

**ORAL ARGUMENT NOT YET SCHEDULED**

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IN THE UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT

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**No. 22-1139, Consolidated with No. 22-1140**

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CONCERNED HOUSEHOLD ELECTRICITY CONSUMERS COUNCIL, et al.,

*Petitioners,*

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

*Respondent.*

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ON PETITION FOR REVIEW OF FINAL ACTION BY THE  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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**FINAL BRIEF OF RESPONDENT**

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Dated: February 21, 2023

## **CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES**

Pursuant to Circuit Rule 28(a)(1), Respondent United States Environmental Protection Agency (“EPA” or the “Agency”) states the following:

### **A. Parties, Intervenors, and Amici**

Petitioners’ brief (at i-ii) lists all parties, intervenors, and amici that have appeared to date.

### **B. Rulings Under Review**

Petitioners seek review of EPA’s denial of Petitioners’ administrative petitions for reconsideration or rulemaking regarding the 2009 Endangerment Finding for Greenhouse Gases. *See* EPA’s Denial of Petitions Relating to the Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, EPA-HQ-OAR-2022-0129-0053 (the “Denial”); *see also* Notice of Final Action Denying Petitions: Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Action on Petitions, 87 Fed. Reg. 25412 (Apr. 29, 2022).

### **C. Related Cases**

Petitioners’ brief (at ii) identifies the only prior related case. There are no currently pending related cases.

*/s/ Brian H. Lynk* \_\_\_\_\_

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**GLOSSARY**

Academies	National Research Council of the National Academies of Sciences
CAA or Act	Clean Air Act
Council	Concerned Household Electricity Consumers Council
EPA or Agency	United States Environmental Protection Agency
Foundation	FAIR Energy Foundation
JA	Joint Appendix
Panel	Intergovernmental Panel on Climate Change
Program	United States Global Change Research Program

## INTRODUCTION

These petitions nominally seek review of the Environmental Protection Agency's ("EPA's" or "the Agency's") decision not to reconsider, or initiate a rulemaking to reopen or revise, its 2009 finding that elevated concentrations of six well-mixed greenhouse gases in the atmosphere may reasonably be anticipated to endanger the public health and welfare of current and future generations (the "2009 Endangerment Finding" or "2009 Finding"). In practical terms, however, these petitions seek to relitigate substantially the same disputes over the record basis for EPA's 2009 Finding that this Court heard a decade ago, when it denied all petitions for review of that Finding and of EPA's 2010 decision denying reconsideration petitions. Evidence of the impact of warming global average temperatures and other associated climatic changes on public health and welfare has only grown stronger in the intervening years, as has the scientific basis for attributing these changes to greenhouse gas emissions from human activity.

Petitioners' attempt to rehash the record basis for EPA's 2009 Finding should be dismissed because Petitioners lack standing. They are not entities regulated by EPA. They identify no harm caused by *any* action EPA has taken limiting greenhouse gas emissions, much less harm from EPA's decision to deny reconsideration or rulemaking. The alleged economic and advocacy injuries

Petitioners describe are unsupported, speculative and not traceable to that decision. Thus, they lack standing, and the Court lacks jurisdiction.

If the Court reaches the merits, it should uphold EPA's denial of the reconsideration and rulemaking petitions ("the Denial"). EPA provided a thorough, 40-page explanation of how it considered both the original scientific record for the 2009 Finding and the more recent scientific assessments, as well as the information submitted with Petitioners' objections. EPA carefully considered Petitioners' objections and demonstrated that none is supported by sound science.

#### **STATEMENT REGARDING JURISDICTION**

As explained in Argument I below, Petitioners do not have standing to seek judicial review of the Denial. If the Court nonetheless finds that Petitioners have standing, then this Court has jurisdiction under section 307(b)(1) of the Clean Air Act ("CAA" or "Act"), because the Denial is a final action of the Administrator under the CAA. *See* 42 U.S.C. § 7607(b)(1) and 7607(d)(7)(B) (allowing challenges to petition denials "as provided in [section 307(b)]"); *see also infra* at 36-37 & n.11 (questioning jurisdiction over certain objections).<sup>1</sup>

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<sup>1</sup> Petitioners quote *Oljato Chapter of the Navajo Tribe v. Train*, 515 F.2d 654, 667 (D.C. Cir. 1975), asserting that EPA has a "duty to respond substantively" to rulemaking petitions that "exist[s] completely independently of Section 307." Corrected Brief of Petitioners ("Pet. Br.") at 6. That quote pertains not to the

## STATUTES AND REGULATIONS

Pertinent statutes and regulations are set forth in a separate addendum (unless previously included in the addendum to Petitioners' brief).

## STATEMENT OF ISSUES

1. Whether the petitions for review should be dismissed for lack of standing due to Petitioners' reliance on speculative injuries, such as predictions of increased home electric bills, for which no connection to EPA's action is shown.

2. If the Court has jurisdiction, whether EPA reasonably explained its decision not to reconsider the 2009 Endangerment Finding, where it issued a 40-page response detailing why the Finding was supported by both the information available in 2009 and more recent scientific assessments.

## STATEMENT OF THE CASE

### I. STATUTORY BACKGROUND

Congress enacted the CAA, 42 U.S.C. §§ 7401-7671q, in 1970 "to respond[] to the growing perception of air pollution as a serious national problem," *Alabama Power Co. v. Costle*, 636 F.2d 323, 346 (D.C. Cir. 1980), by establishing a comprehensive program for controlling and improving the nation's air quality,

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Court's jurisdiction under section 307 but to EPA's obligations with respect to rulemaking petitions under the Administrative Procedure Act.

*NRDC v. Gorsuch*, 685 F.2d 718, 720-21 (D.C. Cir. 1982). Title II establishes a statutory framework for controlling air pollution from motor vehicles and other mobile sources. 42 U.S.C. §§ 7521-90. Section 202(a)(1) authorizes EPA to establish standards for “the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in [the Administrator’s] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” *Id.* § 7521(a)(1).

Section 302(g) defines “air pollutant” as “any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air[,]” including any precursors to the formation of such air pollutant. *Id.* § 7602(g). Section 302(h) defines “effects on welfare” to include “effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and *climate*, damage to . . . property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being . . . .” *Id.* § 7602(h) (emphasis added).

Once the Administrator makes the “endangerment finding” described in section 202(a)(1), the Act requires him to issue emission standards for new motor vehicles and engines, taking into account specified technological and cost considerations. *Id.* § 7521(a)(1)-(2).



## II. THE 2009 ENDANGERMENT FINDING

Petitioners challenge EPA's denial of administrative petitions for reconsideration of, or a rulemaking to reopen or revise, the 2009 Endangerment Finding. These petitions largely presented the same or materially similar assertions as those EPA addressed in responding to comments on the proposed Finding and to earlier reconsideration petitions. Accordingly, the sections below provide background on the 2009 Finding and the Court's opinion upholding that Finding and EPA's earlier reconsideration denial.

### A. EPA's 2009 Greenhouse Gas Endangerment Finding in Response to the Supreme Court's Mandate in *Massachusetts v. EPA*

In *Massachusetts v. EPA*, 549 U.S. 497, 529, 533 (2007), the Supreme Court remanded EPA's denial of a petition seeking regulation of greenhouse gas emissions from new motor vehicles under CAA section 202(a), 42 U.S.C. § 7521(a). *See* 68 Fed. Reg. 52922 (Sept. 8, 2003). The Court held that section 202(a)(1) unambiguously gives EPA authority to regulate greenhouse gas emissions from new motor vehicles because greenhouse gases "fit well within" the Act's definition of "air pollutant" in section 302(g). 549 U.S. at 532. The Court further held that EPA's petition denial "offered no reasoned explanation for its refusal to decide whether greenhouse gases cause or contribute to climate change." *Id.* at 534. The Court reasoned that the "policy judgments" EPA offered for not

regulating greenhouse gases did not satisfy the “clear terms of the ... Act” because they “have nothing to do with whether greenhouse gas emissions contribute to climate change” and cannot provide a “reasoned justification for declining to form a scientific judgment.” *Id.* at 533-34. Instead, EPA should have focused on “whether sufficient information exists to make an endangerment finding.” *Id.* at 534.

The Court emphasized that EPA could not avoid its obligations under section 202(a) “by noting the uncertainty surrounding various features of climate change and concluding that it would therefore be better not to regulate at this time.” *Id.* at 534. It added that if “the scientific uncertainty is so profound that it precludes EPA from making a reasoned judgment as to whether greenhouse gases contribute to global warming, EPA must say so.” *Id.*

EPA responded by publishing proposed endangerment and cause-or-contribute findings under section 202(a) for six well-mixed greenhouse gases, addressed collectively as a single air pollutant. 74 Fed. Reg. 18886 (Apr. 24, 2009). EPA received more than 380,000 public comments and, after careful consideration, published final endangerment and cause-or-contribute findings under section 202(a) on December 15, 2009. 74 Fed. Reg. 66496. EPA’s final action was accompanied by an 11-volume response-to-comment document

addressing scientific, technical, review process, and administrative issues. *See* Denial at 6 (JA-008). Specifically, EPA made the following findings in 2009<sup>2</sup>:

Endangerment Finding: The Administrator found that the then-current and projected concentrations of the combined mix in the atmosphere of the six well-mixed greenhouse gases—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—endanger the public health and welfare of current and future generations.

Cause or Contribute Finding: The Administrator found that the combined emissions of the six well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution that threatens public health and welfare. *See id.* at 6 (JA-008).

The Administrator carefully considered all of the scientific and technical information in the record but principally relied on thorough and peer-reviewed assessments of climate change science prepared by the Intergovernmental Panel on Climate Change (the “Panel”), the United States Global Change Research Program (the “Program”), and the National Research Council of the National Academies

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<sup>2</sup> For purposes of this brief, “2009 Endangerment Finding” or “2009 Finding” includes both findings below.

(the “Academies”). EPA evaluated these assessments in several ways: by reviewing the process employed to develop each assessment; by reviewing their substantive content in light of in-house expertise; and by considering the depth of scientific consensus represented in the assessments. *See* 74 Fed. Reg. at 66510-12. EPA also took comments on its approach of relying principally on these assessments, and affirmed its view after considering comments. *Id.* In its final 2009 action, EPA explained that these assessments represented the best reference materials for determining the general state of knowledge on the scientific and technical issues presented by an endangerment decision. EPA emphasized that “[n]o other source of information provides such a comprehensive and in-depth analysis across such a large body of scientific studies, adheres to such a high and exacting standard of peer review, and synthesizes the resulting consensus view of a large body of scientific experts across the world.” *Id.* at 66511.

Along with the 2009 Finding, EPA issued a 210-page technical support document summarizing the major scientific assessments and relevant emissions data. EPA had released a draft to the public with an advance notice of proposed rulemaking. 73 Fed. Reg. 44354 (July 30, 2008). EPA’s April 2009 proposal included a revised and updated draft technical support document reflecting more recent assessments and responding to comments on the advance notice. That

proposal then provided another opportunity for comments, which EPA considered before taking final action. 74 Fed. Reg. at 66510.

After publishing the 2009 Finding, EPA received 10 reconsideration petitions. EPA denied those petitions in July 2010, with a thorough supporting explanation. *See Denial at 6 (JA-008)*.

**B. The D.C. Circuit’s Decision Upholding the 2009 Endangerment Finding**

This Court denied all petitions for review of the 2009 Endangerment Finding and 2010 reconsideration denial. *Coal. for Responsible Regul., Inc. v. EPA*, 684 F.3d 102, 120 (D.C. Cir. 2012) (“*Coalition*”), *aff’d in part, rev’d in part sub nom. Util. Air Regul. Grp. v. EPA*, 573 U.S. 302 (2014), and amended sub nom. *Coal. for Responsible Regul., Inc. v. EPA*, 606 F. App’x 6 (D.C. Cir. 2015). Rejecting challenges to several aspects of EPA’s approach, the Court concluded that the 2009 Finding “is consistent with *Massachusetts v. EPA* and the text and structure of the CAA, and is adequately supported by the administrative record.” 684 F.3d at 117. First, the Court addressed arguments that, in making endangerment and cause-or-contribute findings, section 202(a)(1) “requires EPA to consider [] the benefits of activities that require greenhouse gas emissions, the effectiveness of emissions regulation triggered by the Endangerment Finding, and the potential for societal adaptation to or mitigation of climate change.” *Id.* The Court found these

arguments “foreclosed by the language of the statute and the Supreme Court’s decision in *Massachusetts v. EPA*.” *Id.* By grounding the 2009 Finding in the science, and not the additional policy considerations petitioners advocated, EPA “complied with the statute.” *Id.* at 118.

Next, this Court denied record-based challenges to the 2009 Finding. The Court held that:

- (1) EPA’s reliance on peer-reviewed assessments was appropriate;
- (2) the record and EPA’s explanation demonstrated that “EPA had . . . substantial record evidence that anthropogenic emissions of greenhouse gases ‘very likely’ caused warming of the climate over the last several decades,” as well as “evidence of current and future effects of this warming on public health and welfare”;
- (3) EPA reasonably made findings notwithstanding that some uncertainty in the science remained; and
- (4) EPA was not required to define specific endangerment thresholds and reasonably declined to do so.

*Id.* at 119-23.

Finally, the Court upheld EPA’s denial of the reconsideration petitions based on its reasonable determination that they failed to “provide substantial support for the argument that the [2009 Finding] should be revised.” *Id.* at 125-26.

The Supreme Court granted certiorari to decide a statutory interpretation issue unrelated to the 2009 Finding’s merits: whether EPA permissibly determined that its regulation of greenhouse gas emissions from new motor vehicles, following

the 2009 Finding, triggered certain permitting requirements for stationary sources that emit greenhouse gases. *See Utility Air Regul. Group*, 573 U.S. at 314. In granting further review on this single question, the Supreme Court did not disturb this Court's holding affirming the 2009 Finding.

### III. EPA'S 2022 DENIAL OF ADMINISTRATIVE PETITIONS

Between 2017 and 2019, EPA received four administrative petitions and several supplemental submissions asking it to reconsider or to initiate new rulemaking in connection with the 2009 Finding. Denial at 2 (JA-004). After initially denying the petitions on January 19, 2021, with a brief discussion, EPA withdrew that denial on March 23, 2021. *Id.* EPA indicated it would reassess the petitions and issue a new decision. *Id.* EPA thereafter thoroughly evaluated the petitions' merits.

The petitions were variously framed as seeking either reconsideration or new rulemaking regarding the 2009 Finding. *Id.* at 7 (JA-009). In response, EPA evaluated all four petitions as seeking rulemaking under the Administrative Procedure Act, while also evaluating any petition that invoked CAA section 307(d)(7)(B) as seeking reconsideration under that section. *Id.*<sup>3</sup> EPA considered

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<sup>3</sup> EPA did not waive and expressly reserved any argument that a petition failed to invoke the proper legal authority. *Id.*

these submissions in the context of the larger body of scientific and other relevant information available to EPA, including the original record for the 2009 Finding and more recent assessments by the Academies, the Program, and the Panel after 2009. *See id.* at 2-3, 11-13 and nn.23-24 (JA004-05, JA013-15).

After a thorough evaluation, EPA denied all four administrative petitions in April 2022 and published notice in the Federal Register. EPA provided a 40-page explanation of its reasoning, including a point-by-point response to the key issues raised in petitions. *Id.* at 14-39 (JA016-41). To the extent the petitions sought mandatory reconsideration of the 2009 Finding under section 307(d)(7)(B), EPA found that the petitioners' objections failed to meet the scope and timing limitations that section 307(d)(7)(B) imposes on mandatory reconsideration requests. *See* 42 U.S.C. § 7607(d)(7)(B); Denial at 8-10 (JA010-12). EPA then found that the petitions failed to identify information or circumstances warranting new rulemaking. *Id.* at 10-11, 39 (JA012-13, JA-041). To the contrary, EPA noted that the science supporting the 2009 Finding "is robust, voluminous, and compelling, and has been strongly affirmed by recent scientific assessments" of the Panel, the Program, and the Academies. *Id.* at 1 (JA-003). Two of the administrative petitioners petitioned for judicial review.



## STANDARD OF REVIEW

Article III limits federal courts' jurisdiction to cases and controversies. U.S. Const. art. III, § 2; *see Chamber of Commerce of the U.S. v. EPA*, 642 F.3d 192, 200 (D.C. Cir. 2011) (Federal courts are “without authority . . . to decide questions that cannot affect the rights of litigants in the case before them.”) (internal quotation omitted). “Standing to sue is a doctrine rooted in the traditional understanding of a case or controversy,” and Petitioners bear the burden of establishing standing. *Spokeo v. Robbins*, 578 U.S. 330, 338 (2016). The “irreducible constitutional-minimum” elements of standing include an injury that is: (1) concrete, particularized, and actual or imminent, not conjectural or hypothetical (*i.e.*, “injury-in-fact”); (2) fairly traceable to the challenged action; and (3) redressable by a favorable ruling. *Id.*; *see also Clapper v. Amnesty Int’l USA*, 568 U.S. 398, 408-09 (2013).

Any federal court claimant “must support each element of its claim to standing by affidavit or other evidence,” and that burden applies equally to those seeking review of federal agency action. *Sierra Club v. EPA*, 292 F.3d 895, 899 (D.C. Cir. 2002). Thus, where its standing is not self-evident from the administrative record, “the petitioner must supplement the record to the extent necessary to explain and substantiate its entitlement to judicial review,” and must

do so with its opening brief. *Id.* at 900-01; *see Coalition*, 684 F.3d at 123-24; D.C. Cir. Rule 28(a)(7).

If Petitioners demonstrate standing, the Clean Air Act sets forth the standard of review, which is the same as under the Administrative Procedure Act, 5 U.S.C. § 706(2)(A). *Catawba County, N.C. v. EPA*, 571 F.3d 20, 41 (D.C. Cir. 2009) (citations omitted); *see also New York v. EPA*, 921 F.3d 257, 261 (D.C. Cir. 2019) (same standard of review for rulemaking petition denial under the CAA as for rulemaking petition denial under the Administrative Procedure Act, 5 U.S.C. § 553(e)). The Court considers whether EPA’s action was “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 42 U.S.C. § 7607(d)(9)(A). In general, “[t]he scope of review under the ‘arbitrary and capricious’ standard is narrow and a court is not to substitute its judgment for that of the agency.” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). Rather, it considers whether the agency has “examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choice made.” *State Farm*, 463 U.S. at 43 (internal quotation and citation omitted); *see also FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 513-15 (2009) (reaffirming *State Farm*).

