IN THE

Supreme Court of the United States

AMERICAN PETROLEUM INSTITUTE,

Petitioner,

v.

Environmental Protection Agency, $et\ al.,$ Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the District of Columbia Circuit

PETITION FOR A WRIT OF CERTIORARI

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QUESTION PRESENTED

Whether the Environmental Protection Agency may establish a new National Ambient Air Quality Standard under the Clean Air Act based on a purely hypothetical threat to the public health, as the D.C. Circuit held, or whether the agency is instead limited to establishing standards that are necessary to protect the public health from an actual or reasonably anticipated threat of harm.

PARTIES TO THE PROCEEDINGS

The following were parties to the proceedings in the U.S. Court of Appeals for the District of Columbia Circuit:

- 1. The American Petroleum Institute, petitioner on review, was a petitioner below.
- 2. The Environmental Protection Agency, respondent on review, was the respondent below.
- 3. The Natural Resources Defense Council, respondent on review, was an intervenor for respondent below.
- 4. The Interstate Natural Gas Association of America and the Utility Air Regulatory Group, nominal respondents on review, were petitioners below.

RULE 29.6 DISCLOSURE STATEMENT

Petitioner American Petroleum Institute is a nonprofit, national trade association headquartered in the District of Columbia. API has no outstanding shares or debt securities in the hands of the public and has no parent company. No publicly held company has a ten percent or greater ownership interest in API.

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No. 12-

AMERICAN PETROLEUM INSTITUTE, Petitioner,

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Environmental Protection Agency, $et\ al.$, Respondents.

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PETITION FOR A WRIT OF CERTIORARI

The American Petroleum Institute (API) respectfully petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the District of Columbia Circuit.

OPINIONS BELOW

The D.C. Circuit's decision is reported at 684 F.3d 1342. Pet. App. 1a. EPA's final rule is published at 75 Fed. Reg. 6474. Pet. App. 24a.

JURISDICTION

The D.C. Circuit entered judgment on July 17, 2012, and denied rehearing on September 24, 2012. Pet. App. 1a, 98a, 100a. This Court has jurisdiction under 28 U.S.C. § 1254(1).

STATUTE INVOLVED

Section 109(b)(1) of the Clean Air Act, 42 U.S.C. § 7409(b)(1), provides in relevant part:

National primary ambient air quality standards, prescribed under subsection (a) of this section 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.

INTRODUCTION

This case once again presents a question regarding the limits of the Environmental Protection Agency's authority to set National Ambient Air Quality Standards, or NAAQS. In American Trucking Associations v. EPA, 175 F.3d 1027 (D.C. Cir. 1999), the D.C. Circuit held that Section 109 of the Clean Air Act gave EPA unfettered discretion to set those standards, in violation of the nondelegation doctrine. EPA challenged that ruling before this Court, arguing that the statute required it to set the national standards "at a level that is requisite to protect public health from the adverse effects of the pollutant in the ambient air." Tr. of Oral Arg. in No. 99-1257, at 5. This Court accepted EPA's argument and concluded, based on that interpretation, that the statute sufficiently constrained EPA's discretion to satisfy the nondelegation doctrine. Whitman v. American Trucking Ass'ns, Inc., 531 U.S. 457 (2001).

The D.C. Circuit has now swung to the opposite extreme. Rather than *faulting* EPA for exercising boundless discretion, it has affirmatively *authorized* EPA to do just that. EPA determined in the rule-

making under review that a new NAAQS for nitrogen dioxide (NO₂) was necessary to "protect the public health." 42 U.S.C. § 7409(b)(1). As it has done in many recent NAAQS proceedings, EPA based its conclusion largely on an assessment of the benefits a new standard would bring relative to an imagined world in which air quality deteriorated to the lowest point allowed by the existing NO₂ standard. Although EPA acknowledged that there was no chance air quality would actually *reach* that level, the theoretical possibility of such deterioration sufficed to establish (in EPA's view) that the current standard was not sufficient to protect the public health.

The D.C. Circuit gave its full-throated endorsement to EPA's standardless approach in the decision below. So long as an air quality scenario is theoretically "possible" under existing law, the Court of Appeals held, EPA can rely on the scenario when deciding whether to impose a new NAAQS. Pet. App. 18a. In other words, EPA can force regulated industries to take steps to prevent risks that have literally no chance of materializing.

