

No. ____

IN THE
Supreme Court of the United States

CHAMBER OF COMMERCE OF THE UNITED STATES
OF AMERICA, ET AL.

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY; LEE ZELDIN, ADMINISTRATOR, ET AL.

Respondents.

ON PETITION FOR WRIT OF CERTIORARI TO THE UNITED
STATES COURT OF APPEALS FOR THE DISTRICT OF
COLUMBIA CIRCUIT

APPENDIX VOLUME II OF II

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APPENDIX C

Clean Air Act § 109, 42 U.S.C.

§ 7409. National primary and secondary ambient air quality standards

(a) Promulgation

(1) The Administrator-

(A) within 30 days after December 31, 1970, shall publish proposed regulations prescribing a national primary ambient air quality standard and a national secondary ambient air quality standard for each air pollutant for which air quality criteria have been issued prior to such date; and

(B) after a reasonable time for interested persons to submit written comments thereon (but no later than 90 days after the initial publication of such proposed standards) shall by regulation promulgate such proposed national primary and secondary ambient air quality standards with such modifications as he deems appropriate.

(2) With respect to any air pollutant for which air quality criteria are issued after December 31, 1970, the Administrator shall publish, simultaneously with the issuance of such criteria and information, proposed national primary and secondary ambient air quality standards for any such pollutant. The procedure provided for in paragraph (1)(B) of this subsection shall apply to the promulgation of such standards.

(b) Protection of public health and welfare

(1) National primary ambient air quality standards, prescribed under subsection (a) shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health. Such primary standards may be revised in the same manner as promulgated.

(2) Any national secondary ambient air quality standard prescribed under subsection (a) shall specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air. Such secondary standards may be revised in the same manner as promulgated.

(c) National primary ambient air quality standard for nitrogen dioxide

The Administrator shall, not later than one year after August 7, 1977, promulgate a national primary ambient air quality standard for NO₂ concentrations over a period of not more than 3 hours unless, based on the criteria issued under section 7408(c) of this title, he finds that there is no significant evidence that such a standard for such a period is requisite to protect public health.

(d) Review and revision of criteria and standards; independent scientific review committee; appointment; advisory functions

(1) Not later than December 31, 1980, and at five-year intervals thereafter, the Administrator shall complete a thorough review of the criteria published under section 7408 of this title and the national ambient air quality standards promulgated under this section and shall make such revisions in such criteria and standards and promulgate such new standards as may be appropriate in accordance with section 7408 of this title and subsection (b) of this section. The Administrator may review and revise criteria or promulgate new standards earlier or more frequently than required under this paragraph.

(2)(A) The Administrator shall appoint an independent scientific review committee composed of seven members including at least one member of the National Academy of Sciences, one physician, and one person representing State air pollution control agencies.

(B) Not later than January 1, 1980, and at five-year intervals thereafter, the committee referred to in subparagraph (A) shall complete a review of the criteria published under section 7408 of this title and the national primary and secondary ambient air quality standards promulgated under this section and shall recommend to the Administrator any new national ambient air quality standards and revisions of existing criteria and standards as may be

appropriate under section 7408 of this title and subsection (b) of this section.

(C) Such committee shall also (i) advise the Administrator of areas in which additional knowledge is required to appraise the adequacy and basis of existing, new, or revised national ambient air quality standards, (ii) describe the research efforts necessary to provide the required information, (iii) advise the Administrator on the relative contribution to air pollution concentrations of natural as well as anthropogenic activity, and (iv) advise the Administrator of any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance of such national ambient air quality standards.

(July 14, 1955, ch. 360, title I, § 109, as added Pub. L. 91-604, § 4(a), Dec. 31, 1970, 84 Stat. 1679; amended Pub. L. 95-95, title I, § 106, Aug. 7, 1977, 91 Stat. 691.)

[CONTENT OMITTED]

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APPENDIX D

**Responses to Significant Comments on the
2023 Proposed Rule for the
Reconsideration of the National Ambient
Air Quality Standards for Particulate
Matter**

Docket Number OAR-2015-0072

U.S. Environmental Protection Agency

[CONTENT OMITTED]

X. Response to Significant Comments on Legal, Administrative, and Procedural Issues and to Miscellaneous Comments

A. Legal Comments

- (1) **Comment:** A number of commenters contend that the proposal exceeds the EPA's statutory authority. These commenters argue that there is nothing in section 109 of the CAA that authorizes the Agency to reconsider a decision by the Administrator not to revise a NAAQS in a previous statutorily prescribed NAAQS review, and that the EPA assumes it has some inherent authority to do so without identifying such authority in January 2021. These commenters recognize that section 109(d)(1) of the CAA allows for the review and revision of the air quality criteria or promulgation of new standards more frequently than every five years, but assert that under section 109 "any such revision should be effectuated *'in the same manner'* in which those standards were first 'promulgated'" and that the proposed revision to the primary annual PM_{2.5} standard is not the result of a "thorough review of...the national ambient air quality standards" pursuant to section 109(d)(1) of the CAA. Some commenters suggest that the EPA may not reopen the air quality criteria without undertaking a comprehensive review of the entire criteria.

Furthermore, these commenters suggest that promulgation or revision of any NAAQS is governed by section 307(d)(1)(A), and that the only sort of reconsideration proceeding contemplated under section 307(d) is that described in section 307(d)(7), subparagraph (B). They state that subpart (B) “provides that ‘the Administrator shall convene a *proceeding for reconsideration* of the rule’ in those circumstances where a person who seeks to challenge a final rule on the basis of an objection not raised during the public comment period ‘can demonstrate to the Administrator that it was impracticable to raise such objection within such time or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule.’ CAA § 307(d)(7)(B) (emphasis added).” They further note that while several petitions for reconsideration were filed following the 2020 final decision, the Administrator did not refer to those petitions in announcing the reconsideration of the PM NAAQS. The commenters also contend that reconsideration of the 2020 final decision to retain the PM NAAQS must be considered in light of precedents such as *American Methyl Corp. v. EPA*, 749 F.2d 826 (D.C. Cir. 1984), and *New Jersey v. EPA*, 517 F.3d 574, 583 (D.C. Cir. 2008), noting that the U.S. Court of Appeals for the D.C. Circuit observed that, “when Congress has provided a mechanism capable of rectifying mistaken

actions . . . it is not reasonable to infer authority to reconsider agency action.” The commenters recognize that the Agency is not considering the 2020 final decision to be “mistaken” but state that Congress provided an express “mechanism” by which the EPA is authorized to review and determine whether or not to revise the NAAQS and that is under the procedures set for expressly under section 109(d)(1) of the CAA. Other commenters contend that the CAA does not give the EPA unlimited authority to address all environmental issues generally, stating that Congress determines the extent of that authority, not the Agency.