Judicial review of a denial of rulemaking is “‘extremely limited’ and ‘highly deferential.’” *New York*, 921 F.3d at 261 (quoting *Massachusetts*, 549 U.S. at 527-

28) (other internal quotations omitted). The Court examines whether the Agency “adequately explained the facts [] it relied on and whether those facts have some basis in the record.” *WildEarth Guardians v. EPA*, 751 F.3d 649, 653 (D.C. Cir. 2014) (internal quotation and citation omitted). The denial will only be set aside “for compelling cause, such as a plain error of law or a fundamental change in the factual premises previously considered by the agency.” *New York*, 921 F.3d at 261 (internal quotation and citation omitted).

In reviewing an agency’s technical determinations, courts are “deferential. . . . A court simply ensures that the agency has acted within a zone of reasonableness and, in particular, has reasonably considered the relevant issues and reasonably explained the decision.” *Fed. Commc’ns Comm’n v. Prometheus Radio Project*, 141 S. Ct. 1150, 1158 (2021); *see also Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 377 (1989) (“Because analysis of the relevant documents requires a high level of technical expertise, we must defer to the informed discretion of the responsible federal agencies.”) (internal quotations and citation omitted); *Baltimore Gas & Elec. Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 103 (1983); *Miss. Comm’n on Env’t’l Quality v. EPA*, 790 F.3d 138, 156 (D.C. Cir. 2015) (describing the standard as one of “extreme deference”) (internal quotation and citations omitted). Thus, when applying *State Farm* in the context of reviewing science-based agency determinations, the Court

does not make its own scientific determination but evaluates whether the agency identified a rational basis for its determination. *Coalition*, 684 F.3d at 122 (“re-weigh[ing] the scientific evidence . . . is not our role”).

### SUMMARY OF ARGUMENT

Petitioners lack standing to challenge EPA’s decision not to reconsider its 2009 Endangerment Finding. Petitioners are not regulated by EPA. They identify no harm to themselves caused by *any* action EPA has taken to limit greenhouse gas emissions, much less harm actually caused by the 2009 Finding (which imposes no emission limitations) or the Denial. Petitioners’ alleged injuries relate to increased home electricity prices or reductions in fossil-fuel availability, but the limited assertions they offer to substantiate these injuries are speculative and non-particularized, and fail to show the challenged action caused their alleged harm. Thus, Petitioners have failed to establish their standing.

If the Court reaches the merits, it should uphold the Denial, much as it did the 2009 Finding and 2010 reconsideration denial. EPA’s 40-page supporting explanation reflects that EPA carefully considered all evidence before it, including the original record for the 2009 Finding and more recent climate science, as well as the information submitted with administrative petitions. EPA clearly and reasonably explained each of its determinations: (1) that the petitions identify no grounds for mandatory reconsideration under 42 U.S.C. § 7607(d)(7)(B); (2) that

the scientific evidence continues to support and, indeed, further strengthens the basis for the 2009 Finding; and (3) that Petitioners' objections are unsupported and do not establish grounds to reconsider or initiate a new rulemaking to reopen the 2009 Finding.

For these reasons, if it reaches the merits, the Court should deny the petitions. In doing so, it should not abandon its longstanding precedent regarding the appropriate deference to give agencies' scientific and technical judgments. Finally, the Court is bound by *Massachusetts v. EPA*, which resolved the question of EPA's legal authority to issue the 2009 Finding.

## ARGUMENT

### I. PETITIONERS LACK STANDING.

Petitioners claim that they have standing to seek judicial review of the Denial due to primarily economic injuries, specifically increased home electric bills and fossil fuel costs. Pet. Br. at 32. They do not claim that the Denial directly caused these injuries. Rather, they assert that "EPA's regulations based on the [2009] Endangerment Finding" purportedly "increase the costs of fossil fuels and of electricity." *Id.* Such regulations do this, Petitioners allege, by "driv[ing] replacement of fossil-fuel-generated electricity with 'renewables,' principally wind turbines and solar panels." *Id.* Additionally, they claim that "greenhouse gas regulation flowing from the Endangerment Finding" purportedly "limits the

availability and exploitation of fossil fuels,” and thereby “jeopardizes . . . prosperity, security and human flourishing.” *Id.* at 35. Both Petitioners claim organizational standing, and Concerned Household Electricity Consumers Council (the “Council”) also claims associational standing. *See id.* at i, 32. FAIR Energy Foundation (the “Foundation”) identifies no injuries to individual members, *see id.* at 34-36, and does not claim associational standing.

Beyond their generalized complaints about “regulations” noted above, Petitioners fail to discuss and substantiate their alleged injuries with any particularity. Most notably, they do not identify any *specific* EPA regulations that caused their alleged organizational injuries, let alone show that the unspecified regulations were adopted based on or as a consequence of the 2009 Finding. Likewise, although the Council claims associational standing based on the higher electric bills its members allegedly endure, it submits no affidavits or other evidence to show that any members actually paid higher bills or imminently anticipate doing so. *See supra* at 13-14 (under this Court’s rules and case law, such evidence was due with the opening brief).

Neither Petitioner has demonstrated standing. To begin with, their unsupported allegations are too generalized and unsubstantiated to establish a “concrete,” “particularized,” and “actual or imminent” injury, the first required standing element. *See Spokeo*, 578 U.S. at 339 (“For an injury to be

‘particularized,’ it ‘must affect the [claimant] in a personal and individual way.’”) (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 n.1 (1992)). The Court’s recent analysis in *Competitive Enter. Inst. v. FCC*, 970 F.3d 372 (D.C. Cir. 2020), is instructive regarding the inadequacy of Petitioners’ allegations regarding higher costs. There, internet service consumers asserted standing to challenge the Commission’s approval of a merger of internet service *providers*, which merger the consumers claimed would harm them “by increasing Internet prices and decreasing Internet quality.” *Id.* at 382. The Court found that the former claim adequately established the injury element of standing because “[t]he three individual consumers have provided evidence that their cable bills increased after the merger.” *Id.* at 382-83. In contrast, the consumers’ allegations about decreasing Internet quality were “too abstract” because they “provide[d] no evidence that quality declined after the merger nor anything else suggesting a significant possibility of future declines.” *Id.* at 383. Petitioners’ presentation here lacks the type of support that the Court in *Competitive Enter. Inst.* found adequate to establish injury based on price increases—that is, Petitioners here merely make the assertion but do not offer *evidence* of higher electric bills. Moreover, in *Competitive Enter. Inst.* there was a showing of causation, *i.e.*, that the cable bills “increased after the merger.” *Id.* Here, in contrast, because Petitioners do not even identify what “regulation” they are referring to, Petitioners cannot show causation.

Indeed, the Petitioners’ asserted basis for standing is even weaker than that of certain petitioners in *Am. Lung Ass’n v. EPA*, 985 F.3d 914, 989 (D.C. Cir. 2021), *rev’d and remanded on other grounds sub nom. W. Virginia v. EPA*, 142 S. Ct. 2587 (2022), where this Court found that some of the petitioners lacked standing. Those petitioners relied on an “illustrative policy scenario” in EPA’s Regulatory Impacts Analysis of the specific regulation for which the petitioners sought judicial review. *Id.* at 990. The petitioners argued that the Analysis indicated the potential for price increases. This Court rejected their assertion of standing, holding that any price increases were speculative as they would not be directly attributable to EPA’s rulemaking but rather depended on the future actions of third parties. *Id.* at 990-91. That same weakness defeats standing here, because any assertion of higher electricity bills or fossil fuel costs *also* depends on third parties’ economic choices. But Petitioners have an even weaker case since they failed even to *identify* the supposedly injurious “regulations,” let alone submit evidence pertaining to an identified regulation comparable to the Analysis in *Am. Lung Ass’n*.

Petitioners’ extended discussion of electricity costs in Germany—involving a different country, market, currency, and regulatory regime—does not aid their efforts. Pet. Br. at 33. There is no information suggesting that Petitioners or their



members suffer “injury-in-fact” from electricity rates in Germany, nor that any U.S. regulation (let alone the 2009 Finding or Denial) affected those rates.

Petitioners’ references to their organizational mission and purpose also fail to meet their burden. *See* Pet. Br. at 34-35. Organizational standing requires a “concrete and demonstrable injury to the organization’s activities” that “constitutes far more than simply a setback to the organization’s abstract social interests.” *Havens Realty Corp. v. Coleman*, 455 U.S. 363, 379 (1982) (internal citation omitted). Additionally, Petitioners must show a “consequent drain on the organization’s resources.” *Id.*; *see also Elec. Privacy Info. Ctr. v. Presidential Advisory Comm’n on Election Integrity*, 878 F.3d 371, 378 (D.C. Cir. 2017) (“[T]he plaintiff must show that it used its resources to counteract that harm.”) (internal quotation and citation omitted); *Friends of Animals v. Bernhardt*, 961 F.3d 1197, 1208 (D.C. Cir. 2020).

Here, the Foundation sues to protect its organizational “purpose” of promoting fossil fuel availability. Pet. Br. at 35. Both Petitioners further assert that, “[i]n view of their missions,” they “have legitimate interests in overcoming governmental tampering with and misrepresentation of available scientific information, and governmental abuse of the processes for evaluation of scientific information that are mandated by the Clean Air Act.” *Id.* However, “[i]t is well established that injury to an organization’s advocacy activities does not establish

standing.” *Am. Lung Ass’n*, 985 F.3d at 989. In *Am. Lung Ass’n*, the Court emphasized that an advocacy organization must identify some “perceptible impairment to its mission.” *Id.* As an example, the Court cited a case where an agency’s failure to promulgate standards “compelled the organization to develop guidance for the public that otherwise would have been provided by the agency’s standards.” *Id.* (citing *Am. Anti-Vivisection Soc’y v. United States Dep’t of Agric.*, 946 F.3d 615, 619 (D.C. Cir. 2020)). Petitioners offer no comparable evidence here of the types of organizational resource expenditures that might show their alleged injuries are more than just “abstract.” *Havens Realty*, 455 U.S. at 379.

Additionally, Petitioners fail to meet the “traceability” element of standing. When a petitioner that is not itself the object of a government regulation asserts an economic injury from that regulation, the petitioner’s standing “depends on the unfettered choices made by independent actors not before the courts and whose exercise of broad and legitimate discretion the courts cannot presume either to control or to predict.” *Lujan*, 504 U.S. at 562 (internal quotation omitted). It therefore “becomes the burden of the [petitioner] to adduce facts showing that those choices have been or will be made in such manner as to produce causation and permit redressability of injury,” which is “ordinarily substantially more difficult to establish.” *Id.* (internal quotation omitted); see *Am. Lung Ass’n*, 985 F.3d at 990-91.

Here, Petitioners claim that their alleged organizational injuries result from regulations purportedly adopted due to the 2009 Finding, but as noted above, they do not identify even one such regulation. The only nominal traceability or causation evidence Petitioners offer concerning home electricity prices is that those prices were higher in California in 2020 than in 2015, which Petitioners attribute without support to that state's increased reliance on renewable energy generation. Pet. Br. at 33. Petitioners make no attempt, however, to distinguish other potentially significant variables that may have affected California's consumer electricity rates in 2020, such as economic impacts during the contemporaneous Covid-19 lockdown in 2020,<sup>4</sup> or the increased costs to California's electric utilities (and, hence, to electricity consumers in California) from historically severe wildfire seasons.<sup>5</sup> In other words, Petitioners have not shown any causal link between the cited 2020 electricity prices and *any* federal regulation of greenhouse

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<sup>4</sup> See, e.g., <https://www.energyhelpline.com/news/lockdown-set-to-cause-energy-price-hikes-in-2021> (noting increased home utility bills due to greater at-home energy usage during Covid-19 lockdowns in the spring of 2020).

<sup>5</sup> See, e.g., <https://www.utilitydive.com/news/california-electric-customers-could-see-rising-bills-due-to-wildfires-decl/554524/> (published May 10, 2019); <https://lao.ca.gov/Publications/Report/4079> (June 21, 2019 report by the California Legislative Analyst's Office entitled "Allocating Utility Wildfire Costs: Options and Issues for Consideration"); *id.* at 4 (Pacific Gas & Electric estimated up to \$15 billion in liability from a single catastrophic 2018 fire, the Camp Fire).

gas emissions, let alone the 2009 Finding, and much less the Denial—the action for which review is sought.<sup>6</sup>

Likewise, to the extent the Foundation is concerned with “limits [on] the availability and exploitation of fossil fuels,” Pet. Br. at 35, the bare assertions in Petitioners’ brief fail to trace that alleged injury to the 2009 Finding, much less the Denial. The 2009 Finding imposes no limits on the exploration for or use of fossil fuels. *See Grocery Mfrs. Ass’n v. EPA*, 693 F.3d 169, 177 (D.C. Cir. 2012) (traceability not established where challenged rule did not “force” or “require” regulated entities to use allegedly costlier fuel type). Likewise, the Denial imposes no such limits. Thus, Petitioners fail to trace their harm to either EPA action.

The degree of speculation in Petitioners’ standing allegations is even greater because the 2009 Finding does not itself impose any requirement to “replace [] fossil-fuel-generated electricity with ‘renewables’.” Pet. Br. at 32. The Finding does not entail judgments regarding “how” to regulate greenhouse gas emissions.

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<sup>6</sup> To the extent the Council asserts associational standing, these flaws are equally fatal. Moreover, it does not even assert that any members reside in California. *See* Pet. Br. at i (identifying names but not states of residence); *compare with Am. Chem. Council v. Dep’t of Transp.*, 468 F.3d 810, 819 (D.C. Cir. 2006) (petitioners could not establish associational standing to challenge a worker safety regulation where they “[did] not indicate, for example, that any of petitioners’ members have been or will be working in specific areas with safety concerns”).

*See Coalition*, 684 F.3d at 118 (distinguishing the scientific judgment that section 202(a)(1) required for purposes of the 2009 Finding from other considerations that apply when promulgating emission standards under section 202(a)(2), such as compliance costs and availability of technology). And, as noted above, Petitioners identify no specific EPA regulation adopted after and as a consequence of the 2009 Finding. Thus, at best the Petitioners merely offer speculation about unspecified regulations that they assume EPA *may* adopt, and the higher costs those unspecified regulations may then cause. Such “multi-tiered speculation” does not establish Article III standing. *La. Env’tl Action Network v. Browner*, 87 F.3d 1379, 1383 (D.C. Cir. 1996).

This Court has denied assertions of standing based on the alleged economic impacts of a challenged agency action where, as here, little or no attempt is made to distinguish other potential causes of those impacts or to show that they are traceable to the agency action for which review is sought. For example, in *Crete Carrier Corp. v. EPA*, trucking companies sought review of EPA’s denial of a petition to reconsider heavy-duty diesel engine emission standards promulgated in 2004. 363 F.3d 490 (D.C. Cir. 2004). To establish standing, the Court explained, “the Trucking Companies must show it is ‘substantially probable’ the 2004 Standard is responsible for the increased tractor prices the Trucking Companies will allegedly pay.” *Id.* at 493. The trucking companies could not meet this

burden because manufacturers of heavy-duty diesel engines already were subject to consent decrees unrelated to the 2004 standard that would require the engines to meet the same emission limit and thus would impose the same production cost. *Id.*

Here, Petitioners make an even weaker showing than in *Crete Carrier*. As in that case, Petitioners attempt to show both injury and a causal link to EPA action by relying on “[s]peculative and unsupported assumptions regarding the [] actions of third-party market participants.” 363 F.3d at 494. But there is added speculation here because the 2009 Finding, unlike the EPA rule in *Crete Carrier*, does not itself impose regulatory limitations on sources of air pollutants, let alone regulate other economic activity. Petitioners, again, fail to identify any *specific* EPA rule promulgated due to the 2009 Finding that injured them in the manner they claim. *See also supra* at 19-20, 22 (Petitioners’ standing allegations also compare unfavorably with those in *Competitive Enter. Inst.* and *Am Lung Ass’n*).

Petitioners claim that the fact of their having petitioned EPA for rulemaking, and EPA’s Denial, “gives them standing under *Massachusetts v. EPA*” without requiring any other showing because Petitioners assert a procedural right. Pet. Br. at 36. This is incorrect. A claimant cannot simply “allege a bare procedural violation, divorced from any concrete harm, and satisfy the injury-in-fact requirement of Article III.” *Spokeo*, 578 U.S. at 341 (quoting *Summers v. Earth Island Inst.*, 555 U.S. 488, 496 (2009)). Instead, where a claimant alleges injury

resulting from violation of a procedural right afforded to them by statute and designed to protect their threatened concrete interest, “the courts relax—while not wholly eliminating—the issues of imminence and redressability, but not the issues of injury in fact or causation.” *Def. of Wildlife v. Perciasepe*, 714 F.3d 1317, 1323 (D.C. Cir. 2013). As explained above, Petitioners fail to demonstrate either injury-in-fact or causation, and these defects are fatal to their standing.<sup>7</sup>

This Court rejected a similar argument that petitioners had “automatic standing” to appeal the Drug Enforcement Administration’s denial of their administrative rulemaking petition under 21 U.S.C. § 811(a)(2). *Gettman v. DEA*, 290 F.3d 430, 433 (D.C. Cir. 2002). As the Court explained then: “Petitioners misunderstand the law. Petitioners may be ‘interested part[ies]’ under the statute, and therefore able to petition the agency, and yet not have Article III standing to bring this action in federal court.” *Id.*

Petitioners have not shown a concrete and particularized injury, nor that any alleged injury is fairly traceable to the challenged EPA action. The Court should therefore dismiss these petitions without reaching the merits.

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<sup>7</sup> In *Massachusetts v. EPA*, the Supreme Court held that, as a state, Massachusetts was “entitled to special solicitude in [the Court’s] standing analysis.” 549 U.S. at 520. Nonetheless, Massachusetts also submitted standing affidavits that “satisfied the most demanding standards of the adversarial process.” *Id.* at 521. Petitioners here submitted none.

## II. EPA PROVIDED A RATIONAL BASIS FOR DENYING PETITIONS FOR RECONSIDERATION OR RULEMAKING REGARDING THE 2009 ENDANGERMENT FINDING.