That holding conflicts with the text of the Clean Air Act, with this Court's decisions, and with EPA's own interpretation of the law in *American Trucking*. If left to stand, the Court of Appeals' decision will have pernicious consequences. EPA will predictably invoke unrealistic air quality scenarios as justification for new NAAQS, as it has done in many recent rulemakings. Those new standards will impose extraordinary burdens on States, cities, businesses, and consumers—all in service of an imaginary goal. The D.C. Circuit's decision will also have cascading effects in other areas of the law. Many other stat-

utes are worded identically to the Clean Air Act. And the D.C. Circuit's expansive view of EPA's authority is equally applicable to the administrative agencies charged with enforcing those laws.

Finally, the decision below reintroduces the non-delegation problem this Court sought to avoid in *American Trucking*. By allowing EPA to establish NAAQS that are not "necessary" to protect the public health, the D.C. Circuit has eliminated the intelligible principle that saves the statute from unconstitutionality. Perhaps that is why not even EPA advocated the Court of Appeals' expansive interpretation in this case.

The important question of federal law presented is ripe for the Court's consideration. No other court of appeals will weigh in because the D.C. Circuit has "exclusive jurisdiction to hear a challenge to a NAAQS." Pet. App. 8a (citing 42 U.S.C. § 7607(b)). And the D.C. Circuit is unwilling to reconsider its position. See Pet. App. 100a. Indeed, it approved another NAAQS based partly on a fictive air quality scenario just days after issuing its decision in this See National Envi'l Dev. Ass'ns Clean Air Project v. EPA, 686 F.3d 803, 813 (D.C. Cir. 2012), petition for cert. filed, No. 12-510 (U.S. Oct. 18, 2012). This case is also an ideal vehicle for considering the scope of EPA's NAAQS-setting authority. The issues are sharply focused and are not intertwined with the underlying science.

The Court should accordingly grant the writ and reverse the decision below.

STATEMENT

A. National Ambient Air Quality Standards

The NAAQS are the "engine that drives nearly all of Title I" of the Clean Air Act. American Trucking, 531 U.S. at 468. Congress has charged EPA with identifying air pollutants whose presence in the outdoor environment "may reasonably be anticipated to endanger" the public health or welfare. 42 U.S.C. § 7408(a)(1)(A). For each such air pollutant, EPA sets a nationwide ambient air quality standard—the primary NAAQS—aimed at protecting the public health. Id. § 7409(b)(1). EPA also sets a secondary NAAQS aimed at protecting the public welfare. Id. § 7409(b)(2).1

The promulgation or revision of a NAAQS has a number of important consequences. The NAAQS themselves operate as nationwide caps on the concentration of the targeted air pollutants. For instance, a NAAQS might provide that the average annual concentration of the pollutant shall not exceed threshold X, or that the daily average concentration shall not exceed threshold Y. See, e.g., 40 C.F.R. § 50.7(a). The States have primary responsibility for determining how to meet those federally defined goals. Once EPA finalizes a new NAAQS, each State has three years to design a formal plan to implement, maintain, and enforce the federal standard. 42 U.S.C. § 7410(a)(1). The States must submit

¹ Harm to the public welfare can include "effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being * * *." 42 U.S.C. § 7602(h).

their proposed implementation plans to EPA for approval. Id.

An EPA-approved plan becomes federal law backed by a variety of coercive sanctions. E.g., 42 U.S.C. § 7413(a) (administrative compliance orders); id. § 7413(b) (judicial orders and fines); id. § 7413(c) (criminal penalties); id. § 7413(d) (administrative fines); id. § 7420 (noncompliance penalties); id. § 7604 (citizen suits). If the air quality in an area falls short of a NAAQS, EPA can require the responsible State to revise its implementation plan, can impose a federal implementation plan, and, if the area continues to fall short, can ultimately withdraw a portion of the State's federal highway funding. *Id*. §§ 7410(c), (k), 7509. Even States that meet the NAAQS must administer a permitting system to ensure that the air quality within their borders does not deteriorate. *Id.* § 7475. Promulgation of a NAAQS thus sets into motion a chain of events that imposes heavy costs on States, cities, businesses, and consumers alike.

