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Nos. 21-1251, 21-1252 & 21-1253

In the United States Court of Appeals for the District of Columbia Circuit

HEATING, AIR-CONDITIONING, & REFRIGERATION DISTRIBUTORS INTERNATIONAL, *et al.*,
Petitioners,

v.

U.S. ENVIRONMENTAL PROTECTION AGENCY, *et al.*,
Respondents.

On Petition for Review of Final Agency Action of the United States Environmental Protection Agency
86 Fed. Reg. 55,116 (October 5, 2021)

BRIEF FOR PETITIONERS HEATING, AIR-CONDITIONING, & REFRIGERATION DISTRIBUTORS INTERNATIONAL; AIR CONDITIONING CONTRACTORS OF AMERICA; PLUMBING-HEATING COOLING CONTRACTORS—NATIONAL ASSOCIATION; AND WORTHINGTON INDUSTRIES, INC.

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PARTIES, RULINGS, AND RELATED CASES

Parties and *amici*. The petitioners in these consolidated cases are Heating, Air-Conditioning & Refrigeration Distributors International; Air Conditioning Contractors of America; and Plumbing-Heating Cooling Contractors—National Association (No. 21-1251); Worthington Industries, Inc. (No. 21-1252); and RMS of Georgia, LLC d/b/a Choice Refrigerants (No. 21-1253).

The respondents are the U.S. Environmental Protection Agency and Michael S. Regan, in his official capacity as Administrator of the U.S. Environmental Protection Agency.

No *amici* or intervenors have appeared in the cases thus far.

Final Agency Action Under Review. The action under review is the final rule issued by the U.S. Environmental Protection Agency entitled *Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program under the American Innovation and Manufacturing Act*, 86 Fed. Reg. 55,116 (Oct. 5, 2021) (codified at 40 C.F.R. Part 84).

Related Cases. Petitioners are not aware of any related cases other than Nos. 21-1251, 21-1252, 21-1253, which have been consolidated here.

CORPORATE DISCLOSURE STATEMENT

Heating, Air-conditioning, & Refrigeration Distributors International ("HARDI") states that it is a nonprofit, nonstock trade association. HARDI has no parent company, and no publicly held company has a 10% or greater ownership interest in HARDI.

Air Conditioning Contractors of America ("ACCA") states that it is a nonprofit, nonstock trade association. ACCA has no parent company, and no publicly held company has a 10% or greater ownership interest in ACCA.

Plumbing-Heating Cooling Contractors—National Association ("PHCC") states that it is a nonprofit, nonstock trade association. PHCC has no parent company, and no publicly held company has a 10% or greater ownership interest in PHCC.

Worthington Industries, Inc. ("Worthington") is a publicly traded corporation organized under the laws of the State of Ohio and headquartered in Columbus, Ohio. Shares of Worthington are listed on the New York Stock Exchange (NYSE: WOR). Worthington has no parent companies, and no publicly-held corporation has a 10% or greater ownership interest in it.

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GLOSSARY

ACCA	Air Conditioning Contractors of America
AIM Act	American Innovation and Manufacturing Act
CAA	Clean Air Act
CARB	California Air Resources Board
CBP	U.S. Customs and Border Protection
EPA	U.S. Environmental Protection Agency
EU	European Union
HARDI	Heating, Air-conditioning, & Refrigeration Distributors International
HFCs	hydrofluorocarbons
HVACR	heating, ventilation, air-conditioning, and refrigeration
PHCC	Plumbing-Heating Cooling Contractors—National Association
RFA	regulatory flexibility analysis

INTRODUCTION

The American Innovation and Manufacturing Act ("AIM Act" or "Act") establishes a comprehensive statutory regime to phase down the production and consumption of certain greenhouse gases—hydrofluorocarbons ("HFCs")—so as to reduce their harmful impact on the climate and the environment. To accomplish that goal, the Act directs EPA to "issue a final rule" "phasing down the production [and consumption] of" HFCs "through an allowance allocation and trading program." 42 U.S.C. § 7675(e)(3). Under that program, EPA grants regulated entities permission to produce or consume specified volumes of HFCs and allows them to trade this permission to other entities. And, over time, the total permitted volume of HFCs will be reduced according to a schedule set out in the Act.

Petitioners HARDI, ACCA, PHCC, and Worthington fully support both the ultimate goal of the AIM Act and the method—"an allowance allocation and trading program"—by which Congress chose to accomplish it. But EPA's Final Rule went far beyond the AIM Act's text. It tacked on two additional substantive requirements that have *nothing* to do with an allowance allocation and trading program: it banned the use of all non-refillable cylinders, which are the containers used to transport the overwhelming majority of HFCs; and

it mandated the implementation of a QR-code tracking system that is different from (and largely incompatible with) the tracking methods already employed in the industry.

Those additional requirements are unlawful because they are in excess of EPA's statutory authority. The AIM Act provides EPA with the specific tools by which to phase down the production and consumption of HFCs, and neither the ban nor the mandate are anywhere to be found in the statutory toolbox. Faced with an utter lack of express statutory authority, EPA cites Subsection (e)(B)(2) of the Act, which directs that EPA "shall ensure" that the statutory phase-down targets are met. From those two little words, EPA conjures up effectively limitless power to enact whatever "complementary measures," 86 Fed. Reg. 55,116, 55,172 (Oct. 5, 2021), it thinks might "help ensure compliance with the consumption allowance system," 86 Fed. Reg. 27,150, 27,187 (May 19, 2021). But nothing in the Act authorizes such breathtaking authority, and every principle of statutory interpretation forecloses it.

Even if EPA did possess the statutory authority it claims, the Agency nonetheless acted arbitrarily and capriciously in promulgating the non-refillable cylinder ban and QR-code mandate. EPA failed to examine relevant

data, explain its decisions, and respond to significant points raised in comments. It based its decision on undisclosed information and unsupported suppositions that are contradicted by extensive record data submitted by Petitioners. And it completely ignored reasonable alternatives—some of which have already proven effective at reducing the illegal import of HFCs. To put it bluntly, EPA's substantive analysis was just as deficient as its statutory analysis. And in light of these manifold deficiencies, the Court should sever and vacate the Final Rule's non-refillable cylinder ban and QR-code mandate.

STATEMENT OF JURISDICTION

EPA issued its final rule, entitled *Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program Under the American Innovation and Manufacturing Act*, 86 Fed. Reg. 55,116 ("Final Rule"), on October 5, 2021, pursuant to the AIM Act, 42 U.S.C. § 7675. Petitioners timely petitioned for review on December 2 and 3, 2021. This Court has jurisdiction pursuant to Subsection (k) of the AIM Act, 42 U.S.C. § 7675(k), and Section 307 of Clean Air Act ("CAA"), 42 U.S.C. § 7607.

STATEMENT OF THE ISSUES

1. Whether the AIM Act, which authorizes EPA to create an HFC allowance allocation and trading program, also authorizes EPA to ban non-refillable cylinders.

2. Whether the non-refillable cylinder ban, which outlaws cylinders used by the vast majority of entities that deal with HFCs, is arbitrary and capricious.

3. Whether the AIM Act authorizes EPA to mandate QR-code tracking of HFCs.

4. Whether EPA's QR-code mandate is arbitrary and capricious.

RELEVANT STATUTORY AND REGULATORY PROVISIONS

The American Innovation and Manufacturing Act of 2020, Pub. L. 116-260, Division S, Sec. 103, and EPA's final rule, entitled *Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program Under the American Innovation and Manufacturing Act*, 86 Fed. Reg. 55,116 (October 5, 2021), are reproduced in the addendum.

STATEMENT OF THE CASE

A. Statutory and Regulatory Background

1. The AIM Act

Congress passed the AIM Act to phase down the production and consumption of HFCs to reduce their harmful environmental impact. Specifically, the Act directs EPA to first determine "baseline" levels for production and consumption (defined as production plus imports, minus exports), 42 U.S.C. § 7675(b)(3), (e)(1), and establish a schedule for phasing down production and consumption of HFCs to 15% of the baseline by 2036, § 7675(e)(2)(C).