### A. EPA correctly determined that Petitioners identified no grounds for mandatory reconsideration under CAA section 307(d)(7)(B).

In evaluating whether the petitions identified grounds for mandatory reconsideration under CAA section 307(d)(7)(B), EPA appropriately applied the applicable statutory limitations on the scope and timing of grounds for such reconsideration. Denial at 8 (JA-010). As EPA explained, section 307(d)(7)(B) does not provide mandatory reconsideration for comments like Petitioners', which generally were actually raised or could have been raised in public comments on the proposed 2009 Endangerment Finding. *Id.* at 8-10 (JA-010-12) (citing 42 U.S.C. § 7607(d)(7)(B)). Additionally, the statute does not provide mandatory reconsideration for grounds for objection that arose more than 60 days after Federal Register publication of the 2009 Finding. *Id.* (citing 42 U.S.C. § 7607(b)(1)).

Petitioners incorrectly assert that *any* objection arising at any time after the 2009 comment period is subject to mandatory reconsideration if it is “of central relevance to the outcome” of the 2009 Finding. Pet. Br. at 5. As EPA explained, however, section 307(d)(7)(B) limits mandatory reconsideration to objections that were “impracticable” to raise during that comment period and grounds that “arose



after the period for public comment (*but within the time specified for judicial review*)” if the objection is “of central relevance to the outcome of the rule.” 42 U.S.C. § 7607(d)(7)(B) (emphasis added); Denial at 8-9 nn.13-14 (JA-010-11); *see Alon Refining Krotz Springs Inc. v. EPA*, 936 F.3d 628, 647-48 (D.C. Cir. 2019) (holding that “the time specified for judicial review” encompasses only the first sixty days after Federal Register publication of final action).

Applying this corrected understanding of applicable scope and timing limitations, EPA reasonably determined that “[t]he petitions fail to satisfy the criteria in CAA section 307(d)(7)(B) for mandatory reconsideration proceedings.” Denial at 8 (JA-010). First, EPA noted that “[m]any of the petitioners’ claims . . . are similar in nature and scope to those previously addressed by EPA in responding to public comments” on the proposed Finding. *Id.* at 9 and n.17 (JA-011); *see also id.* at 26, 28-29, 31, 35-38 (JA-028, JA-030-31, JA-033, JA-037-40) (identifying specific objections materially similar to 2009 comments or 2010 reconsideration request issues). Such objections cannot be considered “impracticable to [have] raise[d]” during the 2009 comment period. *Id.* at 9-10 (JA-011-12) (noting that Petitioners did not make a “logical outgrowth” argument to excuse late objections).

Second, EPA applied section 307(d)(7)(B)’s timing limitation. EPA observed that to the extent Petitioners submitted allegedly “new” information, that information “became available long after February 16, 2010,” the statutory

deadline to seek judicial review of the 2009 Finding. Denial at 10 (JA-012). For example, Petitioners rely in part on a report “first published on September 21, 2016, close to seven years *after* the Endangerment Finding.” *Id.* at 10 and n.19 (JA-012). Other information dates from 2017 and 2018. *Infra* at 36. EPA therefore correctly determined that the allegedly “new” information “fail[s] to constitute grounds arising after the [2009] comment period but within the time specified for judicial review and, thus, [is] not a proper basis for a petition for reconsideration under CAA section 307(d)(7)(B).” Denial at 10 (JA-012).

Petitioners’ failure to show that objections either (1) were impracticable to raise during the 2009 comment period or (2) arose after the 2009 Finding but within 60 days of its publication, by itself forecloses mandatory reconsideration without considering whether the comments were “of central relevance to the outcome.” *See* 42 U.S.C. § 7607(d)(7)(B) (objections must meet the timing limitations “*and*” be “of central relevance”) (emphasis added). Nonetheless, as summarized in Argument II.B below, EPA also reasonably determined that Petitioners’ objections were not “of central relevance,” applying the *Coalition* test—whether the petitions “provide[] substantial support for the argument that the [2009 Finding] should be revised.” Denial at 10 (JA-012) (citing 684 F.3d at 125).

**B. EPA sufficiently explained why the petitions did not identify information warranting reconsideration or rulemaking.**

**1. The scientific record supported EPA’s decision not to reconsider or initiate rulemaking to reopen the 2009 Endangerment Finding.**

EPA reasonably concluded that the information presented in administrative petitions does not warrant reconsideration or a discretionary rulemaking to reopen or revise the 2009 Endangerment Finding. As EPA explained, the petitions provide no reason to question the 2009 Finding based on the record available at that time. Denial at 4 (JA-006). In addition, the evidence accumulated since 2009, particularly as compiled in recent scientific assessments, only “strengthens [EPA’s] understanding of the climate system and the impacts that greenhouse gases have on public health and welfare for both current and future generations” and thus bolsters the original basis for the 2009 Finding. *Id.* at 11 (JA-013); *see id.* at 11-13 and nn.23-35 (JA-013-15) (listing recent scientific assessments).

Considering Petitioners’ specific contentions in the larger context of recent assessments and other scientific information, EPA observed that “evidence regarding climatic changes has continued to accumulate, with new records being set for several climate indicators such as global average surface temperatures, greenhouse gas concentrations, and sea level rise.” Denial at 11 (JA-013). For example:

- Annual average atmospheric concentrations of carbon dioxide reached 416 parts per million in 2021—up from 315 parts per million in 1958<sup>8</sup>—and continue to rise.
- Global average temperature increased by about 1.1 degrees Celsius (2 degrees Fahrenheit) from the period of 1850-1900 to the decade of 2011-20.
- The years 2014-20 were the seven warmest years of the 140-year period from 1880 to 2020, contributing to the warmest decade on record.
- Global average sea level has risen about 7 to 8 inches from 1900 to 2015 with almost half of that rise occurring since 1993, and the rate of sea level rise in the 20th century was the highest in at least the past 2800 years.
- Arctic sea ice extent continues to decline in all months of the year; the reductions in September sea ice extent are unprecedented in at least the past 1,000 years (very likely an almost 13 percent reduction per decade between 1979 and 2018).

Denial at 13 (JA-015).

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<sup>8</sup> See NOAA, State of the Climate 2020 at S83 (JA-664) (full citation in Denial at 13 n.36 (JA-015)). Recent atmospheric carbon dioxide concentrations are “higher than at any time in at least 2 million years.” Panel, 2021: Summary for Policymakers at 8 (JA-593) (full citation in Denial at 12 n.29 (JA-014)).

EPA further explained that, in addition to documenting these climatic changes, recent scientific assessments “attribute these changes to the human-induced buildup of greenhouse gases in our atmosphere.” *Id.* For example, the Panel’s most recent assessment finds that “[i]t is unequivocal that human influence has warmed the atmosphere, ocean and land.” Panel, 2021: Summary for Policymakers at 4 (JA-589); *see also id.* (“Observed increases in well-mixed greenhouse gas [] concentrations since around 1750 are unequivocally caused by human activities.”); Panel, 2022: Summary for Policymakers at 9 (JA-632)<sup>9</sup> (“Impacts in natural and human systems from slow-onset processes such as ocean acidification, sea level rise or regional decreases in precipitation have also been attributed to human induced climate change (high confidence).”). The Program also has identified recent refinements in attribution science and increasing confidence in scientific conclusions regarding attribution. *See* Fourth National Climate Assessment, Vol. I at 116-17 (JA-566-67).<sup>10</sup>

Finally, EPA described the process by which the scientific assessments are created and why EPA gave them greater weight than that accorded to individual scientific studies for purposes of reviewing the administrative petitions. Denial at

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<sup>9</sup> Full citation in Denial at 12 n.31 (JA-014).

<sup>10</sup> Full citation in Denial at 11 n.24 (JA-013).

13-14, 15 (JA-015-16, JA-017). As EPA explained, scientific assessments “evaluate the findings of numerous individual peer reviewed studies in order to draw more general and overarching conclusions about the state of science.” *Id.* at 13 (JA-015). The assessments “synthesize thousands of individual studies and convey the consensus conclusions of the scientific community on what the body of scientific literature tells us.” *Id.* As part of this process, the assessments meet a rigorous standard of peer review. *Id.* at 14 (JA-016). This aspect of the assessment process is important because peer review “is conducted to ensure that activities are technically defensible, competently performed, properly documented and consistent with established quality criteria.” *Id.* at 15 (JA-017). It is generally considered a “minimum threshold for dissemination of scientific information,” though peer-reviewed literature may occasionally be complemented by other sources where appropriate. *Id.*

In contrast, “[i]ndividual studies that appear in scientific journals, even if peer reviewed, do not go through as many review stages, nor are they reviewed and commented on by as many scientists.” *Id.* (quoting 74 Fed. Reg. at 66511). Thus, as in 2009, EPA appropriately considered scientific assessments in its review of the administrative petitions because “no other source of information on climate change provides such a comprehensive and in-depth analysis across such a large body of scientific studies and adheres to such a high and exacting standard of peer review.”

*Id.* at 13-14 (JA-015-16); *accord Coalition*, 684 F.3d at 120 (affirming EPA’s determination that “assessments represented the best source material to use in deciding whether greenhouse gas emissions may be reasonably anticipated to endanger public health or welfare”).

EPA explained that recent assessments are “[c]onsistent with the robust and extensive scientific record that informed the 2009 Endangerment Finding and the 2010 denial of petitions for reconsideration.” Denial at 14 (JA-016). Moreover, “these more recent scientific assessments continue to document observed changes in the climate of the planet and of the United States, and present clear support regarding the current and future dangers of climate change.” *Id.* Therefore, these assessments further support EPA’s “decision not to reopen, reconsider or revise the 2009 Endangerment Finding based on the assertions in the petitions.” *Id.* That decision, in light of the record and EPA’s explanation, is eminently reasonable.

**2. EPA explained why Petitioners’ highlighted criticisms failed to support their rulemaking requests.**

In 2009, EPA found that the “scientific evidence is compelling that elevated concentrations of heat-trapping greenhouse gases are the root cause of recently observed climate change,” and explained its reasons for attributing observed climate change to anthropogenic activities. 74 Fed. Reg. at 66518. Petitioners now claim that EPA’s denial of reconsideration or a rulemaking to reopen or revise

the 2009 Endangerment Finding was arbitrary and capricious because the administrative petitions supposedly disproved EPA’s “attribution” conclusion. Pet. Br. at 8-9, 37. First, Petitioners contend that temperature data EPA relies on are “fabricated.” *Id.* at 11, 12-15. Second, they claim that purported econometric analyses of selected temperature datasets—set forth in Wallace, et al., (2016, 2017 and 2018)—show that “after adjusting for natural factors, there has been no statistically significant trend in temperature” in those datasets. Pet. Br. at 8; *see also id.* at 15-18, 40-43. Third, Petitioners claim that a “Hot Spot theory” is central to EPA’s attribution conclusion and that this theory is invalid. *Id.* at 19-28. Finally, Petitioners add that if there is no causal link of anthropogenic greenhouse gases to rising temperatures, then there is also no causal link to increases in extreme weather events, including types of weather events that EPA anticipated as potential adverse impacts on public health and welfare. *Id.* at 43-47.

Although Petitioners nominally point to new information (*e.g.*, Wallace et al.) as the basis for their objections, in substance their arguments largely repeat objections previously raised and addressed by EPA in the 2009 comment period, or issues EPA addressed in its 2010 reconsideration denial. *See supra* at 29 (citing examples). The Court upheld as reasonable EPA’s 2009 Endangerment Finding and 2010 reconsideration denial, notwithstanding those earlier objections, and EPA’s determination in 2022 that materially similar objections do not warrant



reconsideration or a new rulemaking remains reasonable.<sup>11</sup> Furthermore, Petitioners’ “Hot Spot” argument largely rests on a misunderstanding or misstatement of EPA’s scientific basis for the 2009 Finding. As discussed further below, EPA carefully considered Petitioners’ claims and reasonably determined that none supports reconsidering or reopening the 2009 Finding.

**a. EPA reasonably found objections to the sufficiency and validity of surface temperature data unpersuasive.**

Petitioners contend that the surface temperature data EPA considered in making the 2009 Endangerment Finding are invalid. They initially claim that the data is incomplete because “essentially no credible temperature data were captured monthly” in the southern hemispheric oceans between 1900 and 2000. Pet. Br. at 12-13. This objection, like many, essentially repeats an issue that EPA considered

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<sup>11</sup> This Court has held that EPA’s denial of an administrative petition seeking changes to an existing rule based on “new facts” or “changed circumstances” is a reviewable final action. *Alon Refining*, 936 F.3d at 646. But in *Alon Refining*, EPA had found through rulemaking that changed economic conditions adversely impacted regulated entities’ ability to comply with certain statutory requirements, and the administrative petitions cited this new EPA factual finding. *Id.* at 638-39. Here, by contrast, Petitioners largely resurrect the same or similar objections to those EPA addressed before. To the extent the Court concludes that Petitioners reiterate claims that could have been or were pursued during its prior review of 2009 Finding and 2010 reconsideration denial, the claims are untimely. See 42 U.S.C. 7607(b)(1) (requiring that petitions be filed within 60 days of an EPA final action unless “based *solely* on grounds arising after such sixtieth day”) (emphasis added).

in 2010 when denying earlier reconsideration petitions. As EPA explained then, and reiterated in its 2022 Denial, the objection lacks merit. To begin with, the results drawn from analysis of surface temperature data are more robust than Petitioners suggest. For example, EPA’s 2010 reconsideration denial cited studies finding that hemispheric average temperature estimates were “nearly unchanged” after incorporating improvements in spatial coverage, indicating that any spatial coverage limitations did not prevent scientists from discerning reliable temperature estimates. 2010 Response to Petitions, Vol. 1 at 63 (JA-169). Since then, the degree of spatial coverage of available surface temperature data has continued to increase. *See* Rohde and Hausfather (2020) at 1 (JA-671) (reporting “[a] global land/ocean temperature record” that “spans the period from 1850 to present and covers the majority of the Earth’s surface: approximately 57% in 1850, 75% in 1880, 95% in 1960, and 99.9% by 2015”)<sup>12</sup>; Denial at 27 n.52 (JA-029) (full citation to Rohde).

In any event, EPA did not solely rely on surface temperature data in making the 2009 Finding. That Finding drew from assessments that considered the *entirety* of available data—“e.g., surface temperature datasets, satellite data, balloon data,

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<sup>12</sup> Available at <https://essd.copernicus.org/preprints/essd-2019-259/essd-2019-259.pdf>.

ocean heat data, and indicators such as sea ice retreat and glacial melt.” Denial at 25 (JA-027). EPA appropriately considered the strengths and weaknesses of each data source, and determined which conclusions could be made based on that entire body of evidence. *Id.* Petitioners’ narrow critique of the completeness of the surface temperature data—which as noted above is not new—thus identifies no ground to reconsider or reopen the 2009 Finding.

Petitioners also repeat earlier commenters’ insinuation that United States government agencies and Britain’s Hadley Centre for Climate Prediction and Research allegedly manipulated historical data to show a warming trend. Pet. Br. at 14-15; *see* Denial at 26-27 (JA-028-29) (citing 2010 Response to Petitions (1-64) and Vol. 1 at 101-02 (JA-174-75, JA-178)). This refers to adjustments made to ensure data quality in connection with analyses published, separately and at various times, by the National Oceanic and Atmospheric Administration, the National Aeronautics and Space Administration, the Hadley Centre, and others. Denial at 27 (JA-029). All data adjustment procedures used in these organizations’ data analyses are documented in peer-reviewed literature, and the National Aeronautics and Space Administration’s adjustment code is publicly available. *Id.* There is no impropriety in this process.

Moreover, EPA found that the administrative petition alleging data manipulation, and the report on which it principally relied for this objection

(Wallace et al. 2017), did not even acknowledge the existence of the peer-reviewed literature describing data adjustments, nor the publicly available code. Denial at 27 (JA-029). Thus, it found no indication that the petitioner or the report's authors had even reviewed the data adjustment procedures or the code, much less identify any inappropriate adjustment techniques and explain their criticisms. *Id.* Such review and investigation would have been “a basic step to take before making accusations of improper data tampering.” *Id.*

EPA also noted that after the Agency's 2010 decision denying reconsideration on this ground, a non-governmental organization, Berkeley Earth, performed an independent analysis of the surface temperature data between 2010 and 2012. *Id.* at 26-27 (JA-028-29). Berkeley Earth specifically sought to address concerns that had been raised such as “potential biases from data selection, data adjustment, poor station quality, and the urban heat island effect.” *Id.* (citing <https://berkeleyearth.org/methodology/>). Berkeley Earth's independent analysis resulted in historical temperature estimates “quite similar” to those published by the noted U.S. and British government agencies, which does not support Petitioners' assertion that those agencies improperly biased their results.

In contrast to the transparency of the analyses published by government agencies and by Berkeley Earth, Petitioners principally rely for this objection on one report using questionable methods. The 2017 Wallace report “appears to rely

solely on isolating a few individual regions – several cities and states in the US, one city in Greenland, and one analysis of the Arctic region – and then asserting (without using any statistical methodologies) that a cyclical pattern exists in the temperature records from those regions.” Denial at 27 (JA-029). It then makes a further speculative leap by assuming that there should therefore be a similar cyclical pattern in the global temperature dataset. *Id.* In addition to these issues with the 2017 report’s approach, “the petitioners . . . presented no evidence that any of [the Wallace] reports were ever submitted to a peer-reviewed academic journal or any other formal peer review process subject to standard processes to ensure objectivity, independence, transparency, and/or scientific integrity.” *Id.* at 15 (JA-017).

Summarizing its consideration of this issue, EPA stated that the Petitioners did not present “credible evidence that four major climate science organizations with an extensive record of peer-reviewed literature are all independently and inappropriately adjusting their surface temperature datasets, nor do these critiques identify any errors in the actual code or adjustment procedures.” *Id.* at 27 (JA-029). Thus, EPA quite reasonably declined to reconsider or reopen the 2009 Finding based on wholly unsubstantiated data tampering accusations. *Id.*

- b. EPA considered studies purporting to show that naturally occurring factors wholly explain temperature trends and reasonably found that they failed to present competent evidence.**

Petitioners argue that the 2016 and 2017 Wallace reports analyzed as many as 14 temperature data sets and “failed to find that the steadily rising atmospheric [carbon dioxide] has had a statistically significant impact on any of the . . . data sets” after accounting for “natural factor impacts” such as solar, volcanic, and oceanic activity. Pet. Br. at 15-17. They further contend that a 2018 report used econometric methods to prove that increasing atmospheric carbon dioxide concentrations did not have a statistically significant impact on temperature over the period 1979 to 2016. *Id.* at 17, 40-43. EPA reasonably concluded that these reports did not support reconsidering or reopening the 2009 Endangerment Finding. Denial at 18-20 (JA-020-22).