Section 109(b)(1) of the Clean Air Act—the provision at issue here—specifies the conditions for establishing a new NAAQS. Before promulgating a NAAQS, EPA must determine, based on certain scientific documents and "allowing an adequate margin of safety," that the "attainment and maintenance" of the contemplated air quality standard is "requisite to protect the public health." 42 U.S.C. § 7409(b)(1).

That formula has several key elements. The "object" of the statute's focus is the "public health," which simply means the health of the public. *American Trucking*, 531 U.S. at 465, 466. EPA's goal is to ensure that air pollution does not adversely affect

the health of the general population, not to guarantee the health of every individual. The agency must "set air quality standards at the level that is 'requisite'—that is, not lower or higher than is necessary—to protect the public health with an adequate margin of safety." *Id.* at 475-476.

Even then, EPA does not need to eliminate every public health risk. "Safe" does not mean "risk-free," and "what counts as 'requisite' to protecting the public health" will accordingly "vary with background circumstances, such as the public's ordinary tolerance of the particular health risk in the particular context at issue." *Id.* at 494 (Breyer, J., concurring in part).

B. The NO₂ NAAQS Rulemaking

This case involves a newly promulgated NAAQS for nitrogen dioxide. EPA first identified NO₂ as a harmful air pollutant in 1971 and established a primary NAAQS of 53 parts per billion (ppb). Fed. Reg. 8186, 8187 (Apr. 30, 1971). That standard remains in place today. Compliance is based on the mean annual concentration of NO₂ in an area. In other words, the concentration at any given moment can be greater than 53 ppb so long as the annual average does not exceed that level. EPA has periodically reviewed the NO₂ NAAQS, and has concluded on several occasions that the existing standard is sufficient to protect the public health. See 50 Fed. Reg. 25532 (June 19, 1985); 61 Fed. Reg. 52852 (Oct. 8, 1996).

In its most recent review, however, EPA determined that the annual standard did not afford adequate protection. EPA focused its attention on the potential health effects of *short-term* exposures to NO₂. Pet. App. 25a. It canvassed recent scientific

studies in an "Integrated Science Assessment." Pet. App. 36a, 40a-56a. Although the first two public drafts of that document did not report any meaningful effects from short-term exposure to low levels of NO₂, the final draft shifted course based on a nonpublic, non-peer-reviewed meta-analysis of controlled human exposure studies.² According to EPA, the meta-analysis suggested possible effects on asthmatics exposed to NO_2 concentrations as low as 100 ppb. Pet. App. 79a. The agency confessed uncertainty regarding the magnitude and clinical significance of those effects, Pet. App. 84a, and it recognized that a peer-reviewed meta-analysis pointed in the opposite direction, Pet. App. 82a-84a. Nevertheless, EPA found the evidence "sufficient to infer a likely causal relationship for respiratory effects following shortterm NO₂ exposure." Pet. App. 47a, 89a.

But evidence of respiratory effects in individuals is not the same as evidence of a threat to the public health. See Brief for Federal Respondents at 36 n.28, Whitman v. American Trucking Ass'ns, Inc., 531 U.S. 457 (2001) (No. 99-1426) (Congress used the word "public" to "make clear that NAAQS protect the 'health' of the general population, or of population groups, rather than of any specific individual"); Antonin Scalia, Responsibilities of Regulatory Agencies under Environmental Laws, 24 Hous. L. Rev. 97, 103 (1987). Thus, in order to "put judgments about NO₂ associated health effects into a broader public health context," EPA staff conducted a separate Risk and Exposure Assessment (REA) for NO₂. Pet. App.

² A meta-analysis "synthesizes the results of multiple studies by performing statistical analyses of the results of those studies." Pet. App. 5a n.*.

56a. That document sought to bridge the gap between health science and environmental policy by homing in on several practical questions. Among other things, the REA asked:

- Are exposures above benchmark levels [of NO₂] and/or health risks estimated to occur in areas that meet the current standard?
- If so, are the estimated exposures and health risks important from a public health perspective?
- What are the important uncertainties associated with the estimated risks?

Pet. App. 62a.