A number of commenters assert that, because they believe the reconsideration is a discretionary action, the Administration must justify cost. Some commenters suggest that, in reconsidering the “appropriateness” of the 2020 final decision that revisions to the PM NAAQS were not “appropriate,” and in concluding that revisions to the PM NAAQS are “appropriate,” the EPA must consider all costs that would result from the implementation of the proposed revisions. The commenters assert that the EPA cannot evade consideration of costs in determining whether or not to revise a NAAQS by invoking an unprecedented procedure (i.e., a reconsideration) to circumvent the requirements of section 109(d)(1) of the CAA. The commenters state that the EPA is obligated to engage in reasoned decision making, which requires the

Administrator to account for the full range of costs associated with the decision to reconsider the PM NAAQS and to depart from the 2020 final decision. The commenters suggest that the cost of a more stringent standard is a relevant factor that must be considered and an important aspect of the problem that cannot be ignored, and failure to consider the full range of costs would render any final action arbitrary and capricious. These commenters further contend that the EPA does not indicate that it understands these obligations, suggesting that the EPA's invocation of *Whitman v. American Trucking Associations* is not valid in this context. Furthermore, these commenters argue that the EPA must first determine whether it should proceed to regulate at all at this time (including treating cost as a relevant factor in reaching such a decision) and before addressing how to revise the NAAQS, the EPA must confront whether to revise, and in reaching a decision to proceed, the EPA must take into consideration costs, citing to *Michigan v. EPA*, 576 U.S. 743 (2015). These commenters also suggest that if the EPA revises the PM NAAQS as proposed, the Agency must consider the broader social and economic impacts of a revised NAAQS in determining the acceptable level of risk. In so doing, the commenters note that, in *Whitman*, the EPA cannot consider implementation costs, but the EPA is not prohibited from considering other costs (i.e., "disbenefits"), specifically those listed in section 109 of the CAA, including

adverse public health, welfare, social, economic, and energy effects. These commenters also point to Justice Breyer's separate opinion in *Whitman* and state that, in the reconsideration, the Administrator must embrace the range of discretion afforded to him to ensure reasoned decision making. These commenters further assert that the EPA should withdraw the reconsideration proposal because it creates regulatory uncertainty and burden in economically challenging times. These commenters note that this would not be the first Administrator to consider the costs and burdens when withdrawing a reconsideration, pointing to the decision to withdraw the reconsideration of the ozone NAAQS in 2011. These commenters state that the U.S. once again faces economically challenging times, and that the costs from any revisions that are finalized would undermine competitiveness of U.S. manufacturing and businesses that support critical infrastructure and electricity needs of the U.S., and businesses would be driven to other countries. These commenters also argue that the standards are unattainable, citing the Regulatory Impact Analysis (RIA) and analyses of the RIA, and should be withdrawn pending development of strategies to attain the proposed standards because Congress could not have anticipated the difficulties that may be associated with attaining the standard.

On the other hand, other commenters state that

the EPA's decision on reconsideration must be based solely on health and welfare, and there is no room for consideration of costs. They suggest that the decision to end the previous reconsideration of the ozone standards was made under different circumstances and the justification for ending the reconsideration was never judicially upheld. They also point to the reconsideration petitions pending before the Agency as supporting reconsideration of the PM NAAQS and supporting the conclusion that more stringent standards are warranted.

Some commenters question how the reconsideration will impact the five-year review cycle, as mandated by the CAA. These commenters ask if, given the reconsideration, the EPA should complete another PM NAAQS review in 2025 or if the next review should be in the 2028 timeframe.

Response: This action is squarely within EPA's authority under section 109 of the CAA and the EPA has always been clear it is acting under section 109 consistent with its statutory mandate from Congress. Congress intended the EPA to periodically revisit and revise, as appropriate, the air quality criteria and the NAAQS, and this action is consistent with both the EPA's implicit and explicit authority to revisit earlier decisions on the NAAQS. It is well-established that agencies generally have implicit, or inherent, authority to reconsider

their prior actions and take new action in a different direction, provided the Agency is not precluded from doing so by the statute and has a sufficient rationale for the new action. See, e.g., *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009); *Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 42 (1983). Certainly nothing in the Clean Air Act precludes the EPA from revisiting earlier decisions on NAAQS, and the language of section 109 indicates that Congress clearly intended the EPA to revisit, reconsider, and revise earlier decisions as appropriate.

The EPA agrees with the commenters that the Agency is required to engage in reasoned decision-making in this action, but maintains that it has done so in both the notice of proposed rulemaking and in this final action. The EPA disagrees with the commenters that the requirement of reasoned decision-making for this action imposes an additional requirement that the Administrator consider costs of implementation of implementing a revised standard, and with the suggestion that the Supreme Court's holding in *Whitman* does not apply to reviews under section 109(d), including this reconsideration. The Supreme Court held in *Whitman v. American Trucking Ass'ns* that "The text of § 109(b), interpreted in its statutory and historical context and with appreciation for its importance to the CAA as a whole, unambiguously bars cost considerations from

the NAAQS-setting process....” 531 U.S. 457, 471 (2001). There is no basis for suggesting that this holding is limited to reviews undertaken under section 109(b) but not those undertaken under section 109(d) since every review since 1990 (including the reviews at issue in *Whitman*) has necessarily been undertaken pursuant to both section 109(b) and 109(d) and 109(d) expressly references 109(b). Moreover, the Supreme Court in *Whitman* expressly considered and rejected the argument raised by petitioners that the EPA must consider “disbenefits” from adverse public health, welfare, social, economic or energy effects. The Court noted that Congress “not only anticipated that compliance costs could injure the public health, but provided for that precise exigency.” *Id.* at 467. The Court went to note that “Congress, we have held, does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions – it does not, one might say, hide elephants in mouseholes” and that the statutory text left no room for the argument that the EPA was supposed to incorporate considerations of the effects of implementation into its decision making on the NAAQS. *Id.* at 468. Moreover, for the same reasons, courts have consistently held that attainability of the standard is also not a relevant criterion in selecting a NAAQS. See *Lead Indus. Ass’n, Inc. v. EPA*, 647 F.2d 1130, 1148 (D.C. Cir. 1980); *Am. Petroleum Inst. v. Costle*, 665 F.2d 1176, 1185 (D.C. Cir. 1981); *Murray Energy Corp. v. EPA*, 936 F.3d 597, 623

(2019). The EPA also disagrees that the Regulatory Impact Analysis (RIA) demonstrates that the revised standards are unattainable or that Congress did not anticipate the difficulties associated with attainment of a standard based solely on public health without consideration of economic or technological feasibility. The RIA examines illustrative emissions control strategies toward reaching attainment and does not purport to make a judgment whether the standard will be attainable by the attainment dates established in the CAA. As the DC Circuit noted in *Lead Industries*, “[t]he ‘technology-forcing’ requirements of the Act are expressly designed to force regulated sources to develop pollution control devices that might at the time appear to be economically or technologically infeasible.” 647 F.2d at 1149 (internal quotation omitted). Past experience with the NAAQS has demonstrated this to be true, as the City of Houston, which unsuccessfully challenged the 1979 ozone NAAQS in *API* on the grounds that it was unattainable, has since attained that standard (see 85 FR 8411, February 14, 2020). Likewise Congress has been well aware throughout the history of the CAA that attaining the NAAQS may pose severe challenges. The DC Circuit noted in *Lead Industries* that in establishing the NAAQS in the 1970 CAA the Senate drafters considered whether to use “the concept of technical feasibility as the basis for ambient air quality standards” but concluded that “the health of people is more important.”

647 F.2d at 1149. However, Congress well understood that this approach could necessitate shutdown of existing sources of pollution, result in significant economic impacts, and might even prove beyond the ability of industry to meet. The court quotes Senator Muskie as saying “I think that we have an obligation to lay down the standards and requirements of this bill. I think that the industry has an obligation to try to meet them. If, in due course, it cannot, then it should come to Congress and share with the Congress the representatives of the people the need to modify the policy.” Id. at 1150. Thus, the court finds that Congress has made a policy decision to base the standards on public health regardless of concerns about technical feasibility and if it turns out there is a problem then Congress is “the only institution with the authority to remedy the problem.” Id. Of course it is worth noting that in later years Congress did amend the CAA to extend the attainment deadlines for different NAAQS where it found it appropriate to do so in light of the challenges of attaining the standards. For example, the attainment deadline for areas classified as serious nonattainment for the PM NAAQS is ten years, rather than five years, after designation. For all of these reasons, although the EPA does not agree that the standards have been shown to be unattainable, the Administrator has acted consistently with the requirements of the CAA in declining to consider the analyses in the RIA or attainability of the revised standards in revising

the standards under section 109.