First, EPA noted that these objections reassert a contention from 2009 comments—that the cycles of the El Niño Southern Oscillation<sup>13</sup> events are the key driver behind the observed global warming trend. Denial at 18-19 (JA-020-21). In

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<sup>13</sup> “El Niño” refers to the warming of sea surface temperatures in the central and eastern equatorial Pacific, which occurs periodically as part of a shifting gradient of sea surface temperature and low-level winds between the central and eastern equatorial Pacific and Indonesia. “Southern Oscillation” refers to the atmospheric component of this phenomenon. See NOAA State of the Climate 2020 at S61-S62 (JA-661-62).

2009, EPA considered the already extensive scientific research, summarized in assessments, examining whether El Niño and comparable phenomena could explain “all or most of the changes in climate that have occurred over the past century” as commenters then claimed. *Id.* at 19 (JA-021). This proposition is inconsistent with the scientific consensus, and EPA concluded in 2009 that these commenters “did not provide compelling evidence” contradicting that consensus, as reflected in the assessment literature. *Id.* (citing 2009 Response to Comments (3-25) (JA-126-27)).

Examining the more recent reports (Wallace et al 2016, 2017 and 2018) that Petitioners rely on to make their similar objection, EPA found these reports likewise fail to provide competent evidence. The first two rely on a metric (known as “cumulative MEI”) in a way that is not appropriate for this kind of analysis because it does not incorporate a physical understanding of the climate system, and their analyses do not consider thermodynamic laws concerning conservation of energy. Denial at 19 (JA-021). For example, their use of the cumulative MEI makes the basic error of failing to account for the redistribution of heat from the ocean to the atmosphere. *Id.* “This is in contrast to climate models, which are based on fundamental laws of nature (e.g., energy, mass and momentum conservation).” *Id.* (internal quotation and citation omitted).

Moreover, EPA found that while cumulative MEI “is somewhat correlated with surface temperature trends from 1950 to the present,” it “does not bear any resemblance to temperature trends from 1871 to 1950.” *Id.* There is no indication that the reports’ authors even reviewed the earlier MEI dataset, which is publicly available, let alone attempted to explain why no correlation can be observed in earlier time periods. *Id.* at 19 and n.43 (JA-021). If this metric were actually driving temperature trends, the correlation should be observed in other time periods. *Id.* at 19 (JA-021).

Turning to the 2018 Wallace report, EPA found that it introduced a completely different set of parameters from the earlier reports without adequately justifying why the new parameters were appropriate. *Id.* Additionally, it again made basic and fundamental errors. It failed to include a “physically based analysis of the [climate] system,” a critical step in any attempt to evaluate what impact natural and anthropogenic factors have on atmospheric warming. *Id.* Petitioners wave off this criticism by asserting that “the statistical analysis of temperature records implicitly includes *all* of the physical processes.” Pet. Br. at 42. But a physical climate model or physically based analysis is still a necessary companion to a statistical approach, in order to interpret whatever statistical correlations may be found. One classic way to illustrate this point is that drownings and ice cream consumption are correlated, but one cannot draw a causal



link between the two—it is rather high temperatures which increase both.<sup>14</sup> Thus, the kind of “regression approach” used in the 2018 Wallace report, because it omits a physically based analysis, cannot be reliably interpreted as proving “that natural factors can explain warming.” Denial at 19 (JA-021).

As a specific example to illustrate in plain terms the problems stemming from the lack of a physically based climate analysis, EPA explained that the 2018 report treated the same physical properties inconsistently for natural and anthropogenic variables. *Id.* That is, the authors “acknowledge that radiative forcings<sup>15</sup> resulting from volcanic eruptions and changes in solar intensity can have influence on the climate system.” *Id.* But they do *not* acknowledge any influence on the climate system from “radiative forcing changes due to changes in greenhouse gas concentrations.” *Id.* Basic physics would demand an explanation—why would radiative forcing from one source influence the climate system, but not from a different source? The authors do not even acknowledge the question, let alone attempt to answer it. *See id.* A proper analysis, moreover,

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<sup>14</sup> *See, e.g.*, Aggarwal and Ranganathan, “Common pitfalls in statistical analysis: The use of correlation techniques,” *Perspect Clin Res* 2016 Oct-Dec; 7(4): 187-190, available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5079093/> (JA-730-33).

<sup>15</sup> “Radiative forcing” is a measure of how much a factor alters the balance of incoming (solar) and outgoing (infrared and reflected shortwave) energy in the Earth-atmosphere system. 2009 Technical Support Document at 23 (JA-108).

“should consider *all* substantial contributions to changes in radiative forcing . . . when attempting to attribute climate changes.” *Id.* at 19-20 (JA \_\_) (emphasis added).

Finally, the 2018 report’s “econometric analyses” omitted statistical tests that are standard in an analysis aiming to establish a reliable basis for choosing among different possible explanations. *Id.* at 20 (JA \_\_). Any study purporting to analyze the possible impact of different factors on atmospheric warming should include these standard tests. *Id.* Because they omit such standard tests, the report’s results are unreliable.

Petitioners’ brief addresses none of these shortcomings. *See* Pet. Br. at 15-18, 40-43. EPA reasonably determined that Petitioners’ submissions—reflecting “incomplete statistical work,” “poor choices of parameters,” and a “substantially inferior . . . attribution approach[]”—did not support reconsidering or reopening the 2009 Finding. Denial at 20 (JA \_\_).

**c. EPA reasonably rejected “Hot Spot theory” claims that rely on a misunderstanding of EPA’s 2009 Finding.**

Petitioners’ next critique relates to differences between climate models and surface temperature measurements in one part of the atmosphere in the tropics. Pet. Br. at 19-21. As Petitioners acknowledge, EPA’s 2009 Technical Support Document and the assessments from which it drew all clearly stated that climate

models were unable to reproduce observed warming without incorporating the additional “forcing” from (*i.e.*, the influence of) anthropogenic greenhouse gases. *Id.* at 21. Petitioners claim, however, that these climate models are “invalid” because the modelling runs incorporating anthropogenic forcing show a “Hot Spot” that does not match observed temperature data in the tropics. *Id.* at 21-28. Specifically, according to Petitioners, the climate models show warmer temperatures in the lower atmosphere, or “troposphere,”<sup>16</sup> than at the surface in tropical areas, but observed data for those areas do not follow this pattern. *Id.* at 22, 26-28. Petitioners claim that the Panel’s Fourth Assessment Report “states unequivocally that the Hot Spot is an integral feature of the ‘physical understanding’ of the climate’s hypothesized greenhouse warming mechanism.” *Id.* at 22-23. They contend that EPA “irrevocably placed primary reliance” on the Panel’s reports including this statement, and that their petitions to EPA refute “the Hot Spot theory.” *Id.* at 25, 27-28.

Petitioners’ argument does not accurately characterize the Panel’s statements and analysis, let alone EPA’s. EPA has found no passage in the Fourth

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<sup>16</sup> Generally, “troposphere” refers to the lowest atmospheric layer, while “stratosphere” refers to the next atmospheric layer above. *See, e.g.*, 2009 Technical Support Document at 30 (JA-109) (defining the troposphere as extending from the Earth’s surface to “6.2 to 10” miles above the surface, and the stratosphere as extending from “6.2 to 31 miles” above the surface).

Assessment Report that includes the above-quoted statement Petitioners claim it “unequivocally” made. Denial at 21 (JA-023). It uses the word “integral” just once in the chapter Petitioners cite, in a different context. *Id.* Moreover, a more complete review of the Report’s discussion makes clear that the Panel did not assign special significance to the planet’s tropical regions in its consideration of the expected phenomenon of tropospheric warming. Rather, the Panel “[wa]s contrasting the *entire* troposphere with the stratosphere, not just the tropical mid-troposphere: ‘Greenhouse gas forcing is expected to produce warming in the troposphere, cooling in the stratosphere [.]’” *Id.* (citing Fourth Assessment Report at 674 (JA-573)). EPA quoted another discussion in the Report which states, “Models and observations also both show warming in the lower part of the atmosphere (the troposphere) and cooling higher up in the stratosphere. This is another ‘fingerprint’ of change that reveals the effect of human influence on the climate.” Denial at 21 (JA-023) (quoting Fourth Assessment Report at 702-03 (JA-576-77)). Again, this statement discusses “models and observations” of the atmosphere generally, and does not refer to a distinctly *tropical* “fingerprint.” Thus, EPA explained, “[t]he ‘tropical hot spot’ was never labeled as a key fingerprint of anthropogenic warming in either the 2009 Endangerment Finding or by the [Panel], contrary to assertions by the petitioners.” Denial at 21 (JA-023). Petitioners’ misattribution of statements to the Panel—and, by attempted

implication, to EPA—gives a false impression of the alleged importance of Petitioners’ critique.

Furthermore, like other objections, this critique is not “new” but a rehash of issues to which EPA responded thoroughly in 2009 and 2010. *See id.* at 21-22 (JA-023-24) (citing 2009 Technical Support Document, Section 5 (JA-113-20); 2009 Response to Comments (3-7) (JA-124-25); 2010 Response to Petitions, Sec. 1.2 (JA-139-40)). Earlier commenters similarly objected to the 2009 Finding on the ground that “observed vertical temperature structure in the tropics is inconsistent with modeled trends in the administrative record.” Denial at 22 (JA-024). Such commenters asserted the same perceived data-versus-modeling discrepancy for tropical areas: “In the tropics, most observational data sets show more warming at the surface than in the troposphere, while almost all model simulations have larger warming aloft than at the surface.” *Id.* (JA-024) (quoting 2009 Response to Comments (3-7) at 6 (JA-125) (citing Karl et al. (2006))). In its 2009 response, EPA cited a peer-reviewed follow-up study (Karl et al. (2009)) observing that “when uncertainties in models and observations are properly accounted for, newer observational data sets are in agreement with climate model results.” Denial at 22 (JA-024). EPA concluded in 2009 that the Technical Support Document’s literature summary was accurate, as it acknowledged the inconsistency in the tropics while putting it “in context of all the other places on

the planet where the anthropogenic signal has been identified.” *Id.* at 22 n.46 (JA-024).

EPA’s Denial also recalled, and reaffirmed, its 2009 explanation that more uncertainty in climate modelling predictions is to be expected when focusing on smaller areas—*e.g.*, “just the mid-tropospheric atmosphere above the tropical latitudes”—rather than the planetary climate system as a whole. *Id.* at 22 (JA-024). “With respect to spatial scale, . . . ‘as spatial scales considered become smaller, the uncertainty becomes larger because internal climate variability is typically larger than the expected responses to forcing on these scales.’” *Id.* (quoting 2009 Technical Support Document at 52 (JA-118), and 2009 Response to Comments (4-15) (JA-129-31)).

Finally, EPA noted that recent studies not available in 2009, using different methodologies, indicate that tropospheric warming in the tropical latitudes may previously have been underestimated. This could explain the discrepancy between observed warming and modelling in those areas. Denial at 22-23 and nn.47-50 (JA-024-25) (citing four studies). Thus, not only did the original 2009 record support EPA’s responses to comments on this issue, but new data provide further support. Therefore, considering the whole context, EPA reasonably concluded that “it is unwarranted to claim that climate models are invalid and unreliable due to the

possible discrepancy between observations and models for mid-tropospheric tropical temperature trends.” *Id.* at 23 (JA-025).

**d. Petitioners’ objection regarding “extreme weather events” is unsupported.**

As an extension of the above contentions, Petitioners claim that “[i]f the causal link between higher atmospheric [carbon dioxide] concentrations and higher global average surface temperature [] is broken,” then EPA’s conclusion that “higher [carbon dioxide] concentrations also cause loss of Arctic ice, sea-level increases and more frequent severe temperatures, storms, floods, and droughts [is] also necessarily disproved.” Pet. Br. at 45. However, as explained above, Petitioners did not present evidence “disproving a causal link” between anthropogenic greenhouse emissions and rising global average temperatures.

Petitioners then segue to a different assertion, that the “Fifth Supplement” to one administrative petition presents “empirical data showing no positive trend in ten categories of extreme [weather] events.” *Id.* at 46. Here, Petitioners are not addressing a “causal link,” but rather whether data actually show any increasing trend of extreme weather events. As EPA explained, this information was presented as a discussion of “typical climate alarmists’ claims” and did not cite any EPA statements. Denial at 27 (JA-029); *see also id.* at 28 (JA-030) (noting that it includes among the “alarmist claims” such phenomena as tornadoes, which were

not a basis for the 2009 Finding). Because Petitioners “do not connect these claims to language in the 2009 Endangerment Finding,” they fail to demonstrate the claims’ relevance. *Id.* at 28 (JA-030).

In any event, EPA’s Denial considered the entire body of available scientific evidence. This includes numerous recent assessments indicating that the types of extreme phenomena that EPA anticipated in 2009 would eventually become more prevalent, *are* becoming more prevalent. For example, the Program reported in 2017 that “[a]nnual trends toward earlier spring melt and reduced snowpack are already affecting water resources in the western United States and these trends are expected to continue.” Fourth National Climate Assessment at 11 (JA-538). It also reported that “[t]he incidence of large forest fires in the western United States and Alaska has increased since the early 1980s (high confidence) and is projected to further increase in those regions as the climate warms, with profound changes to certain ecosystems (medium confidence).” *Id.* at 22 (JA-549). The Panel reported in 2021 that “[t]he global nature of glacier retreat since the 1950s, with almost all of the world’s glaciers retreating synchronously, is unprecedented in at least the last 2000 years (medium confidence).” Panel, 2021: Summary for Policymakers at 8 (JA-593). While the world’s glaciers shrink, global mean sea level increased by 0.20 meters between 1901 and 2018, with the rate of increase from 2006 to 2018 nearly triple that from the earlier period 1901 to 1971. *Id.* at 5 (JA-590). “Human



influence was *very likely* the main driver of these increases since at least 1971.”

*Id.* These trends are impacting human welfare:

Widespread, pervasive impacts to ecosystems, people, settlements, and infrastructure have resulted from observed increases in the frequency and intensity of climate and weather extremes, including hot extremes on land and in the ocean, heavy precipitation events, drought and fire weather (high confidence).

Panel, 2022: Summary for Policymakers at 9 (JA-632).

Thus, to the extent the 2009 Finding described projections of increasingly severe weather and climate phenomena due to rising global average temperatures, *Coalition*, 684 F.3d at 121, EPA reasonably determined that Petitioners do not present information warranting reconsideration or rulemaking.

**e. The record continues to support EPA’s 2009 Endangerment Finding with respect to attribution.**

As noted above, Petitioners dispute EPA’s decision not to reconsider its 2009 determination that the “scientific evidence is compelling that elevated concentrations of heat-trapping greenhouse gases are the root cause of recently observed climate change,” and its rationale for that attribution. *Supra* at 35-36. They contend that the administrative petitions “invalidated” this determination by discrediting “three lines of evidence” to which EPA referred in 2009: temperature records, the physical understanding of climate, and climate models. Pet. Br. at 37. But the above discussion shows otherwise—Petitioners’ objections are not well-

supported and do not call into question the scientific basis for EPA's determination. *Supra* Arguments II.B.2.a-d. Accordingly, EPA explained that “[n]one of the petitioners have submitted sufficient evidence rebutting these [three] lines of evidence to support reconsidering or revising the 2009 Endangerment Finding.” Denial at 16 (JA-018).

Indeed, far from weakening EPA's original basis for attribution, subsequent developments in climate science further *strengthen* it. For example, the Program's Fourth National Climate Assessment in 2017 described how attribution science has improved over recent years, noting that it is possible to make “increasingly confident statements [] result[ing] from scientific advances, including better observational datasets, improved models and detection/attribution methods, and improved estimates of climate forcings.” *Id.* at 116-17 (JA-566-67). It further noted that the continued long-term warming of the global climate system, and the “broad-scale agreement” between the spatial pattern of observed temperature changes and the climate model projections of greenhouse gas-induced temperature changes that were published in the late 1980's, “give more confidence in the attribution of observed warming since 1951 as being due primarily to human activity.” *Id.* The report found it “extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century.” *Id.* at 35 (JA-562). The Panel's most recent assessments made similarly confident statements regarding

attribution. *Supra* at 33, 52-53 (quoting and citing examples). Thus, EPA explained that “[t]he most recent major scientific assessments of [the Panel] and [the Program] have only increased their confidence in the attribution of recent warming relative to the assessments prior to 2009.” Denial at 16 (JA-018).

Finally, EPA made clear that there would still have been a scientific basis for the 2009 Finding had the attribution evidence *not* been so strong. In making the 2009 Finding, EPA “considered the entirety of the evidence regarding both historical and projected climate change, not just the three lines of evidence regarding attribution.” *Id.* Apart from attribution evidence, EPA explained, “there is independent scientific evidence regarding projected climate impacts that also supports the finding of endangerment.” *Id.* As noted above, moreover, assessments since 2009 continue to strengthen and further support EPA’s understanding of the climate system and the impacts that greenhouse gases have on public health and welfare for current and future generations. *Id.* at 11 (JA-013).