To shed light on those questions, the REA modeled "air quality, exposures, and health risks" associated with different levels of ambient NO₂. Pet. App. 58a. The goal was to gauge the need for a new NAAQS by comparing various potential NO₂ standard with the current standard.

In making that comparison, however, the agency took a radical approach. It did not simply estimate the benefits of a new standard relative to current air quality; it also estimated the benefits of a new standard relative to a *simulated* world in which air quality barely met the existing annual NO₂ standard. In other words, EPA imagined that current average NO₂ levels—which are well below 53 ppb in all areas of the country, Pet. App. 29a—would increase to 53 ppb. And then it asked whether a new cap on short-term NO₂ levels would yield public health benefits relative to that simulated world. The parties and the D.C. Circuit have referred to this simulation as the "just meets" scenario (because air

quality would "just meet" the existing standard). Pet. App. 6a.

EPA ultimately concluded, based on its analyses, that the existing annual NAAQS was inadequate to protect the public health. Rather than revise the existing standard, however, the agency decided to supplement it with a new short-term NAAQS limiting average peak one hour NO₂ concentrations to 100 ppb.

In arriving at its decision to establish a new NAAQS, EPA placed special emphasis on the "just meets" scenario. Unsurprisingly, the estimated number of NO₂ exposures of concern rose "dramatically" when EPA simulated higher ambient NO₂ levels than those that actually exist. Pet. App. 6a. In comparison to these perceived (but entirely simulated) risks under the "just meets" scenario, the proposed new standards looked relatively good. EPA thus "agree[d]" with its staff that "exposure- and risk-based results reinforce the scientific evidence in supporting the conclusion that consideration should be given to revising the current standard so as to provide increased public health protection." App. 93a. It also specifically relied on the REA's conclusion that "risks estimated to be associated with air quality" in that fictive scenario "can reasonably be concluded to be important from a public health perspective." Pet. App. 92a-93a. That brief comment was EPA's only policy-based justification for promulgating a new NAAQS.³

³ As EPA correctly recognized, "the final decision on retaining or revising the current primary NO₂ standard is a public health policy judgment," not a scientific judgment. Pet. App. 60a; see also Cary Coglianese & Gary E. Marchant, Shifting Sands: The Limits of Science in Setting Risk Stand-

Several industry groups questioned EPA's emphasis on the "just meets" scenario in comments. EPA itself had acknowledged, the simulated air quality was not realistic. All areas in the United States currently meet the annual NO₂ NAAQS often by a large margin. See Pet. App. 29a; EPA, Our Nation's Air: Status and Trends through 2010, at 17 (Feb. 2012).⁴ And EPA expressly noted that its air quality adjustments were "not meant to imply an expectation that NO₂ concentrations will increase broadly across the United States or in any given area." Pet. App. 88a. On the contrary, EPA predicted that NO₂ emissions "will decrease substantially over the next 20 years," even without a new national standard. Pet. App. 30a (emphasis added). There is accordingly no chance that the "just meets" scenario will ever come to pass.

But that did not deter EPA from relying on the "just meets" projections. In response to the comments questioning its use of those hypothetical projections, the agency maintained that consideration of the simulated air quality was "clearly useful to inform" its decision regarding the adequacy of the annual NAAQS. Pet. App. 86a. The exposures and risks associated with higher NO₂ levels, the agency pointed out, "could exist" and "would be permitted" under the current standard. Pet. App. 86a, 88a. The

ards, 152 U. Pa. L. Rev. 1255, 1290 (2004) ("The selection of a NAAQS standard * * * is a quintessential risk-management decision that, while drawing on scientific evidence, ultimately turns on social, political, and economic choices.").

⁴ Available at http://www.epa.gov/airtrends/2011/report/fullreport.pdf.

agency did not spell out its reasoning further in the rulemaking record. But its Delphic record statements—and its later litigation position—suggest that the agency believes a NAAQS does not adequately "protect the public health" if the standard would theoretically permit air quality to reach a level that would threaten the public health. See Brief for Respondent at 40, American Petroleum Inst. v. EPA, 684 F.3d 1342 (D.C. Cir. 2012) (No. 10-1079) ("The question before EPA was not whether present air quality threatens human health; it was, instead, whether the existing standard protects public health with an adequate margin of safety.").