To that end, the Act directs that EPA "shall ensure that the annual quantity of all regulated substances produced or consumed in the United States does not exceed" the amount given by the schedule. § 7675(e)(2)(B). And it prescribes the methods to accomplish that aim: It directs that EPA "shall issue a final rule" "phasing down the production [and consumption] of" HFCs "through an allowance allocation and trading program," § 7675(e)(3)—*i.e.*, by establishing a regulatory program that grants various parties permission to produce or consume specified volumes of HFCs and allows them to trade this permission to other entities.

The Act contains other grants of regulatory authority. For example, Subsection (k) empowers EPA to "promulgate such regulations as are necessary to carry out the functions of the Administrator under this section." § 7675(k)(1)(A). And Subsection (h) directs EPA to "promulgate regulations to control, where appropriate, any practice, process, or activity regarding the servicing, repair, disposal, or installation of equipment." § 7675(h)(1). The Act also contains a monitoring and reporting requirement, requiring each person who "produces, imports, exports, destroys, transforms, uses as a process agent, or reclaims" regulated HFCs regularly to disclose to EPA various specific data. § 7675(d)(1)(A).

In order to ensure compliance with AIM Act regulations, the Act incorporates enforcement mechanisms from the CAA. § 7675(k)(1)(C). Specifically, the Act makes violations of its regulations subject to civil and criminal penalties as described in Section 113 of the CAA. *Id.* (incorporating 42 U.S.C. § 7413). Thus, a violator may be subject to fines of "$25,000 per day for each violation," § 7413(b), or "by imprisonment for not to exceed 5 years" (doubling to ten years in the case of a repeat violation), § 7413(c).

2. The Notice of Proposed Rulemaking

In May 2021, EPA issued a notice of proposed rulemaking entitled *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) ("Proposed Rule" or "Proposal"). Pursuant to the AIM Act's mandate that EPA "shall issue a final rule" "phasing down the production [and consumption] of" HFCs "through an allowance allocation and trading program," 42 U.S.C. § 7675(e)(3), EPA proposed to "[e]stablish the HFC production and consumption baselines based on historical data [and] establish the allowance allocation program to phase down HFC production and consumption," 86 Fed. Reg. at 27,157.

EPA also proposed, however, to regulate two activities unrelated to the "allowance allocation and trading program." 42 U.S.C. § 7675(e)(3). First, EPA proposed to ban the use of non-refillable cylinders to store and transport HFCs. 86 Fed. Reg. at 27,187 ("non-refillable cylinder ban"). EPA stated that non-refillable cylinders have "adverse consequences on the environment" because the "residual amount" of HFCs left at the end of the cylinder's useful life (*i.e.*, the "heel") may be "released to the atmosphere." *Id.* EPA also reasoned that the ban would "help ensure compliance with the consumption

allowance system" by helping Customs and Border Protection (CBP) officers visually identify illegally imported HFCs. *Id.* EPA's Proposal did not identify which provision of the AIM Act authorized EPA to promulgate the ban on non-refillable cylinders.

Second, EPA proposed the "[e]stablishment of a comprehensive certification ID tracking system using QR codes or similar digital technology to track the movement of HFCs through commerce." 86 Fed. Reg. at 27,184 ("QR-code mandate"). EPA proposed that "anyone selling HFCs would need to be registered in the system." *Id.* at 27,191. Under the Proposed Rule, "[s]ellers would need to scan the containers as they are sold, and buyers who intend to sell the HFCs, other than the final customer, would need to do the same." *Id.* Similarly, "[a]nyone who is filling a container or cylinder … would be required to enter information in the system and generate a new QR code for the new containers and add information on: the brand it would be sold under, the quantity and composition of HFC(s) in the container, the date it was packaged or repackaged, the certification IDs associated with the HFCs (if being repackaged), the quantity of containers it was packaged in, and the size of the containers." *Id.* EPA's Proposal did not identify the statutory authority for the QR-code mandate.

3. Relevant Comments on the Proposed Rule

Petitioners provided comments and testimony expressing support for the AIM Act and the HFC phase-down, but deep concerns about the legality and rationality of EPA's proposal to ban the non-refillable cylinders used by 99% of the heating, air-conditioning, ventilation, and refrigeration ("HVACR") industry and to mandate rarely used and insufficiently manufactured refillable cylinders. JA__[EPA-HQ-OAR-2021-0044-0116 at 1-2; EPA-HQ-OAR-2021-0044-0103 at 6-8; EPA-HQ-OAR-2021-0044-0193 at 1-3; EPA-HQ-OAR-2021-0044-0215 at 1-3]. Likewise, HARDI contested the legality and rationality of the proposed QR-code mandate. JA__[EPA-HQ-OAR-2021-0044-0103 at 21-26].

a. In their comments, Petitioners first explained that neither the AIM Act nor the CAA granted EPA statutory authority to ban non-refillable cylinders. JA__[EPA-HQ-OAR-2021-0044-0103 at 16; EPA-HQ-OAR-2021-0044-0215 at 30-32]. The AIM Act never mentions cylinders and does not prohibit HFC venting. JA__[EPA-HQ-OAR-2021-0044-0103 at 18-19; EPA-HQ-OAR-2021-0044-0215 at 30-32]. Moreover, Section (h)(1) of the AIM Act authorizes regulation of "equipment" other than cylinders, and Section

(k)(i)(A) simply authorizes EPA to implement the AIM Act. JA__[EPA-HQ-OAR-2021-0044-0103 at 17-18; EPA-HQ-OAR-2021-0044-0215 at 30-32].

HARDI likewise urged that the proposed cylinder tracking mandate was beyond EPA's AIM Act authority. JA__[EPA-HQ-OAR-2021-0044-0103 at 24-25]. The AIM Act never references cylinder tracking and excludes distributors and contractors from the industry segments EPA may subject to reporting requirements. *Id.*

b. Petitioners also explained that EPA's proposed rationales for the non-refillable cylinder ban were unsupported by the facts. With regard to EPA's stated goal of curbing illegal imports of HFCs, commenters explained that EPA's own analysis demonstrated that a similar ban by the European Union (EU) had been ineffective and that smugglers simply shifted from non-refillable to refillable cylinders. JA__[EPA-HQ-OAR-2021-0044-0215 at 13-15; EPA-HQ-OAR-2021-0044-0116 at 1-2; EPA-HQ-OAR-2021-0044-0193 at 2; EPA-HQ-OAR-2021-0044-0142 at 5].

Commenters also disputed EPA's cost-benefit analysis. All of the environmental benefits EPA attributed to the non-refillable cylinder ban were based on EPA's presumption that non-refillable cylinders contained at least 5% of their HFCs at the end of their useful life and that 95% of those cylinders

were illegally vented. As Worthington pointed out, both of these assumptions are based on undocumented "personal communications" with two companies. JA__[EPA-HQ-OAR-2021-0044-0215 at 8-9]. EPA's proposal also relied extensively on four agency-commissioned reports from Stratus Consulting and "personal conversations" that were not in the docket or publicly available. *See* JA__[EPA-HQ-OAR-2021-0044-0046-7 at 4, 8, 13]. Worthington estimated the average HFC "heel" remaining to be 1.2%, based on analysis from industry guidelines and its own experience and knowledge; and the California Air Resources Board (CARB), which has "studied this issue more than any other U.S. regulatory body, estimated an average heel of 1.85%." JA__[EPA-HQ-OAR-2021-0044-0215 at 8-9]. Worthington also noted that EPA's unsupported assumption that 95% of cylinders are vented conflicts with CARB's 70% estimate and that both are profoundly overestimated given the high penalties for illegal venting. JA__[*Id.* at 9-10].

Petitioners also warned EPA that insufficient cylinder manufacturing capacity exists to produce the number of refillable cylinders necessitated by the proposed ban's compliance date of July 1, 2023. JA__[EPA-HQ-OAR-2021-0044-0215 at 5-6, 17; EPA-HQ-OAR-2021-0044-0103 at 12]. Whereas EPA assumed 4.5 million refillable cylinders would be needed to replace non-

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refillable cylinders on a 1:1 basis, Worthington, the only domestic cylinder manufacturer, submitted confidential sales data [redacted]. JA__[EPA-HQ-OAR-2021-0044-0215 at 3].