The EPA in this action is following the direction of *Whitman* and setting the NAAQS that provide the requisite protection for public health and welfare, as required by the CAA section 109. Nonetheless the EPA notes that some comments suggest that the EPA lacks authority to set such a NAAQS under the “major questions doctrine,” on the theory that the revised NAAQS could have significant economic impacts. This of course is a perverse inversion of the holding of *Whitman*, which is commonly understood to be part of the “major questions doctrine” line of cases and held that the EPA is *required* to set NAAQS to protect public health and public welfare without consideration of the potential economic impact of the standards. *See, e.g., Whitman*, 531 U.S. at 471 (“The text of § 109(b) ... unambiguously bars cost considerations from the NAAQS-setting process, and thus ends the matter for us as well as the EPA.”); *see also, West. Virginia v. EPA*, 142 S. Ct. 2587, 2609 (2022) (citing *Whitman* for the proposition that “Extraordinary grants of regulatory authority are rarely accomplished through ‘modest words,’ ‘vague terms,’ or ‘subtle device[s].’”).

Similarly, some commenters argue that because under the CAA the Administrator is charged with periodically reviewing and making such revisions to air quality criteria and NAAQS “as may be appropriate” that the scope of

“appropriate” in NAAQS reviews must encompass costs, under the Supreme Court’s decision in *Michigan v. EPA*, 576 U.S. 743 (2015). Such an argument is also plainly inconsistent with the Supreme Court’s decision in both *Whitman* and *Michigan*,¹⁸ as well as the D.C. Circuit’s decision in *Murray Energy* (see 936 F.3d 597, 621-622 (D.C. Cir. 2019)).

Some commenters further suggest that the EPA is at least required to consider costs because this is a reconsideration completed sooner than the statutory 5-year deadline for periodic NAAQS reviews. The EPA notes that section 109(b) provides that NAAQS “may be revised in the same manner as promulgated.” The EPA understands this provision to authorize the Administrator to revise the NAAQS and to require that every NAAQS revision be subject to the same basic requirements under section 109 (and *Whitman*) – the standards must be based on the air quality criteria and must be requisite to protect the public health for primary standards and public welfare for secondary standards. The NAAQS decisions made in this action conform to

¹⁸ In *Michigan*, the Court did not over-rule *Whitman*; it simply noted the principles of *Whitman* were irrelevant to the statutory provision at issue in *Michigan*, highlighting textual differences between the statutory provision before it in *Michigan* and the provisions at issue in *Whitman* and repeating that the provision at issue in *Whitman* “does not encompass cost.” *Michigan*, 576 U.S. at 755–56.

those requirements for primary and secondary standards, respectively.¹⁹ It would be an absurd result, contrary to both the statute and caselaw, if the Administrator was required to disregard costs of implementation in setting a NAAQS under the 5-year schedule but was free to turn around the following year and revise the NAAQS to a different level based on the costs of implementation.

Similarly, the EPA rejects the suggestion that it is required to consider costs of implementation in deciding whether to revise the NAAQS, or that it is required undertake any particular analysis to justify its decision to reconsider the NAAQS. Some commenters point to statements made by the President and the Administrator of OIRA regarding the completion of interagency review of a draft final decision on a prior reconsideration of a NAAQS. These statements, which were not made by the EPA, do not establish that the EPA Administrator has discretion, much less the obligation, to consider costs of implementation in making any decisions regarding the NAAQS under section 109, particularly where such considerations are prohibited under section 109. As just noted, section 109(b) provides that NAAQS may be revised in the same manner as

¹⁹ Although section 109(b) does not specify any particular process that must be followed, this reconsideration followed the same notice and comment rulemaking procedures, as required by section 307(d), as previous reviews.

promulgated, and section 109(d) provides that the Administrator “may review and revise criteria or promulgate new standards earlier or more frequently than required under this paragraph.” Nothing in section 109 suggests that before undertaking a review of the air quality criteria or standards the Administrator is required to assess the potential economic or social impacts of a possible decision that he might reach to revise the NAAQS based on such a review. As noted above, the Supreme Court has held that “Congress does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions -- it does not, one might say, hide elephants in mouseholes.” Imposing such a requirement on the Administrator as a precondition to reviewing the NAAQS would fundamentally alter the nature of the NAAQS review process away from its focus on the health of the public. “And because § 109(b)(1) and the NAAQS for which it provides are the engine that drives nearly all of Title I of the CAA, 42 U.S.C. §§ 7401-7515, that textual commitment must be a clear one.” *Whitman*, 531 US at 468. There is no such textual commitment in section 109, and the EPA concludes there is no such requirement on the Administrator.

Some commenters also suggest that the EPA lacks authority to undertake this action because Congress has specified the mechanism for the EPA to revise NAAQS in section 109(d)(1) and this proceeding fails to satisfy the requirements

of that provision. The EPA disagrees that this action falls outside the scope of section 109(d)(1). As noted above, section 109(d)(1) specifically authorizes the Administrator to “review and revise criteria or promulgate new standards earlier or more frequently than required under this paragraph.” That is precisely what the Administrator is doing here. This reconsideration is based on the thorough review of the air quality criteria completed in 2020, as supplemented by the additional studies, information, and analyses in the ISA Supplement and 2022 PA. The EPA acknowledges that the ISA Supplement does not itself satisfy the EPA’s obligation to periodically complete a thorough review of the air quality criteria. There are a number of areas, such as respiratory effects and reproductive and developmental effects, where commenters have identified new studies that the EPA judged did not warrant reopening the air quality criteria at this time but will warrant closer consideration in a future review. Thus, a “thorough review” of the air quality criteria for PM, along with any revisions to the criteria and NAAQS that may be appropriate, should still be completed within five years of the most recent complete review, which concluded in 2020. However, nothing in the last sentence of section 109(d)(1) indicates that the authority of the Administrator to revise air quality criteria or NAAQS is limited to the context of a new full review of the air quality criteria.

It is true that the first sentence of section 109(d)(1) imposes a duty on the Administrator to “complete a thorough review of the criteria published under section 7408 of this title and the national ambient air quality standards promulgated under this section and shall make such revisions in such criteria and standards and promulgate such new standards as may be appropriate” However, a careful reading makes plain that the last sentence of section 109(d)(1) provides additional authority, independent of the requirement to undertake a full review of the air quality criteria and revise the criteria and the NAAQS, as appropriate, every five years. The first sentence of section 109(d)(1) clearly specifies that every five years the Administrator must undertake “a thorough review of the criteria” and then, based on that review make such changes in the air quality criteria and the NAAQS as may be appropriate. By contrast, the last sentence of section 109(d)(1) simply says “may review and revise criteria or promulgate new standards earlier or more frequently than required under this paragraph.” Thus, while the first sentence of section 109(d)(1) establishes the baseline requirement that the air quality criteria must undergo a “thorough review” at least every five years (which may necessitate revisions to the NAAQS), the last sentence authorizes the Administrator to review and revise *either* the air quality criteria or the NAAQS on a shorter schedule of the Administrator’s choosing. The plain language of

the last sentence of section 109(d)(1) authorizes the Administrator to revise the NAAQS *without* revising the air quality criteria. It also authorizes the Administrator to revise the air quality criteria, without undertaking a “thorough review” of the criteria. It follows that the action of the Administrator here, to reopen the air quality criteria to seek CASAC advice on certain studies he considered most useful in informing conclusions on the health effects of PM and revising the NAAQS based the entire air quality criteria (including both the thorough review completed in 2020 as well as additional studies judged most likely to be useful), was entirely consistent with the authority granted by Congress in section 109(d)(1).