For all of these reasons, EPA quite reasonably declined to reconsider the 2009 Finding—which Finding this Court previously upheld as noted—based on Petitioners’ attribution objections.<sup>17</sup>

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<sup>17</sup> The amicus brief of Drs. Harper and Linden and the CO2 Coalition is focused on the 2009 Finding and its Technical Support Document, not EPA’s Denial of administrative petitions. *See* Doc. No. 1970116 at 35 (filed Oct. 21, 2022)

**C. This Court appropriately applies considerable deference to agency scientific judgments.**

Petitioners' Argument II, Pet. Br. 47-52, does not directly contest any aspect of EPA's Denial, but quibbles with this Court's precedent applying the "arbitrary-and-capricious" standard in the context of reviewing agencies' technical and scientific judgments. Petitioners' concern is with the term "extreme deference," which the Court often uses in this context. *Id.* But the Court has used other formulations to describe the same deferential approach. *See, e.g. Ethyl Corp. v. EPA*, 541 F.2d 1, 36 (D.C. Cir. 1976) (en banc) ("We must look at the decision not as the chemist, biologist or statistician that we are qualified neither by training nor experience to be, but as a reviewing court exercising our narrowly defined duty of holding agencies to certain minimal standards of rationality.") (internal quotations, citations and footnotes omitted); *A.L. Pharma, Inc. v. Shalala*, 62 F.3d 1484, 1490 (D.C. Cir. 1995) (describing "a high level of deference"); *Ctr. for Biological Diversity v. EPA*, 749 F.3d 1079, 1087 (D.C. Cir. 2014) (collecting quotes from "decades" of prior cases). Regardless of the semantic formulation used, this Court for decades appropriately has applied a very deferential standard

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(requesting that the Court "rescind the Endangerment Findings and Technical Support Document"). As such, it is irrelevant to any arguably timely claims of Petitioners for this Court's review.

of review to agency technical and scientific judgments, recognizing agency expertise. That approach is wholly consistent with Supreme Court case law. *Supra* at 15.<sup>18</sup> Thus, there is no reason for the Court to discard its considerable body of precedent in this area.

Petitioners do not articulate precisely what “higher level of scrutiny” they believe should be applied. Pet. Br. at 48. They appear, however, to contend that the Court should apply a *different* standard than arbitrary-and-capricious review—something more akin to *de novo* review. *Id.* at 51 (suggesting courts make their own “‘scientific’ determination[s]” based on “empirical evidence”). That would be contrary to Congress’ statutory direction and wholly inappropriate.

Beyond that, Petitioners’ discussion overlooks that they challenge the denial of a rulemaking request, where this Court’s review is additionally “extremely limited and highly deferential.” *New York*, 921 F.3d at 261. In any event, EPA’s

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<sup>18</sup> Petitioners’ invocation here of *West Virginia* is badly misplaced. Pet. Br. at 51. That case concerned methods of statutory interpretation; as Petitioners admit, it did not involve applying the arbitrary-and-capricious standard to agency scientific judgments. *See id.*

Denial was well-reasoned and should be upheld under the arbitrary-and-capricious standard regardless of the precise level of deference applied.

**D. This case does not present a justiciable “major question doctrine” issue.**

Petitioners’ final argument (Pet. Br. at 52-60) also does not contest the basis for EPA’s Denial. Instead, it seeks to “preserve the issue” of whether the Supreme Court’s 2007 decision in *Massachusetts v. EPA* “should be revisited under the major questions doctrine.” *Id.* at 52. As Petitioners acknowledge, *Massachusetts* is controlling in this Court. *Massachusetts* conclusively establishes EPA’s statutory authority to regulate greenhouse gases under the Act, and the Supreme Court has also repeatedly reaffirmed *Massachusetts*. *See, e.g., Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 424 (2011) (“*Massachusetts* made plain that emissions of carbon dioxide qualify as air pollution subject to regulation under the Act.”); *Utility Air Regul. Group*, 573 U.S. at 316-20 and n.5 (applying *Massachusetts* and distinguishing section 202(a) from certain of the Act’s

permitting provisions for stationary sources); *West Virginia*, 142 S. Ct. at 2602, 2610-12.<sup>19</sup>

## CONCLUSION

For the reasons stated in Argument I, the Court should dismiss the petitions for lack of standing. If the Court reaches the merits, it should deny the petitions for the reasons stated in Argument II.

Respectfully submitted,

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Dated: February 21, 2023

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<sup>19</sup> The United States does not agree that *West Virginia* calls *Massachusetts* into question. The court in *Massachusetts* considered the major questions doctrine as articulated in *FDA v. Brown & Williamson Tobacco Co.*, 529 U.S. 120, 133 (2000), in reaching its opinion. See *Massachusetts*, 549 U.S. at 530-32 (distinguishing *Brown v. Williamson* and concluding that “there is nothing counterintuitive to the notion that EPA can curtail the emission of substances that are putting the global climate out of kilter”). In *West Virginia*, the Supreme Court then expressly acknowledged EPA’s 2009 Endangerment Finding and recognized EPA’s authority to regulate greenhouse gases emitted by power plants through measures that would cause individual sources to improve their emissions performance. See 142 S. Ct. at 2602, 2610-12.

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**CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing Final Brief of Respondent was served this 21st day of February, 2023, on all registered counsel, through the Court's CM/ECF system.

/s/ Brian H. Lynk

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**CERTIFICATE OF COMPLIANCE WITH WORD LIMITATION**

Pursuant to Federal Rule of Appellate Procedure 32(a)(7)(C), I hereby certify that the foregoing Final Brief of Respondent contains 12,903 words as counted by the Word in Microsoft Office 365 word processing system, and thus complies with the applicable word limitation.

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KeyCite Yellow Flag - Negative Treatment

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## 5 U.S.C.A. § 706

## § 706. Scope of review

## Currentness

To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall--

- (1) compel agency action unlawfully withheld or unreasonably delayed; and
- (2) hold unlawful and set aside agency action, findings, and conclusions found to be--
  - (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;
  - (B) contrary to constitutional right, power, privilege, or immunity;
  - (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;
  - (D) without observance of procedure required by law;
  - (E) unsupported by substantial evidence in a case subject to [sections 556](#) and [557](#) of this title or otherwise reviewed on the record of an agency hearing provided by statute; or
  - (F) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.

In making the foregoing determinations, the court shall review the whole record or those parts of it cited by a party, and due account shall be taken of the rule of prejudicial error.



KeyCite Yellow Flag - Negative Treatment

Proposed Legislation

United States Code Annotated  
Title 21. Food and Drugs (Refs & Annos)  
Chapter 13. Drug Abuse Prevention and Control (Refs & Annos)  
Subchapter I. Control and Enforcement  
Part B. Authority to Control; Standards and Schedules

## 21 U.S.C.A. § 811

## § 811. Authority and criteria for classification of substances

Effective: November 25, 2015

[Currentness](#)**(a) Rules and regulations of Attorney General; hearing**

The Attorney General shall apply the provisions of this subchapter to the controlled substances listed in the schedules established by [section 812](#) of this title and to any other drug or other substance added to such schedules under this subchapter. Except as provided in subsections (d) and (e), the Attorney General may by rule--

(1) add to such a schedule or transfer between such schedules any drug or other substance if he--

(A) finds that such drug or other substance has a potential for abuse, and

(B) makes with respect to such drug or other substance the findings prescribed by [subsection \(b\) of section 812](#) of this title for the schedule in which such drug is to be placed; or

(2) remove any drug or other substance from the schedules if he finds that the drug or other substance does not meet the requirements for inclusion in any schedule.

Rules of the Attorney General under this subsection shall be made on the record after opportunity for a hearing pursuant to the rulemaking procedures prescribed by subchapter II of chapter 5 of Title 5. Proceedings for the issuance, amendment, or repeal of such rules may be initiated by the Attorney General (1) on his own motion, (2) at the request of the Secretary, or (3) on the petition of any interested party.

**(b) Evaluation of drugs and other substances**

The Attorney General shall, before initiating proceedings under subsection (a) to control a drug or other substance or to remove a drug or other substance entirely from the schedules, and after gathering the necessary data, request from the Secretary a scientific and medical evaluation, and his recommendations, as to whether such drug or other substance should be so controlled or removed as a controlled substance. In making such evaluation and recommendations, the Secretary shall consider the factors listed in paragraphs (2), (3), (6), (7), and (8) of subsection (c) and any scientific or medical considerations involved in paragraphs

(1), (4), and (5) of such subsection. The recommendations of the Secretary shall include recommendations with respect to the appropriate schedule, if any, under which such drug or other substance should be listed. The evaluation and the recommendations of the Secretary shall be made in writing and submitted to the Attorney General within a reasonable time. The recommendations of the Secretary to the Attorney General shall be binding on the Attorney General as to such scientific and medical matters, and if the Secretary recommends that a drug or other substance not be controlled, the Attorney General shall not control the drug or other substance. If the Attorney General determines that these facts and all other relevant data constitute substantial evidence of potential for abuse such as to warrant control or substantial evidence that the drug or other substance should be removed entirely from the schedules, he shall initiate proceedings for control or removal, as the case may be, under subsection (a).

**(c) Factors determinative of control or removal from schedules**

In making any finding under subsection (a) of this section or under subsection (b) of section 812 of this title, the Attorney General shall consider the following factors with respect to each drug or other substance proposed to be controlled or removed from the schedules:

- (1) Its actual or relative potential for abuse.
- (2) Scientific evidence of its pharmacological effect, if known.
- (3) The state of current scientific knowledge regarding the drug or other substance.
- (4) Its history and current pattern of abuse.
- (5) The scope, duration, and significance of abuse.
- (6) What, if any, risk there is to the public health.
- (7) Its psychic or physiological dependence liability.
- (8) Whether the substance is an immediate precursor of a substance already controlled under this subchapter.

**(d) International treaties, conventions, and protocols requiring control; procedures respecting changes in drug schedules of Convention on Psychotropic Substances**

(1) If control is required by United States obligations under international treaties, conventions, or protocols in effect on October 27, 1970, the Attorney General shall issue an order controlling such drug under the schedule he deems most appropriate to carry out such obligations, without regard to the findings required by subsection (a) of this section or section 812(b) of this title and without regard to the procedures prescribed by subsections (a) and (b) of this section.

(2)(A) Whenever the Secretary of State receives notification from the Secretary-General of the United Nations that information has been transmitted by or to the World Health Organization, pursuant to article 2 of the Convention on Psychotropic Substances,

which may justify adding a drug or other substance to one of the schedules of the Convention, transferring a drug or substance from one schedule to another, or deleting it from the schedules, the Secretary of State shall immediately transmit the notice to the Secretary of Health and Human Services who shall publish it in the Federal Register and provide opportunity to interested persons to submit to him comments respecting the scientific and medical evaluations which he is to prepare respecting such drug or substance. The Secretary of Health and Human Services shall prepare for transmission through the Secretary of State to the World Health Organization such medical and scientific evaluations as may be appropriate regarding the possible action that could be proposed by the World Health Organization respecting the drug or substance with respect to which a notice was transmitted under this subparagraph.

**(B)** Whenever the Secretary of State receives information that the Commission on Narcotic Drugs of the United Nations proposes to decide whether to add a drug or other substance to one of the schedules of the Convention, transfer a drug or substance from one schedule to another, or delete it from the schedules, the Secretary of State shall transmit timely notice to the Secretary of Health and Human Services of such information who shall publish a summary of such information in the Federal Register and provide opportunity to interested persons to submit to him comments respecting the recommendation which he is to furnish, pursuant to this subparagraph, respecting such proposal. The Secretary of Health and Human Services shall evaluate the proposal and furnish a recommendation to the Secretary of State which shall be binding on the representative of the United States in discussions and negotiations relating to the proposal.

**(3)** When the United States receives notification of a scheduling decision pursuant to article 2 of the Convention on Psychotropic Substances that a drug or other substance has been added or transferred to a schedule specified in the notification or receives notification (referred to in this subsection as a “schedule notice”) that existing legal controls applicable under this subchapter to a drug or substance and the controls required by the Federal Food, Drug, and Cosmetic Act do not meet the requirements of the schedule of the Convention in which such drug or substance has been placed, the Secretary of Health and Human Services after consultation with the Attorney General, shall first determine whether existing legal controls under this subchapter applicable to the drug or substance and the controls required by the Federal Food, Drug, and Cosmetic Act, meet the requirements of the schedule specified in the notification or schedule notice and shall take the following action:

**(A)** If such requirements are met by such existing controls but the Secretary of Health and Human Services nonetheless believes that more stringent controls should be applied to the drug or substance, the Secretary shall recommend to the Attorney General that he initiate proceedings for scheduling the drug or substance, pursuant to subsections (a) and (b) of this section, to apply to such controls.

**(B)** If such requirements are not met by such existing controls and the Secretary of Health and Human Services concurs in the scheduling decision or schedule notice transmitted by the notification, the Secretary shall recommend to the Attorney General that he initiate proceedings for scheduling the drug or substance under the appropriate schedule pursuant to subsections (a) and (b) of this section.

**(C)** If such requirements are not met by such existing controls and the Secretary of Health and Human Services does not concur in the scheduling decision or schedule notice transmitted by the notification, the Secretary shall--

**(i)** if he deems that additional controls are necessary to protect the public health and safety, recommend to the Attorney General that he initiate proceedings for scheduling the drug or substance pursuant to subsections (a) and (b) of this section, to apply such additional controls;



(ii) request the Secretary of State to transmit a notice of qualified acceptance, within the period specified in the Convention, pursuant to paragraph 7 of article 2 of the Convention, to the Secretary-General of the United Nations;

(iii) request the Secretary of State to transmit a notice of qualified acceptance as prescribed in clause (ii) and request the Secretary of State to ask for a review by the Economic and Social Council of the United Nations, in accordance with paragraph 8 of article 2 of the Convention, of the scheduling decision; or

(iv) in the case of a schedule notice, request the Secretary of State to take appropriate action under the Convention to initiate proceedings to remove the drug or substance from the schedules under the Convention or to transfer the drug or substance to a schedule under the Convention different from the one specified in the schedule notice.

(4)(A) If the Attorney General determines, after consultation with the Secretary of Health and Human Services, that proceedings initiated under recommendations made under paragraph <sup>1</sup> (B) or (C)(i) of paragraph (3) will not be completed within the time period required by paragraph 7 of article 2 of the Convention, the Attorney General, after consultation with the Secretary and after providing interested persons opportunity to submit comments respecting the requirements of the temporary order to be issued under this sentence, shall issue a temporary order controlling the drug or substance under schedule IV or V, whichever is most appropriate to carry out the minimum United States obligations under paragraph 7 of article 2 of the Convention. As a part of such order, the Attorney General shall, after consultation with the Secretary, except such drug or substance from the application of any provision of part C of this subchapter which he finds is not required to carry out the United States obligations under paragraph 7 of article 2 of the Convention. In the case of proceedings initiated under subparagraph (B) of paragraph (3), the Attorney General, concurrently with the issuance of such order, shall request the Secretary of State to transmit a notice of qualified acceptance to the Secretary-General of the United Nations pursuant to paragraph 7 of article 2 of the Convention. A temporary order issued under this subparagraph controlling a drug or other substance subject to proceedings initiated under subsections (a) and (b) of this section shall expire upon the effective date of the application to the drug or substance of the controls resulting from such proceedings.

(B) After a notice of qualified acceptance of a scheduling decision with respect to a drug or other substance is transmitted to the Secretary-General of the United Nations in accordance with clause (ii) or (iii) of paragraph (3)(C) or after a request has been made under clause (iv) of such paragraph with respect to a drug or substance described in a schedule notice, the Attorney General, after consultation with the Secretary of Health and Human Services and after providing interested persons opportunity to submit comments respecting the requirements of the order to be issued under this sentence, shall issue an order controlling the drug or substance under schedule IV or V, whichever is most appropriate to carry out the minimum United States obligations under paragraph 7 of article 2 of the Convention in the case of a drug or substance for which a notice of qualified acceptance was transmitted or whichever the Attorney General determines is appropriate in the case of a drug or substance described in a schedule notice. As a part of such order, the Attorney General shall, after consultation with the Secretary, except such drug or substance from the application of any provision of part C of this subchapter which he finds is not required to carry out the United States obligations under paragraph 7 of article 2 of the Convention. If, as a result of a review under paragraph 8 of article 2 of the Convention of the scheduling decision with respect to which a notice of qualified acceptance was transmitted in accordance with clause (ii) or (iii) of paragraph (3)(C)--

(i) the decision is reversed, and

(ii) the drug or substance subject to such decision is not required to be controlled under schedule IV or V to carry out the minimum United States obligations under paragraph 7 of article 2 of the Convention,

the order issued under this subparagraph with respect to such drug or substance shall expire upon receipt by the United States of the review decision. If, as a result of action taken pursuant to action initiated under a request transmitted under clause (iv) of paragraph (3)(C), the drug or substance with respect to which such action was taken is not required to be controlled under schedule IV or V, the order issued under this paragraph with respect to such drug or substance shall expire upon receipt by the United States of a notice of the action taken with respect to such drug or substance under the Convention.

(C) An order issued under subparagraph (A) or (B) may be issued without regard to the findings required by subsection (a) of this section or by [section 812\(b\)](#) of this title and without regard to the procedures prescribed by subsection (a) or (b) of this section.

(5) Nothing in the amendments made by the Psychotropic Substances Act of 1978 or the regulations or orders promulgated thereunder shall be construed to preclude requests by the Secretary of Health and Human Services or the Attorney General through the Secretary of State, pursuant to article 2 or other applicable provisions of the Convention, for review of scheduling decisions under such Convention, based on new or additional information.

**(e) Immediate precursors**

The Attorney General may, without regard to the findings required by subsection (a) of this section or [section 812\(b\)](#) of this title and without regard to the procedures prescribed by subsections (a) and (b) of this section, place an immediate precursor in the same schedule in which the controlled substance of which it is an immediate precursor is placed or in any other schedule with a higher numerical designation. If the Attorney General designates a substance as an immediate precursor and places it in a schedule, other substances shall not be placed in a schedule solely because they are its precursors.

**(f) Abuse potential**

If, at the time a new-drug application is submitted to the Secretary for any drug having a stimulant, depressant, or hallucinogenic effect on the central nervous system, it appears that such drug has an abuse potential, such information shall be forwarded by the Secretary to the Attorney General.

**(g) Exclusion of non-narcotic substances sold over the counter without a prescription; dextromethorphan; exemption of substances lacking abuse potential**

(1) The Attorney General shall by regulation exclude any non-narcotic drug which contains a controlled substance from the application of this subchapter and subchapter II of this chapter if such drug may, under the Federal Food, Drug, and Cosmetic Act, be lawfully sold over the counter without a prescription.

(2) Dextromethorphan shall not be deemed to be included in any schedule by reason of enactment of this subchapter unless controlled after October 27, 1970 pursuant to the foregoing provisions of this section.

(3) The Attorney General may, by regulation, exempt any compound, mixture, or preparation containing a controlled substance from the application of all or any part of this subchapter if he finds such compound, mixture, or preparation meets the requirements of one of the following categories:

(A) A mixture, or preparation containing a nonnarcotic controlled substance, which mixture or preparation is approved for prescription use, and which contains one or more other active ingredients which are not listed in any schedule and which are included therein in such combinations, quantity, proportion, or concentration as to vitiate the potential for abuse.