Petitioners and others challenged EPA's unsupported assumption that refillable cylinders could replace non-refillable cylinders on a 1:1 ratio by submitting a detailed analysis prepared for CARB showing that, "for every disposable cylinder sold, four refillable cylinders must be in circulation to account for cylinders in use and in transit." JA__ [EPA-HQ-OAR-2021-0044-0103 at 12; EPA-HQ-OAR-2021-0044-0215 at 5 n.6]. Based on its experience in Canada, which previously banned non-refillable cylinders, Chemours recommended EPA utilize a 5:1 ratio. JA__[EPA-HQ-OAR-2021-0044-0216 at 34; EPA-HQ-OAR-2021-0044-0227-03 at 470]. EPA ignored these data as well, and instead crafted its own 2:1 replacement ratio based on undocumented "experiences in other countries." 86 Fed. Reg. at 55,177.

Having demonstrated that the non-refillable cylinder ban would require the manufacture at least 26 million refillable cylinders, Worthington submitted a fact-based analysis showing that there is insufficient global manufacturing

capacity to meet this level of demand. JA__[EPA-HQ-OAR-2021-0044-0215 at 6, 17].

Petitioners also provided a detailed analysis of the proposed ban's immense cost—roughly $2 billion. JA__[EPA-HQ-OAR-2021-0044-0215 at 17; EPA-HQ-OAR-2021-0044-0116 at 1]. This was far higher than EPA's $200 million cost estimate, 86 Fed. Reg. at 27,201, because EPA not only misapprehended the scale of the cylinder transition, but also wholly overlooked or unreasonably underestimated many foreseeable costs. As Petitioners noted, EPA:

- assigned no costs to construct new cylinder manufacturing capacity;
- underestimated refillable cylinder costs and ignored the cost of periodically reconditioning refillable cylinders;
- failed to consider cylinder loss rates; and
- failed to properly account for increased transportation and fuel costs due to refillable cylinder size and the number of trips to/from distributers, users, and reclaimers.

JA__[EPA-HQ-OAR-2021-0044-0215 at 6, 18, 20; EPA-HQ-OAR-2021-0044-0103 at 14; EPA-HQ-OAR-2021-0044-0116 at 1; EPA-HQ-OAR-2021-0044-0193 at 2].

Petitioners also explained that HVACR workers would suffer negative health effects from routinely carrying refillable cylinders that are 50% heavier

than disposable cylinders. JA__[EPA-HQ-OAR-2021-0044-0215 at 3, 24-25; EPA-HQ-OAR-2021-0044-0103 at 14].

Finally, Petitioners provided EPA with detailed and reasonable alternatives to achieve EPA's goal to reduce HFC smuggling. In particular, Worthington, proposed to help EPA address HFC smuggling through a number of technological solutions, including distinct markings, rotating codes, and anti-counterfeiting stickers, that could help readily identify illegally imported cylinders. JA__ [EPA-HQ-OAR-2021-0044-0215 at 15-16]. Other commenters recommended alternative anti-smuggling actions such as reporting bounties, certification of facilities, authentication programs, import pre-authorization, changes to import documentation, and increasing penalties for smugglers. *See* JA__[EPA-HQ-OAR-2021-0044-0066 at 7-8; EPA-HQ-OAR-2021-0044-0195 at 3; EPA-HQ-OAR-2021-0044-0216 at 36-37; EPA-HQ-OAR-2021-0044-0219 at 4].

c. HARDI and PHCC commented on the illegality and impracticability of EPA's proposed tracking requirements, including the QR-code mandate. JA__[EPA-HQ-OAR-2021-0044-0103 at 21-26; EPA-HQ-OAR-2021-0044-0193 at 2]. They explained that adding a cylinder tracking system, like the QR-code mandate, will disrupt supply chains and create complex, inefficient systems,

especially in an all-refillable cylinder market where cylinder mix-ups will cause additional transfers. JA__[HQ-OAR-2021-0044-0103 at 22-23; EPA-HQ-OAR-2021-0044-0193 at 2]. HARDI also explained that the public database associated with the tracking requirement risks violating the Defend Trade Secrets Act and other confidentiality protections by publicly releasing trade secrets and allowing competitors to use the public sales data to compile confidential customer lists and determine market share. JA__[HQ-OAR-2021-0044-0103 at 23-24].

4. The HFC Allocation Final Rule

EPA finalized its Proposed Rule in October 2021. The Final Rule delayed the compliance deadline for the non-refillable cylinder ban and made "minor changes to accurately reflect how the prohibition will be implemented," but made no other significant amendments. 86 Fed. Reg. at 55,172. The Final Rule also delayed the compliance deadline for the QR-code mandate and revised the estimated compliance costs but otherwise finalized the mandate "largely … as proposed." *Id.* at 55,183.

The Final Rule clarified that EPA relies on Subsection (e)(2)(B) of the AIM Act (42 U.S.C. § 7675(e)(2)(B)) (EPA "shall ensure" "consumption" and "production" targets are met) as the purported statutory authority for both

the non-refillable cylinder ban and QR-code mandate. 86 Fed. Reg. at 55,172 (ban), 55,185 (mandate). EPA's theory is that Section (e)(2)(B) "provides the Agency authority to establish complementary measures" like the ban in order to facilitate interdiction of illegal imports. *Id.* at 55,172. The Agency cited the same language in justifying the QR-code mandate. *Id.* at 55,185 ("Identifying containers of HFCs that were illegally imported and produced is directly related to and supports EPA's ability to meet the statutory obligation in subsection (e)(2)(B) of the AIM Act."). EPA also specifically stated that Subsections (h) and (k)(1)(A) do *not* provide statutory authority for the ban. JA__[EPA-HQ-OAR-2021-0044-0227 at 467].

B. Procedural Background

1. Petitions for Reconsideration

After the Final Rule was published, Worthington and HARDI timely filed petitions for partial administrative reconsideration with EPA. Both Petitioners reiterated that EPA did not have the statutory authority to enact the non-refillable cylinder ban. *See* JA__[EPA-HQ-OAR-2021-0044-0229 at 2-3; EPA-HQ-OAR-2021-0044-0230 at 2-3]. HARDI similarly explained that EPA lacked statutory authority to require tracking of cylinders, including the use of QR codes. JA__[EPA-HQ-OAR-2021-0044-0230 at 5].

Both Petitioners also catalogued many of the significant comments EPA declined to address, the missing records EPA never provided, the misstatements EPA never corrected or supported, the alternatives EPA never examined, and the new erroneous statements EPA made in attempted to bolster its debilitated justification for the non-refillable cylinder ban. *See* JA__[*id.* at 3-6; EPA-HQ-OAR-2021-0044-0229 at 3-6]. And notwithstanding EPA's unwillingness to meaningfully engage with their comments, both Petitioners expressed interest in working with EPA on feasible alternatives to the non-refillable cylinder ban. *See* JA__[EPA-HQ-OAR-2021-0044-0229 at 7; EPA-HQ-OAR-2021-0044-0230 at 6].

2. Petitions for Review

To date, EPA has not responded to Petitioners' petitions for reconsideration. Having failed to obtain relief from the Agency, Petitioners timely petitioned this Court for review on December 2 and 3, 2021. (Case No. 21-1251, Doc. No. 1925396; Case No. 21-1252, Doc. No. 1925317).

STANDARD OF REVIEW

Under the CAA, the Court will set aside those portions of the Rule that are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Am. Lung Ass'n v. EPA*, 985 F.3d 914, 941 (D.C. Cir.

2021) (quoting 42 U.S.C. § 7607(d)(1)(C), (d)(9)(A)); *see Maryland v. EPA*, 958 F.3d 1185, 1196 (D.C. Cir. 2020) ("[W]e apply the same standard of review under the Clean Air Act as we do under the Administrative Procedure Act.").

SUMMARY OF ARGUMENT

The AIM Act authorizes EPA to create an allowance allocation and trading program to phase down HFC production and consumption, and it gives EPA specific regulatory tools to accomplish this purpose. The statute does *not* expressly authorize—or even mention—EPA's attempt to ban non-refillable cylinders or mandate QR-code tracking. Nor can such requirements be implied from Subsection (e)(2)(B)'s direction that EPA "shall ensure" that consumption and production targets are met. 42 U.S.C. § 7675(e)(2)(B). In short, the AIM Act does *not* authorize EPA to create new and entirely unmentioned regulatory requirements out of whole cloth merely because EPA thinks they might be helpful.