Moreover, as explained at length in the final decision on the 2012 PM NAAQS (78 FR 3095-96), “[s]ince the 1970 amendments, the EPA has taken the view that NAAQS decisions are to be based on scientific studies and related information that have been assessed as a part of the pertinent air quality criteria.” As a consequence, when the EPA believes new science is sufficiently important to be material to decision making on NAAQS, it reopens the air quality criteria to allow the CASAC and the public, as well as the Administrator, to fully consider the evidence. In each review the EPA faces the question of whether “new” studies that become available, or are brought to EPA’s attention, at the time of the rulemaking but were

not initially presented to the CASAC should be considered for decision making on the NAAQS, and where the EPA has concluded these studies should be considered for decision making, the EPA has reopened the air quality criteria for the review, as it has done here. Thus, the EPA finds that its approach to reopening the air quality criteria in this reconsideration, recognizing that there were additional studies that should be considered for decision making, and deciding to bring to the CASAC a draft ISA Supplement considering those studies most likely to be useful in judging whether the current standards are requisite, is entirely consistent with the CAA and the EPA's longstanding practice.

Finally, because the Administrator is acting within the scope of his authority under section 109 (whether that authority is characterized as implicit or explicit), it is irrelevant that CAA section 307(d)(7)(B) also requires the Administrator to convene a reconsideration proceeding under certain circumstances. Section 307(d)(7)(B) is intended to ensure that any objections to EPA's decisions on the NAAQS are brought before the Agency for consideration before being raised in judicial review. Thus, where a commenter identifies an issue of central relevance to the rule that was impracticable to raise an issue in public comment (or that arose after the public comment period but before judicial review), this provision specifies EPA shall convene a reconsideration proceeding to

consider the issue. However, section 307(d)(7)(B) merely specifies certain circumstances when reconsideration is necessary—it does not limit the availability of reconsideration to only those circumstances, and it does not alter the Administrator’s authority to revise NAAQS when acting within the scope of his authority under section 109.

- (2) **Comment:** Some commenters, in their questioning of the Agency’s statutory authority for the reconsideration, suggest that in reaching decisions regarding the adequacy of the NAAQS the CAA requires consideration of science-based criteria, not policy-based criteria. Therefore, the commenters contend that policy initiatives, such as environmental justice, should not be included because the EPA does not have the authority to include them.

Response: The EPA agrees that the NAAQS must be based on the air quality criteria, although any decision on the appropriate NAAQS necessarily requires the Administrator to exercise his judgment, including with respect to science policy and public health policy judgments on the strength and uncertainties of the scientific evidence. The EPA did not seek to rewrite or expand its authority in this reconsideration but simply set standards requisite to protect the public health and welfare based on the air quality criteria. The Administrator expressly considered the

available information regarding health effects among at-risk populations in reaching the proposed decisions that the current primary annual PM_{2.5} standard is not requisite to protect public health with an adequate margin of safety, and should be revised. The 2019 ISA and ISA Supplement identified children, older adults, people with pre-existing diseases (cardiovascular disease and respiratory disease), minority populations, and low SES populations as at-risk populations. Consistent with the EPA's longstanding approach to the NAAQS, which is supported by legislative history and case law as discussed in section I of the preamble, the EPA set the NAAQS to protect the at-risk populations identified for this review, including minority and low SES populations.

- (3) **Comment:** Several commenters contend that the EPA's reconsideration of the 2020 final decision is a discretionary action. Commenters assert that the EPA's proposed decision to reconsider the PM NAAQS is premature, and that the EPA should withdraw its reconsideration and defer further action to a future required review. Commenters also suggest that the reconsideration is based more on a change in administration rather than the NAAQS process as described in the CAA, that the proposed decision is based on politics rather than science, and that the reconsideration should be suspended.

Some commenters note that the CAA requires review of the NAAQS no more than five years after its previous review, and assert that the EPA should wait the mandatory timeframe before embarking on a new standard. Other commenters express concerns about proposing revisions to the standards in the reconsideration three years ahead of the schedule of the CAA statutorily-mandated review, suggesting that predictability helps state and local officials engage in long-term planning for NAAQS implementation and other environmental requirements.

Response: As discussed in responding to the earlier comment in this section, the CAA authorizes the Administrator to revise the air quality criteria or the NAAQS more frequently than every five years. The Administrator initiated the reconsideration because he concluded that the available scientific evidence and technical information indicated that the current standards may not be adequate to protect public health and welfare, which is a sufficient and appropriate basis for reconsidering the NAAQS. When such questions arise, the CAA does not require the Administrator to wait until the next statutory review deadline before addressing them. Moreover, the PM NAAQS was most recently revised in 2012 and Congress clearly anticipated that the NAAQS could – and, where appropriate based on a review of the science and the

standards, should – be revised more often than every 10 years. To the extent that the comments related to implementation of the NAAQS implicate consideration of the costs of implementation or consideration of attainability and technological feasibility, those are not relevant considerations in making decisions about whether to revise the NAAQS. *See, e.g., Whitman v. American Trucking Associations*, 531 U.S. 457, 465-472, 475-76 (2001); *American Petroleum Institute v. Costle*, 665 F.2d 1176, 1185 (D.C. Cir. 1981); *accord Murray Energy Corporation v. EPA*, 936 F.3d 597, 623-24 (D.C. Cir. 2019). Even assuming the concerns raised in these comments were appropriate for consideration in this action, there are no implementation activities that were triggered by the 2020 final decision to retain the PM NAAQS that could be disrupted by revising the NAAQS in this action.

As discussed in the preamble to the final rule, the decision to revise the NAAQS was based on additional scientific evidence that was not part of the criteria considered by the prior Administrator, and additional advice from the CASAC and public comment taking that additional evidence into account, as well as on the current Administrator's judgments about the evidence, including an approach to the epidemiologic evidence that is more in line with the EPA's approach to considering such evidence in past PM NAAQS reviews compared with the

approach in the 2020 final decision. Thus, the EPA rejects the suggestion of some commenters that the reconsideration is not based on science or is not fully consistent with the requirements of the CAA.

- (4) **Comment:** Other comments argue that, while the EPA may not consider the cost of implementing the standard, it may consider the relative proximity of the standard to background concentrations. These commenters assert that the proposal fails to meet this legal standard and revisions to the NAAQS will result in a PM_{2.5} standard that is at or near existing background concentrations in the Western U.S., noting for example, increases in wildfires, and calculation of “background” PM_{2.5} on a permit application. Some commenters acknowledge EPA’s estimates of background as 0.5-3 µg/m³ but suggest that estimate is not representative of the entire country, with one commenter citing an estimate of 6 µg/m³ of “background” PM_{2.5} which was modeled as part of an application to modify a state air pollution permit.