(B) A compound, mixture, or preparation which contains any controlled substance, which is not for administration to a human being or animal, and which is packaged in such form or concentration, or with adulterants or denaturants, so that as packaged it does not present any significant potential for abuse.

(C) Upon the recommendation of the Secretary of Health and Human Services, a compound, mixture, or preparation which contains any anabolic steroid, which is intended for administration to a human being or an animal, and which, because of its concentration, preparation, formulation or delivery system, does not present any significant potential for abuse.

**(h) Temporary scheduling to avoid imminent hazards to public safety**

(1) If the Attorney General finds that the scheduling of a substance in schedule I on a temporary basis is necessary to avoid an imminent hazard to the public safety, he may, by order and without regard to the requirements of subsection (b) relating to the Secretary of Health and Human Services, schedule such substance in schedule I if the substance is not listed in any other schedule in [section 812](#) of this title or if no exemption or approval is in effect for the substance under section 505 of the Federal Food, Drug, and Cosmetic Act. Such an order may not be issued before the expiration of thirty days from--

(A) the date of the publication by the Attorney General of a notice in the Federal Register of the intention to issue such order and the grounds upon which such order is to be issued, and

(B) the date the Attorney General has transmitted the notice required by paragraph (4).

(2) The scheduling of a substance under this subsection shall expire at the end of 2 years from the date of the issuance of the order scheduling such substance, except that the Attorney General may, during the pendency of proceedings under subsection (a)(1) with respect to the substance, extend the temporary scheduling for up to 1 year.

(3) When issuing an order under paragraph (1), the Attorney General shall be required to consider, with respect to the finding of an imminent hazard to the public safety, only those factors set forth in paragraphs (4), (5), and (6) of subsection (c), including actual abuse, diversion from legitimate channels, and clandestine importation, manufacture, or distribution.

(4) The Attorney General shall transmit notice of an order proposed to be issued under paragraph (1) to the Secretary of Health and Human Services. In issuing an order under paragraph (1), the Attorney General shall take into consideration any comments submitted by the Secretary in response to a notice transmitted pursuant to this paragraph.

(5) An order issued under paragraph (1) with respect to a substance shall be vacated upon the conclusion of a subsequent rulemaking proceeding initiated under subsection (a) with respect to such substance.

(6) An order issued under paragraph (1) is not subject to judicial review.

**(i) Temporary and permanent scheduling of recently emerged anabolic steroids**

(1) The Attorney General may issue a temporary order adding a drug or other substance to the definition of anabolic steroids if the Attorney General finds that--

(A) the drug or other substance satisfies the criteria for being considered an anabolic steroid under [section 802\(41\)](#) of this title but is not listed in that section or by regulation of the Attorney General as being an anabolic steroid; and

(B) adding such drug or other substance to the definition of anabolic steroids will assist in preventing abuse or misuse of the drug or other substance.

(2) An order issued under paragraph (1) shall not take effect until 30 days after the date of the publication by the Attorney General of a notice in the Federal Register of the intention to issue such order and the grounds upon which such order is to be issued. The order shall expire not later than 24 months after the date it becomes effective, except that the Attorney General may, during the pendency of proceedings under paragraph (6), extend the temporary scheduling order for up to 6 months.

(3) The Attorney General shall transmit notice of an order proposed to be issued under paragraph (1) to the Secretary of Health and Human Services. In issuing an order under paragraph (1), the Attorney General shall take into consideration any comments submitted by the Secretary in response to a notice transmitted pursuant to this paragraph.

(4) A temporary scheduling order issued under paragraph (1) shall be vacated upon the issuance of a permanent scheduling order under paragraph (6).

(5) An order issued under paragraph (1) is not subject to judicial review.

(6) The Attorney General may, by rule, issue a permanent order adding a drug or other substance to the definition of anabolic steroids if such drug or other substance satisfies the criteria for being considered an anabolic steroid under [section 802\(41\)](#) of this title. Such rulemaking may be commenced simultaneously with the issuance of the temporary order issued under paragraph (1).

**(j) Interim final rule; date of issuance; procedure for final rule**

(1) With respect to a drug referred to in subsection (f), if the Secretary of Health and Human Services recommends that the Attorney General control the drug in schedule II, III, IV, or V pursuant to subsections (a) and (b), the Attorney General shall, not later than 90 days after the date described in paragraph (2), issue an interim final rule controlling the drug in accordance with such subsections and [section 812\(b\)](#) of this title using the procedures described in paragraph (3).

(2) The date described in this paragraph shall be the later of--

(A) the date on which the Attorney General receives the scientific and medical evaluation and the scheduling recommendation from the Secretary of Health and Human Services in accordance with subsection (b); or

(B) the date on which the Attorney General receives notification from the Secretary of Health and Human Services that the Secretary has approved an application under section 505(c), 512, or 571 of the Federal Food, Drug, and Cosmetic Act or [section 262\(a\) of Title 42](#), or indexed a drug under section 572 of the Federal Food, Drug, and Cosmetic Act, with respect to the drug described in paragraph (1).

(3) A rule issued by the Attorney General under paragraph (1) shall become immediately effective as an interim final rule without requiring the Attorney General to demonstrate good cause therefor. The interim final rule shall give interested persons the opportunity to comment and to request a hearing. After the conclusion of such proceedings, the Attorney General shall issue a final rule in accordance with the scheduling criteria of subsections (b), (c), and (d) of this section and [section 812\(b\)](#) of this title.

### CREDIT(S)

(Pub.L. 91-513, Title II, § 201, Oct. 27, 1970, 84 Stat. 1245; Pub.L. 95-633, Title I, § 102(a), Nov. 10, 1978, 92 Stat. 3769; Pub.L. 96-88, Title V, § 509(b), Oct. 17, 1979, 93 Stat. 695; Pub.L. 98-473, Title II, §§ 508, 509(a), Oct. 12, 1984, 98 Stat. 2071, 2072; Pub.L. 108-358, § 2(b), Oct. 22, 2004, 118 Stat. 1663; Pub.L. 112-144, Title XI, § 1153, July 9, 2012, 126 Stat. 1132; Pub.L. 113-260, § 2(b), Dec. 18, 2014, 128 Stat. 2930; Pub.L. 114-89, § 2(b), Nov. 25, 2015, 129 Stat. 700.)

[Notes of Decisions \(76\)](#)

### Footnotes

1 So in original. Probably should be “subparagraph”.

21 U.S.C.A. § 811, 21 USCA § 811

Current through P.L. 117-228. Some statute sections may be more current, see credits for details.



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Proposed Legislation

United States Code Annotated  
Title 42. The Public Health and Welfare  
Chapter 85. Air Pollution Prevention and Control (Refs & Annos)  
Subchapter II. Emission Standards for Moving Sources  
Part A. Motor Vehicle Emission and Fuel Standards (Refs & Annos)

## 42 U.S.C.A. § 7521

§ 7521. Emission standards for new motor vehicles or new motor vehicle engines

## Currentness

**(a) Authority of Administrator to prescribe by regulation**

Except as otherwise provided in subsection (b)--

(1) The Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. Such standards shall be applicable to such vehicles and engines for their useful life (as determined under subsection (d), relating to useful life of vehicles for purposes of certification), whether such vehicles and engines are designed as complete systems or incorporate devices to prevent or control such pollution.

(2) Any regulation prescribed under paragraph (1) of this subsection (and any revision thereof) shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period.

**(3)(A) In general**

(i) Unless the standard is changed as provided in subparagraph (B), regulations under paragraph (1) of this subsection applicable to emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter from classes or categories of heavy-duty vehicles or engines manufactured during or after model year 1983 shall contain standards which reflect the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the model year to which such standards apply, giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology.

(ii) In establishing classes or categories of vehicles or engines for purposes of regulations under this paragraph, the Administrator may base such classes or categories on gross vehicle weight, horsepower, type of fuel used, or other appropriate factors.

**(B) Revised standards for heavy duty trucks**

(i) On the basis of information available to the Administrator concerning the effects of air pollutants emitted from heavy-duty vehicles or engines and from other sources of mobile source related pollutants on the public health and welfare, and taking costs into account, the Administrator may promulgate regulations under paragraph (1) of this subsection revising any standard promulgated under, or before the date of, the enactment of the Clean Air Act Amendments of 1990 (or previously revised under this subparagraph) and applicable to classes or categories of heavy-duty vehicles or engines.

(ii) Effective for the model year 1998 and thereafter, the regulations under paragraph (1) of this subsection applicable to emissions of oxides of nitrogen (NO<sub>x</sub>) from gasoline and diesel-fueled heavy duty trucks shall contain standards which provide that such emissions may not exceed 4.0 grams per brake horsepower hour (gbh).

**(C) Lead time and stability**

Any standard promulgated or revised under this paragraph and applicable to classes or categories of heavy-duty vehicles or engines shall apply for a period of no less than 3 model years beginning no earlier than the model year commencing 4 years after such revised standard is promulgated.

**(D) Rebuilding practices**

The Administrator shall study the practice of rebuilding heavy-duty engines and the impact rebuilding has on engine emissions. On the basis of that study and other information available to the Administrator, the Administrator may prescribe requirements to control rebuilding practices, including standards applicable to emissions from any rebuilt heavy-duty engines (whether or not the engine is past its statutory useful life), which in the Administrator's judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare taking costs into account. Any regulation shall take effect after a period the Administrator finds necessary to permit the development and application of the requisite control measures, giving appropriate consideration to the cost of compliance within the period and energy and safety factors.

**(E) Motorcycles**

For purposes of this paragraph, motorcycles and motorcycle engines shall be treated in the same manner as heavy-duty vehicles and engines (except as otherwise permitted under [section 7525\(f\)\(1\)](#) of this title) unless the Administrator promulgates a rule reclassifying motorcycles as light-duty vehicles within the meaning of this section or unless the Administrator promulgates regulations under subsection (a) applying standards applicable to the emission of air pollutants from motorcycles as a separate class or category. In any case in which such standards are promulgated for such emissions from motorcycles as a separate class or category, the Administrator, in promulgating such standards, shall consider the need to achieve equivalency of emission reductions between motorcycles and other motor vehicles to the maximum extent practicable.

(4)(A) Effective with respect to vehicles and engines manufactured after model year 1978, no emission control device, system, or element of design shall be used in a new motor vehicle or new motor vehicle engine for purposes of complying with requirements prescribed under this subchapter if such device, system, or element of design will cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function.

(B) In determining whether an unreasonable risk exists under subparagraph (A), the Administrator shall consider, among other factors, (i) whether and to what extent the use of any device, system, or element of design causes, increases, reduces, or eliminates emissions of any unregulated pollutants; (ii) available methods for reducing or eliminating any risk to public health, welfare, or safety which may be associated with the use of such device, system, or element of design, and (iii) the availability of other devices, systems, or elements of design which may be used to conform to requirements prescribed under this subchapter without causing or contributing to such unreasonable risk. The Administrator shall include in the consideration required by this paragraph all relevant information developed pursuant to section 7548 of this title.

(5)(A) If the Administrator promulgates final regulations which define the degree of control required and the test procedures by which compliance could be determined for gasoline vapor recovery of uncontrolled emissions from the fueling of motor vehicles, the Administrator shall, after consultation with the Secretary of Transportation with respect to motor vehicle safety, prescribe, by regulation, fill pipe standards for new motor vehicles in order to insure effective connection between such fill pipe and any vapor recovery system which the Administrator determines may be required to comply with such vapor recovery regulations. In promulgating such standards the Administrator shall take into consideration limits on fill pipe diameter, minimum design criteria for nozzle retainer lips, limits on the location of the unleaded fuel restrictors, a minimum access zone surrounding a fill pipe, a minimum pipe or nozzle insertion angle, and such other factors as he deems pertinent.

(B) Regulations prescribing standards under subparagraph (A) shall not become effective until the introduction of the model year for which it would be feasible to implement such standards, taking into consideration the restraints of an adequate leadtime for design and production.

(C) Nothing in subparagraph (A) shall (i) prevent the Administrator from specifying different nozzle and fill neck sizes for gasoline with additives and gasoline without additives or (ii) permit the Administrator to require a specific location, configuration, modeling, or styling of the motor vehicle body with respect to the fuel tank fill neck or fill nozzle clearance envelope.

(D) For the purpose of this paragraph, the term “fill pipe” shall include the fuel tank fill pipe, fill neck, fill inlet, and closure.

**(6) Onboard vapor recovery**

Within 1 year after November 15, 1990, the Administrator shall, after consultation with the Secretary of Transportation regarding the safety of vehicle-based (“onboard”) systems for the control of vehicle refueling emissions, promulgate standards under this section requiring that new light-duty vehicles manufactured beginning in the fourth model year after the model year in which the standards are promulgated and thereafter shall be equipped with such systems. The standards required under this paragraph shall apply to a percentage of each manufacturer's fleet of new light-duty vehicles beginning with the fourth model year after the model year in which the standards are promulgated. The percentage shall be as specified in the following table:

**IMPLEMENTATION SCHEDULE FOR ONBOARD VAPOR RECOVERY REQUIREMENTS**

Model year commencing after standards promulgated	Percentage*
Fourth.....	40



Fifth.....	80
After Fifth.....	100

\*Percentages in the table refer to a percentage of the manufacturer's sales volume.

The standards shall require that such systems provide a minimum evaporative emission capture efficiency of 95 percent. The requirements of section 7511a(b)(3) of this title (relating to stage II gasoline vapor recovery) for areas classified under section 7511 of this title as moderate for ozone shall not apply after promulgation of such standards and the Administrator may, by rule, revise or waive the application of the requirements of such section 7511a(b)(3) of this title for areas classified under section 7511 of this title as Serious, Severe, or Extreme for ozone, as appropriate, after such time as the Administrator determines that onboard emissions control systems required under this paragraph are in widespread use throughout the motor vehicle fleet.

**(b) Emissions of carbon monoxide, hydrocarbons, and oxides of nitrogen; annual report to Congress; waiver of emission standards; research objectives**

**(1)(A)** The regulations under subsection (a) applicable to emissions of carbon monoxide and hydrocarbons from light-duty vehicles and engines manufactured during model years 1977 through 1979 shall contain standards which provide that such emissions from such vehicles and engines may not exceed 1.5 grams per vehicle mile of hydrocarbons and 15.0 grams per vehicle mile of carbon monoxide. The regulations under subsection (a) applicable to emissions of carbon monoxide from light-duty vehicles and engines manufactured during the model year 1980 shall contain standards which provide that such emissions may not exceed 7.0 grams per vehicle mile. The regulations under subsection (a) applicable to emissions of hydrocarbons from light-duty vehicles and engines manufactured during or after model year 1980 shall contain standards which require a reduction of at least 90 percent from emissions of such pollutant allowable under the standards under this section applicable to light-duty vehicles and engines manufactured in model year 1970. Unless waived as provided in paragraph (5), regulations under subsection (a) applicable to emissions of carbon monoxide from light-duty vehicles and engines manufactured during or after the model year 1981 shall contain standards which require a reduction of at least 90 percent from emissions of such pollutant allowable under the standards under this section applicable to light-duty vehicles and engines manufactured in model year 1970.

**(B)** The regulations under subsection (a) applicable to emissions of oxides of nitrogen from light-duty vehicles and engines manufactured during model years 1977 through 1980 shall contain standards which provide that such emissions from such vehicles and engines may not exceed 2.0 grams per vehicle mile. The regulations under subsection (a) applicable to emissions of oxides of nitrogen from light-duty vehicles and engines manufactured during the model year 1981 and thereafter shall contain standards which provide that such emissions from such vehicles and engines may not exceed 1.0 gram per vehicle mile. The Administrator shall prescribe standards in lieu of those required by the preceding sentence, which provide that emissions of oxides of nitrogen may not exceed 2.0 grams per vehicle mile for any light-duty vehicle manufactured during model years 1981 and 1982 by any manufacturer whose production, by corporate identity, for calendar year 1976 was less than three hundred thousand light-duty motor vehicles worldwide if the Administrator determines that--

**(i)** the ability of such manufacturer to meet emission standards in the 1975 and subsequent model years was, and is, primarily dependent upon technology developed by other manufacturers and purchased from such manufacturers; and

**(ii)** such manufacturer lacks the financial resources and technological ability to develop such technology.

**(C)** The Administrator may promulgate regulations under subsection (a)(1) revising any standard prescribed or previously revised under this subsection, as needed to protect public health or welfare, taking costs, energy, and safety into account. Any

revised standard shall require a reduction of emissions from the standard that was previously applicable. Any such revision under this subchapter may provide for a phase-in of the standard. It is the intent of Congress that the numerical emission standards specified in subsections (a)(3)(B)(ii), (g), (h), and (i) shall not be modified by the Administrator after November 15, 1990, for any model year before the model year 2004.

(2) Emission standards under paragraph (1), and measurement techniques on which such standards are based (if not promulgated prior to November 15, 1990), shall be promulgated by regulation within 180 days after November 15, 1990.

(3) For purposes of this part--

(A)(i) The term “model year” with reference to any specific calendar year means the manufacturer's annual production period (as determined by the Administrator) which includes January 1 of such calendar year. If the manufacturer has no annual production period, the term “model year” shall mean the calendar year.

(ii) For the purpose of assuring that vehicles and engines manufactured before the beginning of a model year were not manufactured for purposes of circumventing the effective date of a standard required to be prescribed by subsection (b), the Administrator may prescribe regulations defining “model year” otherwise than as provided in clause (i).

(B) Repealed. Pub.L. 101-549, Title II, § 230(1), Nov. 15, 1990, 104 Stat. 2529.

(C) The term “heavy duty vehicle” means a truck, bus, or other vehicle manufactured primarily for use on the public streets, roads, and highways (not including any vehicle operated exclusively on a rail or rails) which has a gross vehicle weight (as determined under regulations promulgated by the Administrator) in excess of six thousand pounds. Such term includes any such vehicle which has special features enabling off-street or off-highway operation and use.