Even if EPA possessed statutory authority to adopt the non-refillable cylinder ban and QR-code mandate, EPA acted arbitrarily and capriciously in promulgating these provisions. EPA failed to examine relevant data, failed to explain its decisions, failed to consider or acknowledge significant points raised in comments, based its decision on undisclosed information and

unsupported suppositions, and ignored reasonable alternatives. The Court should sever and vacate the Final Rule's non-refillable cylinder ban and QR-code mandate.

ARGUMENT

I. The Non-Refillable Cylinder Ban Is Unlawful and Should Be Severed and Vacated.

A. EPA Does Not Have Statutory Authority to Ban Non-Refillable Cylinders.

"To define the scope of delegated authority," this Court must "look to the text in 'context' and in light of the statutory 'purpose.'" *Gundy v. United States*, 139 S. Ct. 2116, 2126 (2019) (quoting *National Broadcasting Co. v. United States*, 319 U.S. 190, 214 (1943)); *Am. Fuel & Petrochemical Mfrs. v. EPA*, 3 F.4th 373, 380 (D.C. Cir. 2021). Here, the text, context, and purpose of the AIM Act make clear that EPA does not have authority to ban non-refillable cylinders.

1. In the Final Rule, EPA relies on Subsection (e)(2)(B) as providing authority to ban non-refillable cylinders in order to help prevent illegal imports of HFCs. *See* 86 Fed. Reg. at 55,172; JA__[EPA-HQ-OAR-2021-0044-0227 at 467]. That subsection provides, in full:

> (B) COMPLIANCE.—For each year listed on the table contained in subparagraph (C), the Administrator shall ensure

> that the annual quantity of all regulated substances produced or consumed in the United States does not exceed the product obtained by multiplying—
>
> > (i) the production baseline or consumption baseline, as applicable; and
> >
> > (ii) the applicable percentage listed on the table contained in subparagraph (C).

42 U.S.C. § 7675(e)(2)(B).

Subsection (e)(B)(2) does not expressly authorize EPA to regulate the cylinders that contain HFCs, and EPA does not contend that it does. Instead, EPA asserts that Subsection (e)(B)(2) "provides the Agency authority to establish *complementary measures* such that the Agency can meet the statutory reduction steps and enforce the requirement that regulated substances may only be produced or consumed when the necessary allowances are expended." 86 Fed. Reg. at 55,172 (emphasis added). Absent express authorization for EPA to devise "complementary measures," EPA does not explain or identify the text it relies upon. Nor does it assert that the statute is ambiguous or that it is engaged in any legislative gap-filling.[1]

[1] The Final Rule also mentions, in passing, EPA's regulatory authority under Subsection (e)(3). *E.g.*, 86 Fed. Reg. at 55,172 ("The AIM Act charges the Agency in subsection (e)(3) to issue regulations that phase down the production and consumption of regulated substances through an allowance

EPA might argue that its authority flows from the words "shall ensure." 42 U.S.C. § 7675(e)(2)(B). For example, EPA's Proposal asserted that banning non-refillable cylinders "would *help ensure compliance* with the consumption allowance system" by "provid[ing] CBP officers the ability to conduct a quick visual inspection to identify potentially illegal imports for follow-up." 86 Fed. Reg. at 27,187 (emphasis added); *see also* 86 Fed. Reg. at 55,173 (similar). But nothing in the Act grants EPA authority to engage in the "detection and interdiction of illegal HFCs" or "deter[ring of] illegal activity." *Id.* at 55,173, 55,175. Nor does the Act grant EPA authority to devise new substantive requirements and prohibitions simply because they might "help ensure compliance" with the statutory regime. *Id.* at 27,187

The closest that EPA came to identifying a connection between its stated justification (interdicting illegal imports) and the AIM Act's text is that the Act directs EPA to phase down "consumption," which is calculated based, in part, on the "quantity" of HFCs "imported into" the United States. 42 U.S.C. § 7675(b)(3). So, the theory goes, "[a]ny level of illicit import of HFCs may

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allocation and trading program."). But EPA does not assert authority to implement the non-refillable cylinder ban under Subsection (e)(3), and the ban plainly does not carry out Congress's direction to regulate "through an allowance allocation and trading program" in any event. 42 U.S.C. § 7675(e)(3)(B).

cause the consumption limit to be exceeded." 86 Fed. Reg. at 55,172. To say that this reasoning is "attenuated" is an understatement. *Merck*, 962 F.3d at 539. At best, the Agency has "identif[ied] a hoped-for trickle-down effect on the regulated programs." *Id.* But that speculation alone cannot justify such an expansive assertion of regulatory authority. *See id.* at 537.

Rather, when Congress directed EPA to "ensure" that consumption and production targets are met, it expected EPA to work with the tools Congress provided. The AIM Act empowered EPA to phase down "consumption" and "production" of HFCs "*through* an allowance allocation and trading program," 42 U.S.C. § 7675(e)(3) (emphasis added), together with other express grants of statutory authority that facilitate that program, *e.g.*, § 7675(d) (mandatory reporting); § 7675(k)(1)(C) (civil and criminal penalties). Those are the tools with which EPA "shall ensure" that consumption and production targets are met. § 7675(e)(2)(B).[2]

[2] This common-sense reading of the phrase "shall ensure," moreover, is consistent with the title of the Subsection—"COMPLIANCE"—which suggests that EPA has authority to compel regulated persons to "comply" with the allowance allocation and trading program, not to conjure new substantive prohibitions or requirements out of thin air that EPA might consider helpful to other agencies in identifying illegal imports.

2. The surrounding context and structure of the AIM Act confirm that Subsection (e)(B)(2) does not grant EPA the authority to ban non-refillable cylinders.

The AIM Act nowhere mentions cylinders, much less expressly authorizes EPA to regulate them. Instead, it sets out a comprehensive statutory regime for reducing HFC consumption and production in the United States. To that end, it identifies the specific gases regulated. 42 U.S.C. § 7675(c). It mandates monitoring and reporting of production, import, and export levels. § 7675(d). And it directs EPA to phase down the "consumption" and "production" of HFCs "through an allowance allocation and trading program." § 7675(e)(3). It sets baselines for consumption and production, § 7675(e)(1), and grants EPA power to alter the "exchange values" and establish criteria governing such alterations, § 7675(e)(1)(D). It establishes a timetable and target percentages for phasing down consumption and production through the year 2036. § 7675(e)(2)(C). It grants EPA the power to designate certain uses of HFCs as "essential," along with a detailed procedure to follow and criteria to consider in making such a designation. § 7675(e)(4)(B). And it grants EPA ancillary power specifically to regulate "any practice, process, or activity regarding the servicing, repair, disposal, or installation of

equipment" for the "purpose[] of maximizing reclaiming and minimizing the release of a regulated substance from equipment and ensuring the safety of technicians and consumers." § 7675(h)(1).

The regulation of cylinders—the containers in which HFCs are distributed—does not fit into this statutory regime at all. The ban on using non-refillable cylinders does not govern the details of an "allowance allocation and trading program," § 7675(e)(3)—it does not supply the process for applying for an allocation, what criteria will be used to determine allocations, how trading allocations will be recorded, or anything similar. Nor does it fit within Subsection (h)(1)'s grant of authority to regulate "any practice, process, or activity regarding the servicing, repair, disposal, or installation of equipment." § 7675(h)(1). That authority is limited to regulating "practice[s], process[es,] [and] activit[ies]." *Id.* It does not grant EPA authority to regulate the containers themselves, and certainly not to ban certain types of containers (*i.e.*, non-refillable cylinders) altogether. That is probably why EPA expressly disclaimed any reliance on Subsection (h) when it promulgated the Final Rule.