Response: The EPA agrees that, in the context of considering standard levels within the range of reasonable values supported by the air quality criteria and judgments of the Administrator, the EPA may consider proximity to background concentrations as a factor in the decision on

whether and how to revise the NAAQS.²⁰ However, the EPA disagrees that the revised primary annual PM_{2.5} NAAQS will be at or near existing background levels. The EPA presented two estimates for background PM_{2.5} in the proposed rule, one based on zero-out modeling which produced a range of 0.5-3 µg/m³ and one using speciated monitoring data from IMPROVE sites which suggests background concentrations are in the range of 1-3 µg/m³. It is important to note that, as explained in the 2022 PA, the EPA defines U.S. background PM for this reconsideration as any PM formed from emissions other than U.S. anthropogenic (i.e., manmade) emissions. The EPA considers IMPROVE sites, which are generally located away from major sources of anthropogenic PM, to be suitable sites to examine background PM, but also notes that its estimate for background PM was supported by the zero-out modeling

²⁰ The EPA generally understands prior court decisions addressing consideration of background concentrations of a pollutant in NAAQS reviews to hold that while the Agency may not establish a NAAQS that is outside the range of reasonable values supported by the air quality criteria and the judgments of the Administrator because of proximity to background concentrations, it is not precluded from considering relative proximity to background concentrations as one factor in selecting among standards that are within that range. *See American Trucking Ass'ns v. EPA*, 283 F.3d 355, 379 (D.C. Cir. 2002); *Murray Energy v. EPA*, 936 F.3d 597, 622–624 (D.C. Cir. 2019); *American Petroleum Institute v. Costle*, 665 F.2d 1176, 1185 (D.C. Cir. 1982).

which looked at U.S. regions in addition to IMPROVE monitoring sites. By contrast, one commenter cites an estimate of 6 $\mu\text{g}/\text{m}^3$ of “background” which was modeled as part of an application to modify a state air pollution permit. Although neither the permit application nor the modeling itself was submitted and thus the EPA is unable to fully assess the validity of the modeling for these purposes, generally “background” in this context refers to emissions other than from the source, and would include anthropogenic emissions from other sources, thus explaining the higher value. Furthermore, as some commenters recognize, emissions attributable to wildfires may be eligible for exclusion from design value calculation under the Exceptional Event Rule. Thus, the EPA finds no reason to conclude that the revised primary annual $\text{PM}_{2.5}$ NAAQS will approach background levels. Even assuming background levels could be somewhat higher than 1-3 $\mu\text{g}/\text{m}^3$ they still wouldn’t be at or near the level of the revised primary annual $\text{PM}_{2.5}$ NAAQS, and the Administrator set the standards based on his assessment of what is requisite to protect public health, consistent with the requirements of the CAA.

- (5) **Comment:** A number of commenters contend that revising the PM NAAQS will impose harm, including economic impacts, employment impacts, exacerbating poverty, threatening electric grid reliability, national security risk,

impacts on clean energy transition, and timing concerns, among others.

Response: The EPA notes that several commenters provide analyses in support of their claims that are of questionable or no relevance (e.g., analyzing impacts of a carbon dioxide tax of \$300/ton, or of Clean Air Act regulations other than a PM NAAQS), and which ignore the health and economic benefits of reduced pollution and illness. Without conceding or agreeing with any of these commenters' predictions, such concerns would not be valid considerations for this action. As discussed in the preamble to the proposed and final rules and in response to other comments, the Clean Air Act, as the Supreme Court held in *Whitman*, “unambiguously bars cost considerations from the NAAQS-setting process,” 531 U.S. at 471, including these various concerns raised by commenters.²¹

- (6) **Comment:** Some commenters suggest that it was inappropriate to propose a range of levels for consideration in revising the primary annual

²¹ The EPA notes that in *Am. Petroleum Inst. v. Costle*, 665 F.2d 1176 (D.C. Cir. 1981), the City of Houston claimed that the then-recently adopted 1-hour ozone standard had been set below natural concentrations of ozone and was unattainable. The DC Circuit rejected the argument that “attainability” is a relevant criterion for the NAAQS, *id.* at 1185, and the EPA has since determined that air quality in the area including Houston has attained the 1979 1-hour ozone standard. See 85 FR 8411 (Feb. 14, 2020).

PM_{2.5} standards. These commenters suggest that the EPA should propose a recommended specific level in order to help define exactly what the EPA intends and to assist the public in providing more focused and specific comments regarding the proposal. Some commenters state that the range is too broad and is impossible to fully evaluate, and therefore, the EPA should withdraw the proposal and repropose specific standards for meaningful comment from the public. Some commenters also assert that proposing a range of options would be more appropriate in an Advanced Notice of Proposed Rulemaking (ANPRM) rather than in a reconsideration request and that the reconsideration request should not be to take comments on options for new standards.

Response: The EPA disagrees that it was inappropriate to propose a range, and to solicit comment on potential values above and below the range. The EPA recognizes that the NAAQS are of great significance to a wide variety of stakeholders and that often there is a range of reasonable values that could be supported by the air quality criteria and judgments of the Administrator. Accordingly, the EPA has in the past, as in this reconsideration, found it helpful to identify for public comment the range of values under closest consideration for the final decision, along with the rationale for identifying that range, while also soliciting comment on a wider range in order to benefit from stakeholder

input before reaching a final decision. The proposed range for the level of the primary annual PM_{2.5} standard was 9-10 µg/m³, which is a fairly narrow range.

Had the EPA proposed a single level rather than proposing a range of levels, the Agency still would have solicited comment on a range of 8-11 µg/m³ for the level of the primary annual PM_{2.5} standard, which would have been entirely appropriate under the Clean Air Act and general principles of administrative law but would have provided even less guidance to public commenters.

Further, the EPA disagrees that it would be more appropriate to proceed by ANPRM instead of reconsideration, particularly given the scope of the record and the nature of the considerations that informed the initiation of the reconsideration. As explained in responding to other comments, considering revisions to the PM NAAQS through this reconsideration is consistent with the EPA's authority under the CAA.

- (7) **Comment:** Some commenters state that having multiple significant regulatory actions proposed simultaneously interferes with the ability for states to provide meaningful participation and comment to the EPA, especially with overlapping public comment periods for proposed actions.

Response: The EPA recognizes that it has in a number of significant regulatory actions ongoing at various stages and appreciates the contributions of stakeholders through public comments to each of them. In the case of this action, the proposed decision was announced on January 6, 2023, and the pre-publication version of the notice of proposed rulemaking was posted to the EPA's website. The notice was published in the Federal Register on January 27, 2023, and the public comment period was open until March 28, 2023. In addition to the written public comment period, the EPA offered a multi-day virtual public hearing for the public to provide oral comments to the Agency on the proposed rule in February 2023. The EPA considers this a fully adequate amount of time for states and other commenters to provide comments to the Agency regarding the proposed decisions for the PM NAAQS. Furthermore, we note that for this reconsideration, the public also had opportunities to provide written comments on the 2021 draft ISA Supplement and the 2021 draft PA, as well as to offer oral comments at the public CASAC meetings during which these documents were reviewed.

[CONTENT OMITTED]

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APPENDIX E

ORAL ARGUMENT HELD ON
DECEMBER 16, 2024

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

COMMONWEALTH OF
KENTUCKY, ET AL.,

Petitioners,

v.

U.S. ENVIRONMENTAL
PROTECTION AGENCY,
ET AL.,

Respondents.

Case No. 24-1050 and
consolidated cases

DECLARATION OF AARON SZABO

I, Aaron Szabo, under penalty of perjury, affirm and
declare that the following statements are true and
correct to the best of my knowledge and belief, and are

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based on my own personal knowledge or on information contained in the record of the United States Environmental Protection Agency (EPA) or supplied to me by EPA employees under my supervision.

1. I am the Assistant Administrator for the United States Environmental Protection Agency Office of Air and Radiation (OAR), which is located at 1200 Pennsylvania Avenue, NW, Washington D.C. 20460.
2. Prior to joining EPA, I served as a federal civil servant, first at the Nuclear Regulatory Commission, where I worked on nuclear power plant issues and regulations, and then at the White House Office of Information and Regulatory Affairs, where I worked on major climate and air regulations. I continued my

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career civil service as the Senior Counsel at the Council on Environmental Quality, where my role expanded to include the National Environmental Policy Act and federal sustainability issues. I hold degrees in economics, government, and politics from the University of Maryland, College Park, and a law degree from George Washington University Law School.