(3)<sup>1</sup> Upon the petition of any manufacturer, the Administrator, after notice and opportunity for public hearing, may waive the standard required under subparagraph (B) of paragraph (1) to not exceed 1.5 grams of oxides of nitrogen per vehicle mile for any class or category of light-duty vehicles or engines manufactured by such manufacturer during any period of up to four model years beginning after the model year 1980 if the manufacturer demonstrates that such waiver is necessary to permit the use of an innovative power train technology, or innovative emission control device or system, in such class or category of vehicles or engines and that such technology or system was not utilized by more than 1 percent of the light-duty vehicles sold in the United States in the 1975 model year. Such waiver may be granted only if the Administrator determines--

(A) that such waiver would not endanger public health,

(B) that there is a substantial likelihood that the vehicles or engines will be able to comply with the applicable standard under this section at the expiration of the waiver, and

(C) that the technology or system has a potential for long-term air quality benefit and has the potential to meet or exceed the average fuel economy standard applicable under the Energy Policy and Conservation Act upon the expiration of the waiver.

No waiver under this subparagraph<sup>2</sup> granted to any manufacturer shall apply to more than 5 percent of such manufacturer's production or more than fifty thousand vehicles or engines, whichever is greater.

**(c) Feasibility study and investigation by National Academy of Sciences; reports to Administrator and Congress; availability of information**

(1) The Administrator shall undertake to enter into appropriate arrangements with the National Academy of Sciences to conduct a comprehensive study and investigation of the technological feasibility of meeting the emissions standards required to be prescribed by the Administrator by subsection (b) of this section.

(2) Of the funds authorized to be appropriated to the Administrator by this chapter, such amounts as are required shall be available to carry out the study and investigation authorized by paragraph (1) of this subsection.

(3) In entering into any arrangement with the National Academy of Sciences for conducting the study and investigation authorized by paragraph (1) of this subsection, the Administrator shall request the National Academy of Sciences to submit semiannual reports on the progress of its study and investigation to the Administrator and the Congress, beginning not later than July 1, 1971, and continuing until such study and investigation is completed.

(4) The Administrator shall furnish to such Academy at its request any information which the Academy deems necessary for the purpose of conducting the investigation and study authorized by paragraph (1) of this subsection. For the purpose of furnishing such information, the Administrator may use any authority he has under this chapter (A) to obtain information from any person, and (B) to require such person to conduct such tests, keep such records, and make such reports respecting research or other activities conducted by such person as may be reasonably necessary to carry out this subsection.

**(d) Useful life of vehicles**

The Administrator shall prescribe regulations under which the useful life of vehicles and engines shall be determined for purposes of subsection (a)(1) of this section and [section 7541](#) of this title. Such regulations shall provide that except where a different useful life period is specified in this subchapter useful life shall--

(1) in the case of light duty vehicles and light duty vehicle engines and light-duty trucks up to 3,750 lbs. LVW and up to 6,000 lbs. GVWR, be a period of use of five years or fifty thousand miles (or the equivalent), whichever first occurs, except that in the case of any requirement of this section which first becomes applicable after November 15, 1990, where the useful life period is not otherwise specified for such vehicles and engines, the period shall be 10 years or 100,000 miles (or the equivalent), whichever first occurs, with testing for purposes of in-use compliance under [section 7541](#) of this title up to (but not beyond) 7 years or 75,000 miles (or the equivalent), whichever first occurs;

(2) in the case of any other motor vehicle or motor vehicle engine (other than motorcycles or motorcycle engines), be a period of use set forth in paragraph (1) unless the Administrator determines that a period of use of greater duration or mileage is appropriate; and

(3) in the case of any motorcycle or motorcycle engine, be a period of use the Administrator shall determine.

**(e) New power sources or propulsion systems**

In the event of a new power source or propulsion system for new motor vehicles or new motor vehicle engines is submitted for certification pursuant to [section 7525\(a\)](#) of this title, the Administrator may postpone certification until he has prescribed standards for any air pollutants emitted by such vehicle or engine which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger the public health or welfare but for which standards have not been prescribed under subsection (a).

**(f)<sup>3</sup> High altitude regulations**

**(1)** The high altitude regulation in effect with respect to model year 1977 motor vehicles shall not apply to the manufacture, distribution, or sale of 1978 and later model year motor vehicles. Any future regulation affecting the sale or distribution of motor vehicles or engines manufactured before the model year 1984 in high altitude areas of the country shall take effect no earlier than model year 1981.

**(2)** Any such future regulation applicable to high altitude vehicles or engines shall not require a percentage of reduction in the emissions of such vehicles which is greater than the required percentage of reduction in emissions from motor vehicles as set forth in subsection (b). This percentage reduction shall be determined by comparing any proposed high altitude emission standards to high altitude emissions from vehicles manufactured during model year 1970. In no event shall regulations applicable to high altitude vehicles manufactured before the model year 1984 establish a numerical standard which is more stringent than that applicable to vehicles certified under non-high altitude conditions.

**(3)** [Section 7607\(d\)](#) of this title shall apply to any high altitude regulation referred to in paragraph (2) and before promulgating any such regulation, the Administrator shall consider and make a finding with respect to--

**(A)** the economic impact upon consumers, individual high altitude dealers, and the automobile industry of any such regulation, including the economic impact which was experienced as a result of the regulation imposed during model year 1977 with respect to high altitude certification requirements;

**(B)** the present and future availability of emission control technology capable of meeting the applicable vehicle and engine emission requirements without reducing model availability; and

**(C)** the likelihood that the adoption of such a high altitude regulation will result in any significant improvement in air quality in any area to which it shall apply.

**(g) Light-duty trucks up to 6,000 lbs. GVWR and light-duty vehicles; standards for model years after 1993****(1) NMHC, CO, and NO<sub>x</sub>**

Effective with respect to the model year 1994 and thereafter, the regulations under subsection (a) applicable to emissions of nonmethane hydrocarbons (NMHC), carbon monoxide (CO), and oxides of nitrogen (NO<sub>x</sub>) from light-duty trucks (LDTs) of

up to 6,000 lbs. gross vehicle weight rating (GVWR) and light-duty vehicles (LDVs) shall contain standards which provide that emissions from a percentage of each manufacturer's sales volume of such vehicles and trucks shall comply with the levels specified in table G. The percentage shall be as specified in the implementation schedule below:

**TABLE G--EMISSION STANDARDS FOR NMHC, CO, AND NO<sub>x</sub> FROM LIGHT-DUTY TRUCKS OF UP TO 6,000 LBS. GVWR AND LIGHT-DUTY VEHICLES**

Vehicle type	Column A			Column B		
	(5 yrs/50,000 mi)			(10 yrs/100,000 mi)		
	NMHC	CO	NO <sub>x</sub>	NMHC	CO	NO <sub>x</sub>
LDTs (0-3,750 lbs. LVW) and light-duty vehicles.....	0.25	3.4	0.4*	0.31	4.2	0.6*
LDTs (3,751-5,750 lbs. LVW).....	0.32	4.4	0.7**	0.40	5.5	0.97

Standards are expressed in grams per mile (gpm).

For standards under column A, for purposes of certification under section 7525 of this title, the applicable useful life shall be 5 years or 50,000 miles (or the equivalent), whichever first occurs.

For standards under column B, for purposes of certification under section 7525 of this title, the applicable useful life shall be 10 years or 100,000 miles (or the equivalent), whichever first occurs.

\* In the case of diesel-fueled LDTs (0-3,750 lvw) and light-duty vehicles, before the model year 2004, in lieu of the 0.4 and 0.6 standards for NO<sub>x</sub>, the applicable standards for NO<sub>x</sub> shall be 1.0 gpm for a useful life of 5 years or 50,000 miles (or the equivalent), whichever first occurs, and 1.25 gpm for a useful life of 10 years or 100,000 miles (or the equivalent), whichever first occurs.

\*\* This standard does not apply to diesel-fueled LDTs (3,751-5,750 lbs. LVW).

**IMPLEMENTATION SCHEDULE FOR TABLE G STANDARDS**

Model year	Percentage *
1994.....	40
1995.....	80
after 1995.....	100

\* Percentages in the table refer to a percentage of each manufacturer's sales volume.

**(2) PM Standard**

Effective with respect to model year 1994 and thereafter in the case of light-duty vehicles, and effective with respect to the model year 1995 and thereafter in the case of light-duty trucks (LDTs) of up to 6,000 lbs. gross vehicle weight rating (GVWR), the regulations under subsection (a) applicable to emissions of particulate matter (PM) from such vehicles and trucks shall contain standards which provide that such emissions from a percentage of each manufacturer's sales volume of such vehicles and trucks shall not exceed the levels specified in the table below. The percentage shall be as specified in the Implementation Schedule below.

**PM STANDARD FOR LDTS OF UP TO 6,000 LBS. GVWR**

Useful life period	Standard
5/50,000.....	0.80 gpm
10/100,000.....	0.10 gpm

The applicable useful life, for purposes of certification under [section 7525](#) of this title and for purposes of in-use compliance under [section 7541](#) of this title, shall be 5 years or 50,000 miles (or the equivalent), whichever first occurs, in the case of the 5/50,000 standard.

The applicable useful life, for purposes of certification under [section 7525](#) of this title and for purposes of in-use compliance under [section 7541](#) of this title, shall be 10 years or 100,000 miles (or the equivalent), whichever first occurs in the case of the 10/100,000 standard.

**IMPLEMENTATION SCHEDULE FOR PM STANDARDS**

Model year	Light-duty vehicles	LDTs
1994.....	40%*	.....
1995.....	80%*	40%*
1996.....	100%*	80%*
after 1996.....	100%*	100%*

\* Percentages in the table refer to a percentage of each manufacturer's sales volume.

**(h) Light-duty trucks of more than 6,000 lbs. GVWR; standards for model years after 1995**

Effective with respect to the model year 1996 and thereafter, the regulations under subsection (a) applicable to emissions of nonmethane hydrocarbons (NMHC), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), and particulate matter (PM) from light-duty trucks (LDTs) of more than 6,000 lbs. gross vehicle weight rating (GVWR) shall contain standards which provide that

emissions from a specified percentage of each manufacturer's sales volume of such trucks shall comply with the levels specified in table H. The specified percentage shall be 50 percent in model year 1996 and 100 percent thereafter.

**TABLE H--EMISSION STANDARDS FOR NMHC AND CO FROM GASOLINE AND DIESEL FUELED LIGHT-DUTY TRUCKS OF MORE THAN 6,000 LBS. GVWR**

LDT Test weight	Column A			Column B			
	(5 yrs/50,000 mi)			(11 yrs/120,000 mi)			
	NMHC	CO	NO <sub>x</sub>	NMHC	CO	NO <sub>x</sub>	PM
3,751-5,750 lbs. TW	0.32	4.4	0.7*	0.46	6.4	0.98	0.10
Over 5,750 lbs. TW	0.39	5.0	1.1*	0.56	7.3	1.53	0.12

Standards are expressed in grams per mile (GPM).

For standards under column A, for purposes of certification under section 7525 of this title, the applicable useful life shall be 5 years or 50,000 miles (or the equivalent) whichever first occurs.

For standards under column B, for purposes of certification under section 7525 of this title, the applicable useful life shall be 11 years or 120,000 miles (or the equivalent), whichever first occurs.

\* Not applicable to diesel-fueled LDTs.

**(i) Phase II study for certain light-duty vehicles and light-duty trucks**

(1) The Administrator, with the participation of the Office of Technology Assessment, shall study whether or not further reductions in emissions from light-duty vehicles and light-duty trucks should be required pursuant to this subchapter. The study shall consider whether to establish with respect to model years commencing after January 1, 2003, the standards and useful life period for gasoline and diesel-fueled light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less specified in the following table:

**TABLE 3--PENDING EMISSION STANDARDS FOR GASOLINE AND DIESEL FUELED LIGHT-DUTY VEHICLES AND LIGHT-DUTY TRUCKS 3,750 LBS. LVW OR LESS**

Pollutant	Emission level *
NMHC.....	0.125 GPM
NO <sub>x</sub> .....	0.2 GPM

CO..... 1.7  
GPM

\* Emission levels are expressed in grams per mile (GPM). For vehicles and engines subject to this subsection for purposes of subsection (d) of this section and any reference thereto, the useful life of such vehicles and engines shall be a period of 10 years or 100,000 miles (or the equivalent), whichever first occurs.

Such study shall also consider other standards and useful life periods which are more stringent or less stringent than those set forth in table 3 (but more stringent than those referred to in subsections (g) and (h)).

(2)(A) As part of the study under paragraph (1), the Administrator shall examine the need for further reductions in emissions in order to attain or maintain the national ambient air quality standards, taking into consideration the waiver provisions of section 7543(b) of this title. As part of such study, the Administrator shall also examine--

(i) the availability of technology (including the costs thereof), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for meeting more stringent emission standards than those provided in subsections (g) and (h) for model years commencing not earlier than after January 1, 2003, and not later than model year 2006, including the lead time and safety and energy impacts of meeting more stringent emission standards; and

(ii) the need for, and cost effectiveness of, obtaining further reductions in emissions from such light-duty vehicles and light-duty trucks, taking into consideration alternative means of attaining or maintaining the national primary ambient air quality standards pursuant to State implementation plans and other requirements of this chapter, including their feasibility and cost effectiveness.

(B) The Administrator shall submit a report to Congress no later than June 1, 1997, containing the results of the study under this subsection, including the results of the examination conducted under subparagraph (A). Before submittal of such report the Administrator shall provide a reasonable opportunity for public comment and shall include a summary of such comments in the report to Congress.

(3)(A) Based on the study under paragraph (1) the Administrator shall determine, by rule, within 3 calendar years after the report is submitted to Congress, but not later than December 31, 1999, whether--

(i) there is a need for further reductions in emissions as provided in paragraph (2)(A);

(ii) the technology for meeting more stringent emission standards will be available, as provided in paragraph (2)(A)(i), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); and

(iii) obtaining further reductions in emissions from such vehicles will be needed and cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii).

The rulemaking under this paragraph shall commence within 3 months after submission of the report to Congress under paragraph (2)(B).



**(B)** If the Administrator determines under subparagraph (A) that--

**(i)** there is no need for further reductions in emissions as provided in paragraph (2)(A);

**(ii)** the technology for meeting more stringent emission standards will not be available as provided in paragraph (2)(A)(i), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); or

**(iii)** obtaining further reductions in emissions from such vehicles will not be needed or cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii),

the Administrator shall not promulgate more stringent standards than those in effect pursuant to subsections (g) and (h). Nothing in this paragraph shall prohibit the Administrator from exercising the Administrator's authority under subsection (a) to promulgate more stringent standards for light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less at any other time thereafter in accordance with subsection (a).

**(C)** If the Administrator determines under subparagraph (A) that--

**(i)** there is a need for further reductions in emissions as provided in paragraph (2)(A);

**(ii)** the technology for meeting more stringent emission standards will be available, as provided in paragraph (2)(A)(i), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); and

**(iii)** obtaining further reductions in emissions from such vehicles will be needed and cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii),

the Administrator shall either promulgate the standards (and useful life periods) set forth in Table 3 in paragraph (1) or promulgate alternative standards (and useful life periods) which are more stringent than those referred to in subsections (g) and (h). Any such standards (or useful life periods) promulgated by the Administrator shall take effect with respect to any such vehicles or engines no earlier than the model year 2003 but not later than model year 2006, as determined by the Administrator in the rule.

**(D)** Nothing in this paragraph shall be construed by the Administrator or by a court as a presumption that any standards (or useful life period) set forth in Table 3 shall be promulgated in the rulemaking required under this paragraph. The action required of the Administrator in accordance with this paragraph shall be treated as a nondiscretionary duty for purposes of [section 7604\(a\)\(2\)](#) of this title (relating to citizen suits).

(E) Unless the Administrator determines not to promulgate more stringent standards as provided in subparagraph (B) or to postpone the effective date of standards referred to in Table 3 in paragraph (1) or to establish alternative standards as provided in subparagraph (C), effective with respect to model years commencing after January 1, 2003, the regulations under subsection (a) applicable to emissions of nonmethane hydrocarbons (NMHC), oxides of nitrogen (NO<sub>x</sub>), and carbon monoxide (CO) from motor vehicles and motor vehicle engines in the classes specified in Table 3 in paragraph (1) above shall contain standards which provide that emissions may not exceed the pending emission levels specified in Table 3 in paragraph (1).

**(j) Cold CO standard**

**(1) Phase I**

Not later than 12 months after November 15, 1990, the Administrator shall promulgate regulations under subsection (a) of this section applicable to emissions of carbon monoxide from 1994 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit. The regulations shall contain standards which provide that emissions of carbon monoxide from a manufacturer's vehicles when operated at 20 degrees Fahrenheit may not exceed, in the case of light-duty vehicles, 10.0 grams per mile, and in the case of light-duty trucks, a level comparable in stringency to the standard applicable to light-duty vehicles. The standards shall take effect after model year 1993 according to a phase-in schedule which requires a percentage of each manufacturer's sales volume of light-duty vehicles and light-duty trucks to comply with applicable standards after model year 1993. The percentage shall be as specified in the following table:

**PHASE-IN SCHEDULE FOR COLD START STANDARDS**

Model Year	Percentage
1994.....	40
1995.....	80
1996 and after.....	100

**(2) Phase II**

(A) Not later than June 1, 1997, the Administrator shall complete a study assessing the need for further reductions in emissions of carbon monoxide and the maximum reductions in such emissions achievable from model year 2001 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit.

(B)(i) If as of June 1, 1997, 6 or more nonattainment areas have a carbon monoxide design value of 9.5 ppm or greater, the regulations under subsection (a)(1) of this section applicable to emissions of carbon monoxide from model year 2002 and later model year light-duty vehicles and light-duty trucks shall contain standards which provide that emissions of carbon monoxide from such vehicles and trucks when operated at 20 degrees Fahrenheit may not exceed 3.4 grams per mile (gpm) in the case of light-duty vehicles and 4.4 grams per mile (gpm) in the case of light-duty trucks up to 6,000 GVWR and a level comparable in stringency in the case of light-duty trucks 6,000 GVWR and above.

(ii) In determining for purposes of this subparagraph whether 6 or more nonattainment areas have a carbon monoxide design value of 9.5 ppm or greater, the Administrator shall exclude the areas of Steubenville, Ohio, and Oshkosh, Wisconsin.