See JA__[EPA-HQ-OAR-2021-0044-0227 at 467] ("EPA is not relying on subsection (h) for the authority to prohibit disposable cylinders.").[3]

The AIM Act's express grants of specific, limited regulatory authority creates a "negative implication" that freewheeling "complementary measures"—entirely absent from the statute—are excluded. *Shook v. D.C. Fin. Resp. & Mgmt. Assistance Auth.*, 132 F.3d 775, 782 (D.C. Cir. 1998) ("the mention of one thing implies the exclusion of another") (quoting *Halverson v. Slater*, 129 F.3d 180, 185 (D.C. Cir. 1997)). In light of this comprehensive regime, there is simply no reason "to believe that Congress, by any remaining ambiguity, intended to undertake the regulation" of a subject "never mentioned in the statute," such as prohibiting the non-refillable cylinders in which the large majority of HFCs are distributed today as an aid in preventing illegal importation. *Am. Bar Ass'n v. FTC*, 430 F.3d 457, 469 (D.C. Cir. 2005).

In the Final Rule, EPA asserts that Subsection (e)(2)(B) empowers EPA to "*enforce* the requirement that regulated substances may only be produced

[3] In the Proposed Rule, EPA's primary justification for the ban was that it "would increase environmental benefit" by "ensuring the heels"—*i.e.*, the small, residual amounts of unused gas that remain in cylinders at the end of their useful lives—"are not released to the atmosphere when disposable cylinders are discarded." 86 Fed. Reg. at 27,187. EPA no longer relies on that justification in the Final Rule, relegating it to a section describing the "additional benefits" of the ban. 86 Fed. Reg. at 55,174.

or consumed when the necessary allowances are expended," and that the ban is one such enforcement "*mechanism*." 86 Fed. Reg. at 55,172-73 (emphasis added). But Subsection (e) does not include any express enforcement mechanism or authorize EPA to create one. And that should come as no surprise: Subsection (k) *already* supplies a comprehensive enforcement regime. Specifically, Subsection (k) incorporates the CAA 's provisions relating to "[f]ederal enforcement" and "[c]itizen suits." 42 U.S.C. § 7675(k)(1)(C) (incorporating, *inter alia*, 42 U.S.C. §§ 7413, 7604). Thus, anyone who violates the statute or regulations could be subject to fines of "$25,000 per day for each violation," 42 U.S.C. § 7413(b), or, in the case of knowing or willful violations, "by imprisonment for not to exceed 5 years" (doubling to ten years in the case of a repeat violation), § 7413(c). And "any person may commence a civil action" in federal court against "any person … who is alleged to have [repeatedly] violated … or to be in violation" of the statute or regulations. § 7604(a)(1). Given this "explicit and detailed remedial scheme" it is "implausible" that Congress intended implicitly to empower the Agency to supplement it with so-called "complementary" measures. *New Mexico v. Dep't of Interior*, 854 F.3d 1207, 1226 (10th Cir. 2017); *Am. Bar Ass'n*, 430 F.3d at 469.

3. The Act's purpose further reinforces the conclusion that EPA is not empowered to ban non-refillable cylinders.

Petitioners strongly support the AIM Act's overarching purpose to reduce the harmful environmental consequences of HFCs, and are *not* challenging the Final Rule's "allowance allocation and trading program." But EPA cannot rely on the Act's broad purposes, described at the highest level of generality, to "bootstrap itself into an area in which it has no jurisdiction." *Smith v. Berryhill*, 139 S. Ct. 1765, 1778 (2019) (quoting *Adams Fruit Co. v. Barrett*, 494 U.S. 638, 650 (1990)). As the Supreme Court has cautioned, "no legislation pursues its purposes at all costs," and "it frustrates rather than effectuates legislative intent simplistically to assume that whatever furthers the statute's primary objective must be the law." *Rodriguez v. United States*, 480 U.S. 522, 525-26 (1987).

Here, Congress's purpose was to phase down the consumption and production of HFCs over time, not by any means necessary, but "*through* an allowance allocation and trading program," 42 U.S.C. § 7675(e)(3) (emphasis added), together with the other specific grants of regulatory authority described above. EPA's reading of Section (e)(B)(2) to grant it far-reaching power to promulgate any and all "complementary measures" to advance broad

statutory purposes "suggests a staggering delegation of power" that Congress did not intend. *Merck*, 962 F.3d at 540; *see also Gonzalez v. Oregon*, 546 U.S. 243, 262 (2006) ("By this logic, however, the Attorney General claims extraordinary authority.").

This Court has been especially reluctant to presume implied agency authority to enact regulations of a "sweeping 'nature and scope,'" like the non-refillable cylinder ban. *Merck*, 962 F.3d at 540 (quoting *Loving v. IRS*, 742 F.3d 1013, 1021 (D.C. Cir. 2014)). As EPA now concedes in the Final Rule, the effect of the ban will be to outlaw the containers in which the "vast majority" of *legal* HFCs are currently stored, 86 Fed. Reg. at 27,187, at a cost of $441 million to the private sector, 86 Fed. Reg. at 55,174. This is a decision of "major economic … significance." *Loving*, 742 F.3d at 1021 (citing *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 160 (2000)). And "nothing in the statute's text or the legislative record contemplates that vast expansion of" EPA's authority. *Id.* Subsection (e)(2)(B), containing no explicit grant of authority, would be a "cryptic" way for Congress "to delegate a decision of such economic and political significance," which is why the Court should be "confident" that it did not. *Brown & Williamson*, 529 U.S. at 160.

Even beyond the "specific application at issue," consider the "implications of the authority claimed." *Merck*, 962 F.3d at 541. EPA's construction of Subsection (e)(2)(B) admits of no stopping point. So long as a measure arguably "complements" the enforcement mechanisms enumerated in one subsection of the statute, it is authorized under EPA's interpretation of the words "shall ensure" that appear in an entirely different subsection. If that is true, nothing would stop the Agency, for example, from regulating the trucks, trains, or planes that HFCs are transported in, or from banning the importation of HFCs from certain countries known for smuggling. EPA could readily claim that each of these measures helps the Agency "ensure" compliance.

The breadth of EPA's theory, when compared to the complete absence of any explicit delegation, demonstrates that "the enacting Congress did not intend to grow such a large elephant in such a small mousehole." *Loving*, 742 F.3d at 1021. Indeed, to agree with EPA, the Court "would have to conclude that Congress not only had hidden a rather large elephant in a rather obscure mousehole, but had buried the ambiguity in which the pachyderm lurks beneath an incredibly deep mound of specificity,"—namely, the specificity of the statutory regime described above—"none of which bears the footprints of

the beast or any indication that Congress even suspected its presence." *Am. Bar Ass'n*, 430 F.3d at 469.[4]

B. The Non-Refillable Cylinder Ban Is Arbitrary and Capricious.

EPA's non-refillable cylinder ban should also be set aside because it is arbitrary and capricious. EPA failed to "examine the relevant data and articulate a satisfactory explanation for its [rule,] including a rational connection between the facts found and the choice made." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (cleaned up).

EPA did not consider or acknowledge significant points raised in the comments. *See* 86 Fed. Reg. at 55,176-79. And when presented with "facially reasonable alternatives" to the non-refillable cylinder ban, EPA altogether ignored them. *Spirit Airlines, Inc. v. DOT*, 997 F.3d 1247, 1255 (D.C. Cir. 2021). EPA predicated the ban on incorrect information, records omitted from the administrative record, and unavailable to this day, as well as EPA's own

[4] Indeed, accepting EPA's interpretation would run afoul of the non-delegation doctrine, which demands that Congress "suppl[y] an intelligible principle to guide the delegee's use of discretion." *Gundy v. United States*, 139 S. Ct. 2116, 2123 (2019) (plurality op.); *Mistretta v. United States*, 488 U.S. 361, 372 (1989) (requiring Congress to specify "an intelligible principle" to which the authorized agency must conform).

conclusory or unsupported suppositions. *See McDonnell Douglas Corp. v. U.S. Dep't of the Air Force*, 375 F.3d 1182, 1187 (D.C. Cir. 2004) (explaining courts do not defer to the agency's conclusory or unsupported suppositions).

1. EPA's conclusion that the non-refillable cylinder ban is necessary to prevent illegal HFC import is controverted by the record and implausible.