3. OAR is the EPA office with primary responsibility for administration of the Clean Air Act. As the Assistant Administrator for OAR, I serve as the principal advisor to the Administrator on matters pertaining to air and radiation programs and am responsible for managing these programs, including: policy development and evaluation;

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development of emissions standards; policy guidance and overview; and technical support and evaluation of regional air and radiation program activities.

4. Through my role as Assistant Administrator for OAR, I am familiar with the development and implementation of EPA programs, policies, and regulations under the Clean Air Act. As part of my duties, I oversee the development and implementation of regulations, policy, and guidance under sections 108 and 109 of the Clean Air Act, 42 U.S.C. §§ 7408–09, including air quality criteria and primary and secondary National Ambient Air Quality Standards (NAAQS) for particulate matter (PM).

5. The purpose of this declaration is to provide the Court with context, history, and factual assertions in support of the EPA's contemporaneously filed confession of error and motion for vacatur.
6. Upon review of the final rule entitled "Reconsideration of the National Ambient Air Quality Standards for Particulate Matter," 89 Fed. Reg. 16202 (March 6, 2024) ("2024 Rule"), and the associated regulatory process, the EPA no longer seeks to defend the 2024 Rule and has asked the Department of Justice to file a motion confessing error and seeking vacatur of the 2024 Rule.
7. The EPA maintains air quality criteria for pollutants that must reflect the latest scientific knowledge regarding adverse

impacts on public health and welfare. 42 U.S.C. § 7408(a). After issuing criteria for a pollutant, the EPA promulgates two types of NAAQS: primary and secondary. “Primary” NAAQS—the type at issue in this litigation—are set “based on such criteria” at a level that the Administrator judges to be “requisite” to protect the “public health.” *Id.* § 7409(b)(1). “Secondary” NAAQS are set “based on such criteria” at a level that the Administrator judges to be “requisite” to protect the “public welfare.” *Id.* § 7409(b)(2). This declaration is primarily focused on the PM primary standards, since that is the subject of this litigation.

8. The EPA first established NAAQS for PM in 1971 (36 Fed. Reg. 8186, April 30, 1971), based

on an air quality criteria document prepared by a predecessor agency component in 1969. The primary standards consisted of a 24-hour standard set at 260 $\mu\text{g}/\text{m}^3$ and an annual standard set at 75 $\mu\text{g}/\text{m}^3$.

9. In October 1979, the EPA announced the first periodic review of the air quality criteria and NAAQS for PM by publishing its “decision to revise the criteria documents for particular matter ... underlying the [PM NAAQS]” and to propose and promulgate revisions to the NAAQS as appropriate based on the revised criteria (44 Fed. Reg. 56730, October 2, 1979). The Agency noted that any “[s]uch revision necessarily entails the thorough additional review of criteria as contemplated in Section 109(d)(1) of the Clean Air Act,” and that “[i]f

any revised standards are to be proposed, they would be based on, and announced concurrently with, the final revised criteria document” (*id.* at 56731).

10. In July 1987, the EPA promulgated revised PM NAAQS after multiple rounds of public comment on the revised criteria document and, subsequently, on the proposed rule (52 Fed. Reg. 24634, July 1, 1987). The Agency detailed “[t]he process by which” it had “reviewed the original criteria and standards for particulate matter under section 109(d)” and explained how that process culminated in the final revisions (*id.* at 24635-37). Based on a review of the revised criteria, the final rule lowered the 24-hour primary standard to 150

$\mu\text{g}/\text{m}^3$ and the annual primary standard to 50 $\mu\text{g}/\text{m}^3$.

11. In April 1994, the EPA announced its plans for the second periodic review of the air quality criteria and NAAQS for PM, and in 1997 promulgated revisions to the NAAQS (62 Fed. Reg. 38652, July 18, 1997). The Agency explained that it began the review “by announcing its intention to develop a revised Air Quality Criteria Document for [PM]” (*id.* at 38654) and that it had “announced its proposed decision to revise the NAAQS for PM” two years later “based on the air quality criteria for PM” (*id.*). In finalizing the revised NAAQS, the EPA rejected arguments that it should base the standards on studies released after the criteria update or delay the

rulemaking to account for such studies. Citing “section 109(d) of the Act,” the EPA explained that it had not relied on such studies “based on its longstanding practice of basing NAAQS decisions on studies and related information included in the pertinent air quality criteria and available for CASAC review” (*id.* at 38662), and specifically noted this “longstanding interpretation was strengthened by new legislative enactments enacted in 1977” as part of the addition of section 109(d) (*id.* at 38662 n.15).

12. The 1997 final rule addressed the fine (PM_{2.5}) and coarse (PM₁₀) fractions of PM separately for the first time. For PM_{2.5}, the primary standards were lowered to an annual standard of 15.0 µg/m³ and a 24-hour standard of 65

µg/m³. To continue to address the health effects of the coarse fraction of PM, the EPA retained the existing primary annual PM₁₀ standard and revised the form of the primary 24-hour PM₁₀ standard to be based on the 99th percentile of 24-hour PM₁₀ concentrations at each monitor in an area.

13. In May 1999, the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) upheld the EPA's decision to establish distinct PM_{2.5} standards and to regulate coarse particle pollution separately, but vacated the particular 1997 PM₁₀ standards selected by the Agency. *Am. Trucking Ass'ns, Inc. v. EPA*, 175 F.3d 1027 (D.C. Cir. 1999). Pursuant to the D.C. Circuit's decision, the EPA subsequently removed the vacated 1997 PM₁₀

standards, and the pre-existing 1987 PM₁₀ standards remained in place (65 Fed. Reg. 80776, December 22, 2000).

14. In October 1997, the EPA published its plans for the third periodic review of the air quality criteria and NAAQS for PM (62 Fed. Reg. 55201, October 23, 1997). The Agency explained that “[a]s with all NAAQS reviews, the purpose is to update the criteria and to determine whether it is appropriate to revise the standards in light of new scientific and technical information” (*id.*). The EPA anticipated developing a revised criteria document, providing for extensive peer review and public comment, and proposing any appropriate revisions when the criteria document was finalized (*id.* at 55202).

15. In October 2006, the EPA promulgated revisions to the primary NAAQS for PM based on a review of the revised criteria and after extensive public input (71 Fed. Reg. 61144, October 17, 2006). The Agency again reaffirmed its “view that NAAQS decisions are to be based on scientific studies and related information that have been assessed as a part of the pertinent air quality criteria” (*id.* at 61148). The EPA lowered the 24-hour PM_{2.5} primary standard to 35 µg/m³ and retained the existing annual PM_{2.5} primary standard of 15.0 µg/m³. With respect to PM₁₀, the EPA retained the 24-hour standard of 150 µg/m³ and revoked the annual standards.
16. In February 2009, the D.C. Circuit remanded the primary annual PM_{2.5} standard for

additional explanation on health protection.

Am. Farm Bureau Fed'n v. EPA, 559 F.3d 512

(D.C. Cir. 2009). The EPA responded to the

remand in its next review of the PM NAAQS,

which was initiated in 2007.

17. In June 2007, the EPA initiated the fourth periodic review of the air quality criteria and NAAQS for PM by issuing a call for information (72 Fed. Reg. 35462, June 28, 2007). The Agency again explained that “Section 109(d) requires periodic review and, if appropriate, revision of existing air quality criteria,” and that “EPA is then to revise the NAAQS, if appropriate, based on the revised air quality criteria” (*id.*).
18. In January 2013, the EPA promulgated revisions to the primary NAAQS for PM based

on its review of the updated air quality criteria (78 Fed. Reg. 3086, January 15, 2013). The Agency again reaffirmed its “longstanding interpretation” that “NAAQS decisions are to be based on scientific studies and related information that have been assessed as part of the pertinent air quality criteria,” which was “strengthened by new legislative requirements enacted in 1977” (*id.* at 3095). The EPA revised the annual PM_{2.5} standard to 12.0 µg/m³ and retained the 24-hour PM_{2.5} standard of 35 µg/m³. For the primary PM₁₀ standard, the EPA retained the 24-hour standard to continue to provide protection against effects associated with short-term exposure to thoracic coarse particles (*i.e.*, PM_{10-2.5}).

