigation Division
69 W. Washington St., 18th Floor
Chicago, IL 60602
(312) 814-0660
jason.james@illinois.gov

FOR THE STATE OF MARYLAND

BRIAN E. FROSH
Attorney General

/s/ Cynthia M. Weisz
CYNTHIA M. WEISZ
Assistant Attorney General
Office of the Attorney General
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230
(410) 537-3014
cynthia.weisz2@maryland.gov

JOSHUA M. SEGAL
Special Assistant Attorney General
Office of the Attorney General
200 St. Paul Place
Baltimore, MD 21202
(410) 576-6446
jsegal@oag.state.md.us

FOR THE STATE OF NEW JERSEY

GURBIR S. GREWAL
Attorney General

/s/ Lisa J. Morelli
LISA J. MORELLI
Deputy Attorney General
New Jersey Division of Law
25 Market Street
Trenton, New Jersey 08625
(609) 376-2745
Lisa.Morelli@law.njoag.gov

FOR THE STATE OF MINNESOTA

KEITH ELLISON
Attorney General

/s/ Peter Surdo
PETER SURDO
Special Assistant Attorney General
Office of the Attorney General
445 Minnesota Street
Suite 1400
St. Paul, MN 55101
(651) 757-1061
peter.surdo@ag.state.mn.us

FOR THE CITY OF NEW YORK

GEORGIA M. PESTANA
Acting Corporation Counsel for
the City of New York

/s/ Alice R. Baker
ALICE R. BAKER
Assistant Corporation Counsel
Environmental Law Division
100 Church Street
New York, NY 10007
(212) 356-2314
albaker@law.nyc.gov

**FOR THE NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL
CONSERVATION**

/s/ Basil Seggos

BASIL SEGOS

Commissioner

New York State Department of

Environmental Conservation

625 Broadway

Albany, NY 12233

**FOR THE STATE OF NORTH
CAROLINA**

JOSHUA H. STEIN

Attorney General

DANIEL S. HIRSCHMAN

Senior Deputy Attorney General

/s/ Asher P. Spiller

ASHER P. SPILLER

Assistant Attorneys General

North Carolina Department of Justice

P.O. Box 629

Raleigh, NC 27602

(919) 716-6400

FOR THE STATE OF OREGON

ELLEN F. ROSENBLUM

Attorney General

/s/ Paul Garrahan

PAUL GARRAHAN

Attorney-in-Charge

STEVE NOVICK

Special Assistant Attorney General

Natural Resources Section

Oregon Department of Justice

1162 Court Street NE

Salem, OR 97301-4096

(503) 947-4593

Paul.Garrahan@doj.state.or.us

Steve.Novick@doj.state.or.us

**FOR THE OREGON DEPARTMENT OF
ENVIRONMENTAL QUALITY**

/s/ Richard Whitman

RICHARD WHITMAN

Director

COLIN MCCONNAHA

Manager, Office of Greenhouse Gas

Programs

700 NE Multnomah, Suite 600

Portland, OR 97232

Colin.mcconnaha@deq.state.or.us

FOR THE STATE OF VERMONT

THOMAS J. DONOVAN, JR.
Attorney General

/s/ Nicholas F. Persampieri
NICHOLAS F. PERSAMPIERI
Assistant Attorney General
Office of the Attorney General
109 State Street
Montpelier, VT 05609
(802) 828-6902
nick.persampieri@vermont.gov

**FOR THE VERMONT DEPARTMENT
OF ENVIRONMENTAL
CONSERVATION**

/s/ Peter Walke
PETER WALKE
Commissioner
1 National Life Drive, Davis 3
Montpelier, Vermont 05620
(802) 828-1556
Peter.Walke@vermont.gov

FOR THE STATE OF WASHINGTON

ROBERT W. FERGUSON
Attorney General

/s/ Christopher H. Reitz
CHRISTOPHER H. REITZ
Assistant Attorney General
Office of the Attorney General
P.O. Box 40117
Olympia, Washington 98504-0117
(360) 586-4614
chris.reitz@atg.wa.gov

**FOR THE WASHINGTON STATE
DEPARTMENT OF ECOLOGY**

/s/ Kathy Taylor
KATHY TAYLOR
Air Quality Program Manager
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
kathy.taylor@ecy.wa.gov

Attachment(s) (via email attachment and CD)

- Attachment A: CARB Staff Report: Initial Statement of Reasons
- Attachment B: Standardized Regulatory Impact Assessment
- Attachment C: Proposed Regulatory Order (May 13, 2021)

Cc via email: Mr. Joseph Goffman (Goffman.Joseph@epa.gov)
Ms. Cindy Newberg (Newberg.Cindy@epa.gov)
Mr. Chris Grundler (grundler.christopher@epa.gov)
U.S. EPA