EPA concluded that the non-refillable cylinder ban was justified because "[r]equiring the use of refillable cylinders has a proven track record of facilitating the detection and interdiction of illegal HFCs." 86 Fed. Reg. at 55,173. EPA purportedly based this conclusion on consultations with countries that have banned non-refillable cylinders "who confirmed that prohibiting disposable cylinders is an effective mechanism for identifying illegal HFCs." *Id.* EPA, however, provided no record of such consultations in the docket.

EPA's conclusion is contradicted by its own record showing rampant smuggling in the EU, the largest market to ban non-refillable cylinders. These records include a 2021 letter from HFC producers warning policymakers that HFC smuggling "continues to thrive across Europe," JA__[EPA-HQ-OAR-2021-0044-0215 at 14], and a *Wall Street Journal* article describing widespread illegal HFC import into the EU in a variety of containers, including non-refillable and refillable cylinders, *see id.*

EPA's record also includes an article from an industry trade periodical explaining the obvious result of the EU's non-refillable cylinder ban—*i.e.*, HFC smugglers switched to using cheap refillable cylinders:

> The high price of refrigerants, means that the comparatively low cost of the cylinder is no barrier to the potential huge profits to be made from importing and selling the gas in "refillable" cylinders. These cylinders … are now being sold with no provision for their return for refilling as required under the F-gas regulations.

JA__[EPA-HQ-OAR-2021-0044-0215 at 15].

EPA's administrative record and basic economics demonstrate the implausibility of EPA's conclusion that non-refillable cylinders uniquely facilitate illegal HFC trade "because they are cheaper." 86 Fed. Reg. at 55,173. While EPA's docket does contain evidence that HFCs are smuggled into the EU in non-refillable cylinders, those same sources identified rampant smuggling in refillable cylinders, as well. *See, e.g.*, JA__[EPA-HQ-OAR-2021-0044-0215 at 14].

EPA's sole rationale for the non-refillable cylinder ban is thus directly controverted by an administrative record demonstrating that non-refillable cylinders are not uniquely prone to HFC smuggling and existing cylinder bans are ineffective in curbing illegal imports. EPA's conclusion otherwise is "so

implausible that it could not be ascribed to a difference in view or the product of agency expertise." *See State Farm*, 463 U.S. at 43.

2. EPA ignored reasonable and obvious alternatives to address HFC smuggling.

EPA also failed to consider reasonable alternatives to the non-refillable cylinder ban. As the only domestic manufacturer of refillable and non-refillable refrigerant cylinders, Worthington recommended multiple technological solutions, including distinct markings and anti-counterfeiting stickers that help readily identify illegal cylinders. JA__[EPA-HQ-OAR-2021-0044-0215 at 15-16]. Other commenters recommended alternatives such as reporting bounties, increased penalties, facility certifications, authentication programs, import pre-authorizations, coding, and changes to import documentation. *See* JA__[EPA-HQ-OAR-2021-0044-0066 at 7-8; EPA-HQ-OAR-2021-0044-0195 at 3; EPA-HQ-OAR-2021-0044-0216 at 36-37; EPA-HQ-OAR-2021-0044-0219 at 4].

EPA never considered these alternatives, and evidently did not even look at them, as it disregarded en masse every suggested alternative by wrongly and illogically asserting that "none of the suggestions address the primary reason EPA is prohibiting the use of disposable cylinders"—*i.e.*, to flag "potential illegal HFC activity on the border and within the United

States." 86 Fed. Reg. at 55,176. Contrary to that assertion, the commenters aimed their suggestions specifically as alternative mechanisms to address illegal HFC imports. And some of these alternatives have *already* proven effective, even before the non-refillable cylinder ban takes effect. Indeed, the federal government has established an interagency task force on illegal HFC trade, which in just 10 weeks has already seen great success in preventing the illegal importation of hundreds of thousands of metric tons of HFCs through some of these methods. *See* EPA Press Office, *U.S. Takes Aim at Violators of Greenhouse Gas Phasedown and Reporting Programs* (Mar. 15, 2022), https://bit.ly/3wXLJea. The government did not need the non-refillable cylinder ban to achieve those impressive results.

3. EPA ignored data and comments demonstrating that cylinder manufacturers cannot produce the number of cylinders necessitated by the non-refillable cylinder ban.

EPA ignored Petitioners' detailed data demonstrating that cylinder manufacturers could not produce the number of refillable cylinders necessitated by the non-refillable cylinder ban. *See, e.g.*, JA__[EPA-HQ-OAR-2021-0044-0215 at 6, 17]. Instead, EPA relied on unavailable "personal communications" and EPA's own uncited speculation. *See* JA__[EPA-HQ-

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OAR-2021-0044-0227-02 at 72 n.60-62; EPA-HQ-OAR-2021-0044-0046-7 at 4, 8, 13].

To estimate the number of refillable cylinders needed to replace non-refillable cylinders, EPA needed to, *inter alia*, consider current sales of non-refillable cylinders and the ratio by which refillable cylinders could replace refillable cylinders. EPA's Proposal assumed 4.5 million non-refillable cylinders are sold in the U.S. annually. JA__[EPA-HQ-OAR-2021-0044-0046-08 at 5]. EPA's only source for this estimate were two "personal conversations" that are not in the administrative record. JA__[EPA-HQ-OAR-2021-0044-0046-7 at 27, tbl.A-2].

Worthington submitted confidential data [redacted] and ITC data showing additional annual imports of 3,941,577 non-refillable cylinders from just China. JA__[EPA-HQ-OAR-2021-0044-0215 at 3]. EPA [redacted] retained the proposal's 4.5 million cylinder assumption, and continued to cite the same two unavailable "personal conversations" as the source of the assumption. *See* 86 Fed. Reg. at 55,176-78; JA__[EPA-HQ-OAR-2021-0044-0227-02 at 72 nn.60-62]. While EPA did acknowledge domestic sales in excess of 4.5 million,

it speculated—without citation or support—that those non-refillable cylinders might not contain HFCs. 86 Fed. Reg. at 55,176.

Similarly, for the replacement ratio, Petitioners submitted a detailed CARB analysis showing that, "for every disposable cylinder sold, four refillable cylinders must be in circulation to account for cylinders in use and in transit." JA__[EPA-HQ-OAR-2021-0044-0103 at 12; EPA-HQ-OAR-2021-0044-0215 at 5 n.6]. EPA ignored these data and crafted its own 2:1 replacement ratio using undocumented "experiences in other countries." 86 Fed. Reg. at 55,177.

EPA's supposition about the number of non-refillable cylinders necessitated by the non-refillable cylinder ban ultimately engendered EPA's alarming disregard for the readily foreseeable supply shortages described by many commenters. For example, Worthington submitted a fact-based analysis showing that there is insufficient global manufacturing capacity to build the 24 to 26 million refillable cylinders necessitated by the non-refillable cylinder ban. JA__[EPA-HQ-OAR-2021-0044-0215 at 6, 17].

EPA made no attempt to identify other manufacturers, much less analyze their capacity; and thus has no basis in the record for concluding that "there is significant global capacity for the production of refillable cylinders."

JA__[EPA-HQ-OAR-2021-0044-0227-03 at 488]. While EPA suggests that it addressed these concerns by moving the compliance deadline from 2023 to 2025, EPA did not identify a single comment or record that could be read to suggest that sufficient refillable cylinders would be available by 2025. *See* 86 Fed. Reg. at 55,173-75. EPA's conclusion that the 2025 deadline is *feasible* is based solely on comments apprising EPA that its proposed 2023 deadline was *infeasible*.

4. EPA ignored other significant points made in comments.

"For an agency's decisionmaking to be rational, it must respond to significant points raised during the public comment period." *Allied Local & Reg'l Mfrs. Caucus v. EPA,* 215 F.3d 61, 80 (D.C. Cir. 2000). EPA did not do so. The following examples illustrate EPA's failures to engage with important new data in comments, relying instead on speculation and information absent from the administrative record.