19. In December 2014, the EPA announced the initiation of the fifth periodic review of the air quality criteria and NAAQS for PM and issued a call for information (79 Fed. Reg. 71764, December 3, 2014). On April 14, 2020, the EPA proposed to retain the primary PM_{2.5} and PM₁₀ standards without revision based on the results of an integrated science assessment finalized in 2019 after peer review and public comment, which reviewed the criteria and scientific developments since the last review (85 Fed. Reg. 24094, April 30, 2020).
20. In December 2020, the EPA finalized its decision to retain the existing primary PM_{2.5} and PM₁₀ standards (85 Fed. Reg. 82684, December 18, 2020). The Agency again reaffirmed its “longstanding interpretation”—

“strengthened by new legislative requirements enacted in 1977”—that “NAAQS decisions are to be based on scientific studies and related information that have been assessed as a part of the pertinent air quality criteria” (*id.* at 82690).

21. The EPA concluded based on a review of the criteria and the 2019 integrated science assessment that the suite of primary PM_{2.5} standards were requisite to protect public health with an adequate margin of safety and should be retained. The EPA also judged it appropriate to retain the primary PM₁₀ standard to provide the requisite degree of public health protection against exposures, regardless of location, source of origin, or particle composition (*id.* at 82725).

22. In 2021, Executive Order 13990 directed review of certain agency actions (86 Fed. Reg. 7037, January 25, 2021). An accompanying fact sheet provided a non-exclusive list of agency actions that agency heads should review in accordance with that Executive Order, including the 2020 Particulate Matter NAAQS Decision.
23. On June 10, 2021, the Agency announced its decision to “reconsider” the 2020 PM NAAQS final action. The Agency announced that, in support of the reconsideration, it would develop a partial supplement to the 2019 integrated science assessment and a revised policy analysis, drafts of which would be reviewed by the CASAC. The draft supplement was released in September 2021 (86 Fed. Reg.

54186, September 30, 2021), and the final supplement was released in May 2022 after CASAC. For the health effects evidence, the supplement focused on studies from the U.S. and Canada for the health effects evidence for which the 2019 integrated science assessment concluded a causal relationship (*i.e.*, short- and long-term PM_{2.5} exposure and cardiovascular effects and mortality) and studies that addressed key scientific topics for which the literature had evolved since the 2020 PM NAAQS review was complete. The draft policy assessment was released in October 2021 (86 Fed. Reg. 56263, October 8, 2021), and the final policy assessment was released in May 2022 after CASAC review.

24. In January 2023, the EPA proposed to revise the annual $\text{PM}_{2.5}$ standard and to retain the primary 24-hour $\text{PM}_{2.5}$ standard and the primary 24-hour PM_{10} standard (88 Fed. Reg. 5558, January 27, 2023). In March 2024, the EPA promulgated a final rule lowering the primary annual $\text{PM}_{2.5}$ standard from $12.0 \mu\text{g}/\text{m}^3$ to $9.0 \mu\text{g}/\text{m}^3$ and retaining the other standards as proposed.
25. In support of the 2024 Rule, the EPA prepared an illustrative analysis of the potential costs associated with the decision to lower the primary annual $\text{PM}_{2.5}$ standard to $9.0 \mu\text{g}/\text{m}^3$ titled “Regulatory Impact Analysis for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter” (RIA). The EPA expressly stated in the 2024

Rule that it did not rely on the RIA or consider cost in deciding to revise the annual PM_{2.5} [sic] standard (89 Fed. Reg. at 16373). The RIA used national scale emissions, controls, and cost information to examine illustrative state and local level attainment of the revised annual PM_{2.5} standard in 2032. The estimated costs reported in the RIA are associated with the control devices themselves and do not include the costs to the EPA, States, or localities of implementing the NAAQS or the costs of revising and implementing permit and permit conditions beginning on the effective date of the 2024 Rule.

26. The RIA estimated that control devices necessitated by the 2024 Rule would cost \$590 million in 2017 dollars (approximately \$780

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million in 2025 dollars assuming an average annual inflation rate of 3.55%) each year. This estimate did not fully account for all the emissions reductions needed to attain the revised standard, and therefore was likely an underestimate of actual cost. Furthermore, citing technical limitations, the RIA did not account for indirect economic impacts on the entire economy from the illustrative control strategy, so therefore acknowledged that there may be additional costs to the economy that are not captured in the estimate. Commenters presented alternative analyses suggesting that EPA had significantly underestimated the costs of the rule, which, according to one analysis, were projected to be up to \$9.1 billion.” (Comments of the NAAQS Regulatory

Review & Rulemaking Coalition, Attach. 3, EPA-HQOAR-2015-0072-2361, JA2481 (Mar. 28, 2023)).

27. The EPA's decision to revise the primary annual PM_{2.5} standard triggered the Clean Air Act's complex implementation provisions and related statutory deadlines for action.
28. Upon promulgation of a revised NAAQS, States and the EPA must initiate the process for designating areas as meeting or not meeting the revised NAAQS, along with the areas nearby that may be contributing to nonattainment of the NAAQS. The timeline for initial area designations began with promulgation of the revised primary annual PM_{2.5} standard. In accordance with CAA section 107(d)(1), not later than 1 year after

promulgation of a revised NAAQS, States must submit to EPA their determinations regarding whether EPA should designate areas within the state as nonattainment, attainment, or unclassifiable. If EPA disagrees with a State, the Agency notifies States of intended modifications in advance and invites an opportunity to respond. Under CAA section 107(d)(1)(B)(i), the EPA generally must promulgate final designations for all areas no later than 2 years after a revised NAAQS is promulgated, although this timeline may be extended for up to one year if there is “insufficient information to promulgate the designations.” The EPA’s revision of the primary annual PM_{2.5} standard in the 2024 Rule triggered an obligation to finalize area

designations by a default deadline of February 7, 2026.

29. In determining designations, the EPA evaluates each area on a case-by-case basis, considering the specific facts and circumstances unique to the area to support initial area designations and associated boundary decisions. The EPA has historically used area-specific analyses to support nonattainment area boundary determinations by evaluating factors such as air quality data, emissions and emissions-related data, meteorology, geography/topography, and jurisdictional boundaries. The EPA makes designations decisions based on complete, quality-assured, certified air quality data in the EPA's Air Quality System. The EPA

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typically looks to monitoring data from existing PM_{2.5} Federal Equivalent Methods and Federal Reference Methods sites to determine violations of the NAAQS. Air agencies may flag air quality data for certain days in the Air Quality System due to potential impacts from exceptional events (*e.g.*, events such as prescribed fires on wildland, wildfires, or high wind dust storms). Accordingly, for purposes of initial area designations, an air agency may submit to the EPA an exceptional events demonstration with supporting information and analyses for each monitoring site and day the air agency claims the EPA should exclude from design value calculations for designations purposes. *See* 40 CFR 50.1, 50.14, 51.930.