### **(3) Useful-life for phase I and phase II standards**

In the case of the standards referred to in paragraphs (1) and (2), for purposes of certification under [section 7525](#) of this title and in-use compliance under [section 7541](#) of this title, the applicable useful life period shall be 5 years or 50,000 miles, whichever first occurs, except that the Administrator may extend such useful life period (for purposes of [section 7525](#) of this title, or [section 7541](#) of this title, or both) if he determines that it is feasible for vehicles and engines subject to such standards to meet such standards for a longer useful life. If the Administrator extends such useful life period, the Administrator may make an appropriate adjustment of applicable standards for such extended useful life. No such extended useful life shall extend beyond the useful life period provided in regulations under subsection (d).

### **(4) Heavy-duty vehicles and engines**

The Administrator may also promulgate regulations under subsection (a)(1) applicable to emissions of carbon monoxide from heavy-duty vehicles and engines when operated at cold temperatures.

### **(k) Control of evaporative emissions**

The Administrator shall promulgate (and from time to time revise) regulations applicable to evaporative emissions of hydrocarbons from all gasoline-fueled motor vehicles--

(1) during operation; and

(2) over 2 or more days of nonuse;

under ozone-prone summertime conditions (as determined by regulations of the Administrator). The regulations shall take effect as expeditiously as possible and shall require the greatest degree of emission reduction achievable by means reasonably expected to be available for production during any model year to which the regulations apply, giving appropriate consideration to fuel volatility, and to cost, energy, and safety factors associated with the application of the appropriate technology. The Administrator shall commence a rulemaking under this subsection within 12 months after November 15, 1990. If final regulations are not promulgated under this subsection within 18 months after November 15, 1990, the Administrator shall submit a statement to the Congress containing an explanation of the reasons for the delay and a date certain for promulgation of such final regulations in accordance with this chapter. Such date certain shall not be later than 15 months after the expiration of such 18 month deadline.

### **(l) Mobile source-related air toxics**

#### **(1) Study**

Not later than 18 months after November 15, 1990, the Administrator shall complete a study of the need for, and feasibility of, controlling emissions of toxic air pollutants which are unregulated under this chapter and associated with motor vehicles and motor vehicle fuels, and the need for, and feasibility of, controlling such emissions and the means and measures for such

controls. The study shall focus on those categories of emissions that pose the greatest risk to human health or about which significant uncertainties remain, including emissions of benzene, formaldehyde, and 1, 3 butadiene. The proposed report shall be available for public review and comment and shall include a summary of all comments.

## **(2) Standards**

Within 54 months after November 15, 1990, the Administrator shall, based on the study under paragraph (1), promulgate (and from time to time revise) regulations under subsection (a)(1) or [section 7545\(c\)\(1\)](#) of this title containing reasonable requirements to control hazardous air pollutants from motor vehicles and motor vehicle fuels. The regulations shall contain standards for such fuels or vehicles, or both, which the Administrator determines reflect the greatest degree of emission reduction achievable through the application of technology which will be available, taking into consideration the standards established under subsection (a), the availability and costs of the technology, and noise, energy, and safety factors, and lead time. Such regulations shall not be inconsistent with standards under subsection (a). The regulations shall, at a minimum, apply to emissions of benzene and formaldehyde.

## **(m) Emissions control diagnostics**

### **(1) Regulations**

Within 18 months after November 15, 1990, the Administrator shall promulgate regulations under subsection (a) requiring manufacturers to install on all new light duty vehicles and light duty trucks diagnostics systems capable of--

**(A)** accurately identifying for the vehicle's useful life as established under this section, emission-related systems deterioration or malfunction, including, at a minimum, the catalytic converter and oxygen sensor, which could cause or result in failure of the vehicles to comply with emission standards established under this section,

**(B)** alerting the vehicle's owner or operator to the likely need for emission-related components or systems maintenance or repair,

**(C)** storing and retrieving fault codes specified by the Administrator, and

**(D)** providing access to stored information in a manner specified by the Administrator.

The Administrator may, in the Administrator's discretion, promulgate regulations requiring manufacturers to install such onboard diagnostic systems on heavy-duty vehicles and engines.

### **(2) Effective date**

The regulations required under paragraph (1) of this subsection shall take effect in model year 1994, except that the Administrator may waive the application of such regulations for model year 1994 or 1995 (or both) with respect to any class or category of motor vehicles if the Administrator determines that it would be infeasible to apply the regulations to that class or category in such model year or years, consistent with corresponding regulations or policies adopted by the California Air Resources Board for such systems.

**(3) State inspection**

The Administrator shall by regulation require States that have implementation plans containing motor vehicle inspection and maintenance programs to amend their plans within 2 years after promulgation of such regulations to provide for inspection of onboard diagnostics systems (as prescribed by regulations under paragraph (1) of this subsection) and for the maintenance or repair of malfunctions or system deterioration identified by or affecting such diagnostics systems. Such regulations shall not be inconsistent with the provisions for warranties promulgated under [section 7541\(a\)](#) and [\(b\)](#) of this title.

**(4) Specific requirements**

In promulgating regulations under this subsection, the Administrator shall require--

- (A) that any connectors through which the emission control diagnostics system is accessed for inspection, diagnosis, service, or repair shall be standard and uniform on all motor vehicles and motor vehicle engines;
- (B) that access to the emission control diagnostics system through such connectors shall be unrestricted and shall not require any access code or any device which is only available from a vehicle manufacturer; and
- (C) that the output of the data from the emission control diagnostics system through such connectors shall be usable without the need for any unique decoding information or device.

**(5) Information availability**

The Administrator, by regulation, shall require (subject to the provisions of [section 7542\(c\)](#) of this title regarding the protection of methods or processes entitled to protection as trade secrets) manufacturers to provide promptly to any person engaged in the repairing or servicing of motor vehicles or motor vehicle engines, and the Administrator for use by any such persons, with any and all information needed to make use of the emission control diagnostics system prescribed under this subsection and such other information including instructions for making emission related diagnosis and repairs. No such information may be withheld under [section 7542\(c\)](#) of this title if that information is provided (directly or indirectly) by the manufacturer to franchised dealers or other persons engaged in the repair, diagnosing, or servicing of motor vehicles or motor vehicle engines. Such information shall also be available to the Administrator, subject to [section 7542\(c\)](#) of this title, in carrying out the Administrator's responsibilities under this section.

**(f)<sup>4</sup> Model years after 1990**

For model years prior to model year 1994, the regulations under subsection (a) applicable to buses other than those subject to standards under [section 7554](#) of this title shall contain a standard which provides that emissions of particulate matter (PM) from such buses may not exceed the standards set forth in the following table:

**PM STANDARD FOR BUSES**

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Model year	Standard *
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1991.....	0.25
1992.....	0.25
1993 and thereafter.....	0.10

\* Standards are expressed in grams per brake horsepower hour (g/bhp/hr).

### CREDIT(S)

(July 14, 1955, c. 360, Title II, § 202, as added Pub.L. 89-272, Title I, § 101(8), Oct. 20, 1965, 79 Stat. 992; amended Pub.L. 90-148, § 2, Nov. 21, 1967, 81 Stat. 499; Pub.L. 91-604, § 6(a), Dec. 31, 1970, 84 Stat. 1690; Pub.L. 93-319, § 5, June 22, 1974, 88 Stat. 258; Pub.L. 95-95, Title II, §§ 201, 202(b), 213(b), 214(a), 215 to 217, 224(a), (b), (g), Title IV, § 401(d), Aug. 7, 1977, 91 Stat. 751 to 753, 758 to 761, 765, 767, 769, 791; Pub.L. 95-190, § 14(a)(60) to (65), (b)(5), Nov. 16, 1977, 91 Stat. 1403, 1405; Pub.L. 101-549, Title II, §§ 201 to 207, 227(b), 230(1) to (5), Nov. 15, 1990, 104 Stat. 2472 to 2481, 2507, 2529.)

### EXECUTIVE ORDERS

#### EXECUTIVE ORDER NO. 13432

<May 14, 2007, 72 F.R. 27717, as amended by Ex. Ord. No. 13693, § 16(e), March 19, 2015, 80 F.R. 15871>

#### Cooperation Among Agencies in Protecting the Environment with Respect to Greenhouse Gas Emissions from Motor Vehicles, Nonroad Vehicles, and Nonroad Engines

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

**Section 1. Policy.** It is the policy of the United States to ensure the coordinated and effective exercise of the authorities of the President and the heads of the Department of Transportation, the Department of Energy, and the Environmental Protection Agency to protect the environment with respect to greenhouse gas emissions from motor vehicles, nonroad vehicles, and nonroad engines, in a manner consistent with sound science, analysis of benefits and costs, public safety, and economic growth.

**Sec. 2. Definitions.** As used in this order:

- (a) “agencies” refers to the Department of Transportation, the Department of Energy, and the Environmental Protection Agency, and all units thereof, and “agency” refers to any of them;
- (b) “alternative fuels” has the meaning specified for that term in section 301(2) of the Energy Policy Act of 1992 (42 U.S.C. 13211(2));
- (c) “authorities” include the Clean Air Act (42 U.S.C. 7401-7671q), the Energy Policy Act of 1992 (Public Law 102-486), the Energy Policy Act of 2005 (Public Law 109-58), the Energy Policy and Conservation Act (Public Law 94-163), and any other current or future laws or regulations that may authorize or require any of the agencies to take regulatory action that directly or indirectly affects emissions of greenhouse gases from motor vehicles;
- (d) “greenhouse gases” means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, nitrogen trifluoride [sic], and sulfur hexafluoride;

- (e) “motor vehicle” has the meaning specified for that term in section 216(2) of the Clean Air Act (42 U.S.C. 7550(2));
- (f) “nonroad engine” has the meaning specified for that term in section 216(10) of the Clean Air Act (42 U.S.C. 7550(10));
- (g) “nonroad vehicle” has the meaning specified for that term in section 216(11) of the Clean Air Act (42 U.S.C. 7550(11));
- (h) “regulation” has the meaning specified for that term in section 3(d) of Executive Order 12866 of September 30, 1993, as amended (Executive Order 12866); and
- (i) “regulatory action” has the meaning specified for that term in section 3(e) of Executive Order 12866.

**Sec. 3. Coordination Among the Agencies.** In carrying out the policy set forth in section 1 of this order, the head of an agency undertaking a regulatory action that can reasonably be expected to directly regulate emissions, or to substantially and predictably affect emissions, of greenhouse gases from motor vehicles, nonroad vehicles, nonroad engines, or the use of motor vehicle fuels, including alternative fuels, shall:

- (a) undertake such a regulatory action, to the maximum extent permitted by law and determined by the head of the agency to be practicable, jointly with the other agencies;
- (b) in undertaking such a regulatory action, consider, in accordance with applicable law, information and recommendations provided by the other agencies;
- (c) in undertaking such a regulatory action, exercise authority vested by law in the head of such agency effectively, in a manner consistent with the effective exercise by the heads of the other agencies of the authority vested in them by law; and
- (d) obtain, to the extent permitted by law, concurrence or other views from the heads of the other agencies during the development and preparation of the regulatory action and prior to any key decision points during that development and preparation process, and in no event later than 30 days prior to publication of such action.

**Sec. 4. Duties of the Heads of Agencies.** (a) To implement this order, the head of each agency shall:

- (1) designate appropriate personnel within the agency to (i) direct the agency's implementation of this order, (ii) ensure that the agency keeps the other agencies and the Office of Management and Budget informed of the agency regulatory actions to which section 3 refers, and (iii) coordinate such actions with the agencies;
- (2) in coordination as appropriate with the Committee on Climate Change Science and Technology, continue to conduct and share research designed to advance technologies to further the policy set forth in section 1 of this order;
- (3) facilitate the sharing of personnel and the sharing of information among the agencies to further the policy set forth in section 1 of this order;
- (4) coordinate with the other agencies to avoid duplication of requests to the public for information from the public in the course of undertaking such regulatory action, consistent with the Paperwork Reduction Act (44 U.S.C. 3501 et seq.); and
- (5) consult with the Secretary of Agriculture whenever a regulatory action will have a significant effect on agriculture related to the production or use of ethanol, biodiesel, or other renewable fuels, including actions undertaken in whole or in part based on authority or requirements in title XV of the Energy Policy Act of 2005, or the amendments made by such title, or when otherwise appropriate or required by law.

(b) To implement this order, the heads of the agencies acting jointly may allocate as appropriate among the agencies administrative responsibilities relating to regulatory actions to which section 3 refers, such as publication of notices in the **Federal Register** and receipt of comments in response to notices.

**Sec. 5. Duties of the Director of the Office of Management and Budget and the Chairman of the Council on Environmental Quality.** (a) The Director of the Office of Management and Budget, with such assistance from the Chairman of the Council on Environmental Quality as the Director may require, shall monitor the implementation of this order by the heads of the agencies and shall report thereon to the President from time to time, and not less often than semiannually, with any recommendations of the Director for strengthening the implementation of this order.

(b) To implement this order and further the policy set forth in section 1, the Director of the Office of Management and Budget may require the heads of the agencies to submit reports to, and coordinate with, such Office on matters related to this order.

**Sec. 6. General Provisions.** (a) This order shall be implemented in accordance with applicable law and subject to the availability of appropriations.

(b) This order shall not be construed to impair or otherwise affect the functions of the Director of the Office of Management and Budget relating to budget, administrative, and legislative proposals.

(c) This order is not intended to, and does not, create any right, benefit or privilege, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, instrumentalities, or entities, its officers or employees, or any other person.

GEORGE W. BUSH

**EXECUTIVE ORDER NO. 14037**

<August 5, 2021, 86 F.R. 43583>

**Strengthening American Leadership in Clean Cars and Trucks**

By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to promote the interests of American workers, businesses, consumers, and communities, it is hereby ordered as follows:

**Section 1. Policy.** America must lead the world on clean and efficient cars and trucks. That means bolstering our domestic market by setting a goal that 50 percent of all new passenger cars and light trucks sold in 2030 be zero-emission vehicles, including battery electric, plug-in hybrid electric, or fuel cell electric vehicles. My Administration will prioritize setting clear standards, expanding key infrastructure, spurring critical innovation, and investing in the American autoworker. This will allow us to boost jobs\_ with good pay and benefits\_ across the United States along the full supply chain for the automotive sector, from parts and equipment manufacturing to final assembly.

It is the policy of my Administration to advance these objectives in order to improve our economy and public health, boost energy security, secure consumer savings, advance environmental justice, and address the climate crisis.

**Sec. 2. Light-, Medium-, and Certain Heavy-Duty Vehicles Multi-Pollutant and Fuel Economy Standards for 2027 and Later.**



(a) The Administrator of the Environmental Protection Agency (EPA) shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Clean Air Act (42 U.S.C. 7401-7671q) to establish new multi-pollutant emissions standards, including for greenhouse gas emissions, for light-and medium-duty vehicles beginning with model year 2027 and extending through and including at least model year 2030.

(b) The Secretary of Transportation shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Energy Independence and Security Act of 2007 (Public Law 110-140, 121 Stat. 1492) (EISA) to establish new fuel economy standards for passenger cars and light-duty trucks beginning with model year 2027 and extending through and including at least model year 2030.

(c) The Secretary of Transportation shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under EISA to establish new fuel efficiency standards for heavy-duty pickup trucks and vans beginning with model year 2028 and extending through and including at least model year 2030.

**Sec. 3. Heavy-Duty Engines and Vehicles Multi-Pollutant Standards for 2027 and Later.** (a) The Administrator of the EPA shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Clean Air Act to establish new oxides of nitrogen standards for heavy-duty engines and vehicles beginning with model year 2027 and extending through and including at least model year 2030.

(b) The Administrator of the EPA shall, as appropriate and consistent with applicable law, and in consideration of the role that zero-emission heavy-duty vehicles might have in reducing emissions from certain market segments, consider updating the existing greenhouse gas emissions standards for heavy-duty engines and vehicles beginning with model year 2027 and extending through and including at least model year 2029.

**Sec. 4. Medium-and Heavy-Duty Engines and Vehicles Greenhouse Gas and Fuel Efficiency Standards as Soon as 2030 and Later.** (a) The Administrator of the EPA shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Clean Air Act to establish new greenhouse gas emissions standards for heavy-duty engines and vehicles to begin as soon as model year 2030.

(b) The Secretary of Transportation shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under EISA to establish new fuel efficiency standards for medium-and heavy-duty engines and vehicles to begin as soon as model year 2030.

**Sec. 5. Rulemaking Targets.** (a) With respect to the rulemaking described in section 3(a) of this order, the Administrator of the EPA shall, as appropriate and consistent with applicable law, consider issuing a notice of proposed rulemaking by January 2022 and any final rulemaking by December 2022.

(b) With respect to the other rulemakings described in section 2 and section 4 of this order, the Secretary of Transportation and the Administrator of the EPA shall, as appropriate and consistent with applicable law, consider issuing any final rulemakings no later than July 2024.

**Sec. 6. Coordination and Engagement.** (a) The Secretary of Transportation and the Administrator of the EPA shall coordinate, as appropriate and consistent with applicable law, during the consideration of any rulemakings pursuant to this order.

(b) The Secretary of Transportation and the Administrator of the EPA shall consult with the Secretaries of Commerce, Labor, and Energy on ways to achieve the goals laid out in section 1 of this order, to accelerate innovation and manufacturing in the automotive sector, to strengthen the domestic supply chain for that sector, and to grow jobs that provide good pay and benefits.

(c) Given the significant expertise and historical leadership demonstrated by the State of California with respect to establishing emissions standards for light-, medium-, and heavy-duty vehicles, the Administrator of the EPA shall coordinate the agency's activities pursuant to sections 2 through 4 of this order, as appropriate and consistent with applicable law, with the State of California as well as other States that are leading the way in reducing vehicle emissions, including by adopting California's standards.

(d) In carrying out any of the actions described in this order, the Secretary of Transportation and the Administrator of the EPA shall seek input from a diverse range of stakeholders, including representatives from labor unions, States, industry, environmental justice organizations, and public health experts.

**Sec. 7. General Provisions.** (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

J.R. BIDEN JR.

[Notes of Decisions \(50\)](#)

## Footnotes

1 So in original. Probably should be “(4)”.

2 So in original. Probably should be “paragraph”.

3 Another subsec. (f) is set out following subsec. (m).

4 So in original. Probably should be (n).

42 U.S.C.A. § 7521, 42 USCA § 7521

Current through P.L. 117-228. Some statute sections may be more current, see credits for details.