First, Worthington explained in its comments that refillable cylinders are *50% heavier* than non-refillable cylinders. JA__[EPA-HQ-OAR-2021-0044-0215 at 24]. Other comments also noted significant weight differences. JA__[EPA-HQ-OAR-2021-0044-0227 at 480, 496, 500, 518-519, 523-524]. That issue is extremely important not only to technicians, who have to carry heavier

cylinders into difficult-to-access spaces, like roofs and crawlspaces. It also increases transportation and fuel costs, as well as transportation-related pollution. EPA disagreed, stating that refillable cylinders are "only marginally heavier" based entirely on "[p]ersonal communication" with the government of Australia, no record of which is in the administrative record. JA__[EPA-HQ-OAR-2021-0044-0227-02 at 92 & n.105].

Second, Worthington explained that only 0.3 to .44 pounds of "heel" is estimated to be vented from spent non-refillable cylinders based on CARB analysis, industry guidelines, industry knowledge. JA__[EPA-HQ-OAR-2021-0044-0215 at 8-9]. While EPA also cited the CARB analysis, EPA largely ignored these estimates and instead presumed the amount of heel released to be two-to-threefold greater, at 0.96 pounds. According to EPA's citations, this divergent estimate was based on several sources not available in the administrative record: three reports from EPA's consultant (Stratus (2010a), Stratus (2010b), Stratus (2012)); Airgas (1998); and two "personal communications." JA__[EPA-HQ-OAR-2021-0044-0227-02 at 71 nn.56-58, 72 & nn.60-61, 81-85].

Based on these examples alone, this Court should reverse EPA's Final Rule because it is "based on speculation" and because EPA failed to "engage

the arguments raised before it." *Del. Dep't of Nat. Res. & Envt'l Control v. EPA*, 785 F.3d 1, 11 (D.C. Cir. 2015); *see Nat'l Shooting Sports Found., Inc. v. Jones*, 716 F.3d 200, 214 (D.C. Cir. 2013).

5. EPA's cost-benefit analysis is arbitrary and capricious.

The Regulatory Flexibility Act requires an agency to conduct a regulatory flexibility analysis (RFA) when its rule has a significant economic impact on a substantial number of small businesses. *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 537 (D.C. Cir. 1983). "If data in the regulatory flexibility analysis—or data anywhere else in the rulemaking record—demonstrates that the rule constitutes such an unreasonable assessment of social costs and benefits as to be arbitrary and capricious … the rule cannot stand." *Thompson v. Clark*, 741 F.2d 401, 405 (D.C. Cir. 1984).

Here, EPA declined to conduct an RFA analysis because it certified that the Final Rule "will not have a significant economic impact on a substantial number of small entities under the RFA." 86 Fed. Reg. at 55,199. This conclusion is unsupported and unreasonable.

Although EPA determined that the non-refillable cylinder ban would adversely impact "up to 8,742" of the 8,866 small businesses, JA__[EPA-HQ-OAR-2021-0044-0227-7 at 4, 9], EPA's non-refillable cylinder ban analysis was

limited to a brief and largely uncited appendix to the HFC phase-down screening analysis, JA__[*id.*, App. C]. This analysis plainly miscalculates the number of small businesses impacted by the non-refillable cylinder ban and the extent to which they are harmed.

To begin, EPA declined to consider the impacts to small businesses in the HVACR industry that are directly affected and therefore directly regulated by the non-refillable cylinder ban. Greater than 99% of the thousands of small HVACR contracting and repair businesses use the non-refillable cylinders that EPA banned, and will be compelled to purchase and transport refrigerants in refillable cylinders that are costlier, heavier, and largely unavailable. HVACR businesses fortunate enough to secure refrigerants must purchase (or pay additional cylinder deposits for) at least two refillable cylinders for every non-refillable cylinder they replace, 86 Fed. Reg. at 55,174; JA__[EPA-HQ-OAR-2021-0044-0227-7 at 25 n.9], spend more per cylinder, JA__[EPA-HQ-OAR-2021-0044-0227-7 at 27], and pay higher fuel/transport costs for receiving and returning heavier refillable cylinders to distributers, JA__[*id.* at 25-26]. Moreover, for three of the four sectors for which EPA did analyze the impacts of the non-refillable cylinder ban on small businesses, EPA concluded, without discussion or analysis, that half of small

businesses would "experience minimal economic impacts" based on the following statement and nothing more: "It was assumed that 50 percent of businesses … are refrigerant wholesalers and would be directly affected by the prohibition of disposable cylinders. It is also assumed that the remaining 50 percent of businesses could be affected by the prohibition of disposable cylinders … but are expected to experience minimal economic impacts," JA__[*id.* at 23, tbl.9, & n.b.].

Additionally, many of the sources EPA cited in support of fundamental elements of its non-refillable cylinder ban screening analysis are missing from the administrative record. For instance, EPA cannot support its assumption that the refillable cylinders it required be purchased would last 20 years because it provided no record of the two personal conversations on which this estimate was based. JA__[EPA-HQ-OAR-2021-0044-0227-7 at 24]. Similarly, EPA cannot support its calculation of the transportation and fuel costs associated with returning and refilling refillable cylinders because its estimate that refillable cylinders are refilled an average of 1.5 times per year is based on the same two personal conversations omitted from the administrative record. *Id.* Likewise, EPA's transportation cost assumption that refillable cylinders are "only marginally heavier" than refillable cylinders is based

entirely on an undocumented "personal conversation" with someone from the Government of Australia. JA__[*Id.* at 25]. Not only is documentation of this citation missing from the administrative record, EPA never explained its peculiar reliance on the Government of Australia's assessment of cylinder weights rather than the weight data provided by the only domestic manufacturer of non-refillable and refillable cylinders, which showed that refillable cylinders are 50% heavier when filled. JA__[EPA-HQ-OAR-2021-0044-0215 at 24].

EPA's conclusion that small businesses will treat refillable cylinders as capital assets that can be financed and defray compliance costs by selling recovered refrigerant at $4.00 per pound is similarly unsupported. JA__[EPA-HQ-OAR-2021-0044-0227-7]. EPA supports this conclusion by citing to the Agency's Regulatory Flexibility Analysis, which says nothing about how EPA derived the $4.00 per pound estimate. *Id.*

Finally, even if EPA could support the assumptions it employed in its RFA analysis, Petitioners and this Court cannot possibly discern how EPA used those assumptions to conclude that the non-refillable cylinder ban will have no significant economic impact on a substantial number of small entities. That conclusion is based on three tables that EPA asserts provide a "Summary

of Annualized Economic Impacts" on small businesses from the non-refillable cylinder ban. JA__[EPA-HQ-OAR-2021-0044-0227-7 at 29-31, tbls.15-17]. But because EPA did not disclose the calculations it employed or provide the source spreadsheets, it is impossible to understand how EPA calculated any of the annualized costs.

Indeed, none of the cost estimates in EPA's tables of "Annualized Economic Impacts" appear correlated to the various cost assumptions EPA described in its RFA analysis. Nor can any of these estimates be replicated using the information EPA provided. While EPA declined to include records containing this information in the administrative record, according to EPA's rulemaking docket, even OMB could not replicate EPA's "Annualized Economic Impacts" or understand how they were derived. *See* JA__[EPA-HQ-OAR-2021-0044-0226-2; EPA-HQ-OAR-2021-0044-0226-21].

This is "such an unreasonable assessment of social costs and benefits as to be arbitrary and capricious." *Thompson*, 741 F.2d at 405. Therefore, the "rule cannot stand." *Id.*

II. The QR-Code Mandate Is Unlawful and Should Be Severed and Vacated.

A. EPA Does Not Have Statutory Authority to Mandate QR Code Tracking.

As with the non-refillable cylinder ban (and for many of the same reasons), the text, structure, and purpose of the AIM Act make clear that Congress did not authorize EPA to establish the comprehensive tracking scheme contained in the Final Rule, 86 Fed. Reg. at 55,183-85.

1. As with the ban, EPA does not claim that the QR-code mandate is authorized by any explicit grant of regulatory power. Instead, the Agency again relies on Subsection (e)(2)(B)—the directive that EPA "shall ensure that the annual quantity of all regulated substances produced or consumed in the United States does not exceed" the amount given by the schedule. EPA states that "[i]dentifying containers of HFCs that were illegally imported and produced is directly related to and supports EPA's ability to meet the statutory obligation in subsection (e)(2)(B) of the AIM Act," and that the QR-code mandate "is especially important for identifying illegal production." 86 Fed. Reg. at 55,185.