30. Within 18 months of the effective date of area designations, any State in which a nonattainment area is located must submit a SIP revision that meets CAA requirements (*see* 42 U.S.C. § 7513a(a)(2)). All areas initially designated nonattainment for PM_{2.5} are classified as Moderate areas (*see* 42 U.S.C. § 7513(a)). The EPA previously estimated that developing a SIP revision for PM_{2.5} Moderate nonattainment areas costs each State \$585,900 per nonattainment area in 2015 dollars (or approximately \$800,000 in 2025 dollars assuming an average annual inflation rate of 3.17%). For more information, please see the draft Information Collection Request Supporting Statement for the PM_{2.5} NAAQS State Implementation Plan Requirements

Rule (EPA, DRAFT Information Collection Request Supporting Statement for the PM_{2.5} National Ambient Air Quality Standards State Implementation Plan Requirements Rule, EPA-HQ-OAR-2013-0691-0068 (Mar. 23, 2015), <https://www.regulations.gov/document/EPA-HQ-OAR-2013-0691-0068>).

31. Sections 110(a)(1) and 110(a)(2) of the CAA direct each State to develop and submit to the EPA a plan that provides for the implementation, maintenance, and enforcement of the NAAQS. CAA section 110(a)(1) requires that each State make a new SIP submission within 3 years of promulgation of a revised primary NAAQS for approval into the existing SIP to assure that the SIP meets

the applicable requirements for such revised NAAQS. This type of SIP submission is commonly referred to as an “infrastructure SIP.” The EPA’s revision of the primary annual PM_{2.5} standard in the 2024 Rule triggered States’ obligations to develop and submit these infrastructure SIPs for approval no later than February 7, 2027. Under CAA section 110(k)(2), the EPA must generally review and issue a decision on SIP submissions within one year after the submissions are deemed complete.

32. The Clean Air Act contains preconstruction review and permitting programs applicable to new major stationary sources and major modifications of existing major sources, which is frequently called the new source review

program (NSR). The new source review program requirements vary based on whether the construction is occurring [*sic*] in areas designated attainment, nonattainment, or unclassifiable. In attainment and unclassifiable areas, the applicable NSR requirements are called Prevention of Significant Deterioration (PSD). In nonattainment areas, the NSR requirements are called nonattainment new source review (NNSR). Until the EPA completes area designations for the 2024 PM_{2.5} NAAQS, new source review provisions applicable under an area's current designation for the prior PM_{2.5} NAAQS applies. If an area is designated nonattainment for the 1997, 2006, or 2012 PM_{2.5} NAAQS, nonattainment new source

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review requirements will apply (*see* 40 CFR 51.166(i)(2) and 52.21(i)(2)). If an area is designated as attainment or unclassifiable for all three prior PM_{2.5} NAAQS, the PSD requirements apply. Among other things, the PSD program requires a new major stationary source or a major modification to apply the “best available control technology” (BACT) to limit relevant emissions and to conduct an air quality impact analysis to demonstrate that the proposed major stationary source or major modification will not cause or contribute to a violation of any NAAQS or PSD increment (*see* 42 U.S.C. § 7475(a)(3) and (4); 40 CFR 51.166(j) and (k), 52.21(j) and (k)).

33. Upon the effective date of the revised primary annual PM_{2.5} NAAQS in the 2024 Rule, the

PSD program demonstration required under CAA section 165(a)(3) must include the revised NAAQS. This additional requirement increases the burden on any permit applicant subject to these provisions beyond those that were in effect as a consequence of the EPA's prior PM NAAQS revisions, most recently the 2012 PM_{2.5} NAAQS.

34. The EPA has previously attempted to provide by rule that sources with pending PSD permit applications at the time of the effective date of the revised NAAQS need not demonstrate compliance with the revised NAAQS to obtain a permit, in recognition of the disruptive effects of a mid-process change. In August 2019, however, the D.C. Circuit vacated that provision in the PSD rules for the 2015 ozone

NAAQS (*see Murray Energy Corp. v. EPA*, 936 F.3d 597, 627 (D.C. Cir. 2019)). Accordingly, the 2024 Rule's revision of the PM_{2.5} NAAQS required any pending PSD permit applicants to revise their applications, including applications that may have been pending for quite some time and that were in the late stages of the approval process. This disruption in the application process threatens further delays, may require additional modeling and analyses, and may result in the imposition of additional controls and therefore previously unexpected costs.

35. In the 2024 Rule, the EPA conceded that the limited information added in the integrated science assessment supplement finalized in 2022, was not itself a thorough review. The

EPA “acknowledge[d] that the ISA Supplement does not itself satisfy the EPA’s obligation to periodically complete a thorough review of the air quality criteria” (Response to Comments (“RTC”) at 121, JA2800; *see also* 89 Fed. Reg. at 16212). The EPA further conceded that the 2024 action did not satisfy the requirement in CAA section 109(d)(1) to complete a thorough review of the standards every five years. The EPA stated that review of the PM standards “should still be completed within five years of the most recent complete review, which concluded in 2020” (RTC at 121, JA2800).

36. The process followed to revise the primary annual PM_{2.5} standard in the 2024 Rule through a partial “reconsideration” of the

previous “thorough review” was unprecedented and departed markedly from the longstanding practice utilized in finalizing prior NAAQS revisions. The EPA purported to “supplement” the prior review completed in 2020 with a limited and narrow review of additional studies on some, but not all, areas impacting NAAQS review. Following this limited and narrow supplement, EPA flipped its ultimate determination in 2020, reached after a “thorough review” of the air quality criteria and related standards, on the appropriate level for the primary annual PM_{2.5} standard. In doing so, the EPA for the first time finalized a rule that reconsidered and substantially revised a NAAQS outside of the “thorough review” prescribed by statute.

37. The 2024 PM NAAQS reconsideration process did not comprise a “thorough review.” Under CAA section 109, the EPA must first conduct a “thorough review” of underlying air quality criteria and standards before deciding whether to revise a NAAQS. The combination of a prior thorough review, and a limited update of only some air quality criteria, cannot meet the requirement for a “thorough review.” If that were to be the case, EPA could serially issue supplemental assessments, combine them with a prior thorough review, and continually revise standards. That cannot be what Congress envisioned when providing EPA with a statutory command to do a thorough review of standards every five years.

38. Prior to the 2024 Rule, the EPA consistently took the position that, pursuant to CAA section 109(d) and the surrounding provisions in section 108 and 109(d), the Agency must complete a review of and revisions to the air quality criteria before proposing any appropriate revisions to the NAAQS. The Agency reaffirmed this position in 2020, including by discussing the EPA's longstanding practice for considering claims that studies released in the final stages of a "thorough review" should be considered (85 Fed. Reg. at 82690). Citing its 1993 decision on whether to revise the ozone NAAQS, the EPA reiterated that "new" studies may sometimes be of such significance that it is appropriate to delay a decision in a NAAQS review and to

supplement the pertinent air quality criteria so the studies can be taken into account” (*id.* at 82961 (citing 58 Fed. Reg. 13003, 13013-14, March 9, 1993)). Under those circumstances, the EPA has sometimes “reopen[ed] the air quality criteria” for supplementation before proceeding to repropose and finalize a decision on NAAQS revision within the same thorough review (*id.*) Thus, although thorough reviews sometimes involve multiple rounds of analysis prior to completion, the 2024 rule was an unusual departure from the body of practice in which the EPA understood its decision must reflect all the considerations under section 109(d).

39. Prior to 2024, the EPA never relied on the second sentence of section 109(d)(1), standing

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alone and apart from the first sentence of 109(d)(1), as an independent source of authority to revise the NAAQS.

40. To date, including in the 2024 Rule, the EPA never asserted that 109(b) alone authorized revising the NAAQS without also referencing 109(d). To my knowledge, this issue was raised for the first time at the oral argument for this case before the D.C. Circuit on December 16, 2024 (*see, e.g.*, Hr’g Tr. at 7:22-13:6).

I declare under penalty of perjury that the foregoing is true and correct.

Executed on November 24, 2025, in Washington, D.C.

/s/ Aaron Szabo

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