But, for all the reasons set forth with regard to the non-refillable cylinder ban (*supra* Section I.A), Subsection (e)(2)(B) cannot be read as

authorizing all regulations that are merely "related to and support" EPA's ultimate goal of phasing down production and consumption of HFCs.

2. This textual point is strongly supported by the structure of the AIM Act. As described above (*supra* Section I.A.2), the Act's detailed and explicit grants of regulatory authority exclude the possibility of other, implicit authority like that claimed by EPA here. *Shook*, 132 F.3d at 782; *Am. Bar Ass'n*, 430 F.3d at 469. Likewise, the "explicit and detailed remedial scheme" the AIM Act incorporated from the CAA make EPA's assertion of authority to issue other compliance measures "implausible." *New Mexico*, 854 F.3d at 1226; 42 U.S.C. § 7675(k)(1)(C) (incorporating, *inter alia*, 42 U.S.C. § 7413 and 42 U.S.C. § 7604).

Indeed, the structure of the statute reinforces the absence of any indicia that Congress authorized EPA to create a QR-code mandate. Subsection (d) of the AIM sets forth a detailed reporting requirement. Subsection (d) defines which entities must submit reports, 42 U.S.C. § 7675(d)(1)(A), (d)(1)(B)(iii), what data they must report, § 7675(d)(1)(A)(i)-(v), and even which specific individual must sign the report, § 7675(d)(1)(B)(i). Given the "length, detail, and intricacy" of the statutory reporting scheme, it is "difficult to believe" that

the AIM Act authorizes, *sub silentio*, regulations imposing an entirely distinct reporting requirement on top of it. *Am. Bar Ass'n*, 430 F.3d at 469.

3. Finally, the QR-code mandate is contrary to the purposes of the AIM Act. As described above (*supra* Section I.A.3), the purpose of the AIM Act is not the reduction of HFC by any means necessary but through the Act's specific grants of regulatory authority, including the specific monitoring and reporting requirements in Subsection (d). *See Rodriguez*, 480 U.S. at 525-26.

Like the non-refillable cylinder ban, the "sweeping 'nature and scope'" of the QR-code mandate underscores that it is at cross purposes with the AIM Act. *Merck*, 962 F.3d at 540 (quoting *Loving*, 742 F.3d at 1021). The requirement applies to "*[a]nyone* who is filling a container or cylinder, whether for the first time or when transferring HFC from one container to one or more smaller or larger containers." 86 Fed. Reg. at 55,184 (emphasis added). Under the Final Rule, they will all be required to "enter information in the system and generate a QR code for the new containers and add information on: the brand it would be sold under, the quantity and composition of HFCs in the container, the date it was filled, the certification IDs associated with the HFCs (if being repackaged), and the quantity of each HFC in the container." *Id.* The breadth of the QR-code mandate, especially when

compared to the slender statutory reed on which it rests, demonstrates that Congress could not have intended to authorize it. *See Loving*, 742 F.3d at 1021.

B. The QR-Code Mandate Is Arbitrary and Capricious.

Even putting aside EPA's lack of statutory authority, the QR-code mandate is also arbitrary and capricious because the Agency failed to sufficiently respond to the numerous, serious practical problems raised by Petitioners in their comments on the Proposed Rule. *Am. Mining Cong. v. EPA*, 907 F.2d 1179, 1191 (D.C. Cir. 1990) ("In sum, the agency's failure to respond to petitioners' specific challenges in the record is fatal here, since 'the points raised in the comments were sufficiently central that agency silence ... demonstrate[s] the rulemaking to be arbitrary and capricious.'") (quoting *Nat. Res. Def. Council v. EPA*, 859 F.2d 156, 188 (D.C. Cir. 1988)).

Tracking individual cylinders with QR codes would be a massive burden on the supply chain. As outlined in HARDI's comments, wholesaler-distributors of HFCs serve as a single point of sale for the various equipment, parts, and supplies, including service gases, used by contractors/technicians. JA__[EPA-HQ-OAR-2021-0044-0103 at 21-22]. This requires distributors to manage inventory from multiple sources and requires complex inventory management systems. JA__[*Id.* at 22]. The QR-code mandate—requiring the

scanning of individual cylinders—will badly interfere with any current inventory tracking system and disrupt the current methods of fulfilling customer orders. *Id.*

Additionally, inventory management and fulfillment systems can vary by the size of the distributor. Some larger, more complex, companies use computerized systems to send electronic pick tickets[5] to warehouse workers identifying where the individual product is stored (if known) and exactly which product to pick if an individual serial number is known. JA__[*Id.* at 22-23]. Other smaller companies may rely on paper tickets to pick inventory from a cache of products without identifying the specific product to select. JA__[*Id.* at 23]. Adding the QR-code mandate, which is not compatible with existing computerized or manual pick ticket systems, adds complexity to the system and would likely lead to mistakes. *Id.*

This system would experience even greater disruption if the ban on non-refillable cylinders is upheld. *Id.* Under a scenario in which all cylinders must be refillable, the tracking system must not only account for the process to move from producer/importer/reclaimer through the channel to the end-user

[5] A "pick ticket" is a list used to gather items to be shipped from a warehouse.

but *also* track the cylinder back to the producer/importer/reclaimer. *Id.* The system would have to account for cylinders shipped to the wrong producer/importer/reclaimer and transferred back to the correct owner where the cylinder is refilled and the QR code must be reset to allow for the certification and tracking of the new refrigerant in the cylinder. *Id.* Overall, it is highly unlikely that the addition of a complex tracking system across multiple market actors using multiple inventory tracking systems can accurately track all cylinders through the supply chain and back to the owners. *See id.*

EPA did not sufficiently respond to any of these comments. The Agency admitted that commenters had expressed concerns about the "cost and workability" of the QR-code mandate. 86 Fed. Reg. at 55,185. But the Agency's only response was to push back the compliance deadline in the hopes that "the Agency will have more time to consult industry and develop an appropriate tracking system." *Id.* This is precisely the sort of "high-handed and conclusory" response this Court has found "insufficient." *Chem. Mfrs. Ass'n v. EPA*, 28 F.3d 1259, 1265-66 (D.C. Cir. 1994). The APA requires agencies to "demonstrate the rationality of [their] decision-making process by responding to those comments that are relevant and significant." *Carlson v. Postal Regul.*

Comm'n, 938 F.3d 337, 347 (D.C. Cir. 2019). And this Court must review agency action based on "the grounds upon which the record discloses that the agency's action was based." *Byers v. Comm'r*, 740 F.3d 668, 680 (D.C. Cir. 2014) (citing *SEC v. Chenery Corp.*, 318 U.S. 80, 87-88 (1943)). Allowing EPA to simply hand wave away petitioners' substantive concerns with vague assurances that it will try to fix the problems in some unspecified way at some unspecified time defeats the entire purpose of public comment and frustrates judicial review.[6]

CONCLUSION

The Court should vacate the Final Rule's non-refillable cylinder ban and QR-code mandate.

[6] The Court can and should sever the non-refillable cylinder ban and QR-code mandate from the Final Rule because the ban and mandate are not part of a comprehensive scheme and are not in any way intertwined with the Final Rule's allowance allocation and trading program. *See North Carolina v. EPA*, 531 F.3d 896, 929 (D.C. Cir. 2008).

Dated: April 1, 2022

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CERTIFICATE OF COMPLIANCE

I certify, pursuant to Federal Rule of Appellate Procedure 32(a)(7)(B) and this Court's order issued March 15, 2022, that the attached Appellees' Brief contains 9,458 words and complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6) because it has been prepared in a proportionally spaced typeface using Microsoft Word, in 14-point Century font.

Dated: April 1, 2022

/s/ Stephen K. Wirth
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ADDENDUM OF STATUTES AND REGULATIONS

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CERTIFICATE OF SERVICE

I hereby certify that on April 1, 2022, I caused the foregoing brief and addendum to be electronically filed using the appellate CM/ECF system. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

I further certify that copies of the unredacted version of the foregoing brief and addendum will be served via e-mail and first class mail on the following counsel of record:

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