C. The Decision Below

The American Petroleum Institute renewed its objection to EPA's reliance on the "just meets" scenario in a petition for judicial review of the final NO₂ rule. API argued, among other things, that EPA's reliance on the "just meets" scenario was improper because steps to combat merely hypothetical risks are never "necessary" to protect the public health.

The Court of Appeals disagreed. In its view, EPA's reliance on a hypothetical air quality scenario was perfectly proper. The Court of Appeals' analysis of the issue began with an uncontroversial observation: the Clean Air Act requires the agency to build an "adequate margin of safety" into each NAAQS. Pet. App. 17a (quoting 42 U.S.C. § 7409(b)(1)). As the D.C. Circuit had previously held, that means "the agency should set standards providing a reasonable degree of protection * * * against hazards which research has not yet identified." *Id.* (quotation marks and citations omitted).

EPA is supposed to implement the margin of safety by identifying the level of a pollutant that threatens the public health and then setting the NAAQS somewhat below that level to account for adverse health effects that cannot be measured. *American Trucking*, 531 U.S. at 465. In an early case, for example, EPA concluded that ozone caused adverse health effects at levels as low as 150 ppb, and set NAAQS at 120 ppb to provide an adequate margin of safety. *American Petroleum Inst.* v. *Costle*, 665 F.2d 1176, 1187 (D.C. Cir. 1981) (approving EPA's decision).

In the Court of Appeals' hands, however, the "margin of safety" was transformed into a blank check. Future air quality, the court observed, can be difficult to predict. Pet. App. 17a-18a. Thus, although current air quality "had improved and was expected to keep improving, it was certainly *possible* this trend would be reversed." Pet. App. 18a (emphasis added). EPA, of course, had never actually predicted—or even speculated—that current air quality might deteriorate to the "just meets" level. On the contrary, the agency had forecast a substantial improvement in NO₂ emissions over the next twenty years. Pet. App. 30a.

But that did not daunt the Court of Appeals. The mere theoretical *possibility* that air quality might sharply decrease was enough to justify EPA's methodology. "Considering its duty to err on the side of caution," the court held, "we conclude the EPA did not act unreasonably by comparing the benefits of the one-hour standard against not only a scenario based upon existing air quality but also upon an alternate scenario in which areas just meet the annual NAAQS set in 1971." Pet. App. 19a. Not even EPA had argued for such a limitless interpretation of the "margin of safety."

After rejecting API's other challenges to the final NO₂ rule, the Court of Appeals denied the petition for review. Pet. App. 23a. API sought rehearing, which was also denied. Pet. App. 98a, 100a.

REASONS FOR GRANTING THE PETITION

The D.C. Circuit's decision conflicts with the precedent of this Court on a question of exceptional and recurring importance: Whether EPA may establish a NAAQS under the Clean Air Act based on a purely hypothetical threat to the public health. The D.C. Circuit held that it could, approving EPA's reliance on a "possible" air quality scenario the agency admitted was not realistic. But the text of the Clean Air Act, as well as decisions of this Court, foreclose that interpretation. EPA may establish a new NAAQS only if it is "necessary" to protect the public health from an actual risk of harm. *American Trucking*, 531 U.S. at 473. Theoretical risks will not suffice.

If left to stand, the D.C. Circuit's interpretation of the Clean Air Act would grant EPA limitless authority to set whatever air quality standards it pleases, all by "err[ing] on the side of caution" and hypothesizing completely fictive air quality scenarios as a basis for regulatory action. That is not the way the statute works. This Court should grant certiorari to reaffirm the statutory limits of EPA's discretion in setting national air quality standards.

I. THE COURT OF APPEALS MISINTERPRETED THE CLEAN AIR ACT'S CENTRAL PROVISION. IN CONFLICT WITH THE STATUTORY TEXT, THIS COURT'S PRECEDENT, AND EPA'S OWN INTERPRETATION OF THE LAW.

The Clean Air Act's command to EPA is straightforward. Before establishing a new NAAQS, EPA must determine that the "attainment and maintenance" of the contemplated air quality standard is "requisite to protect the public health," allowing an "adequate margin of safety." 42 U.S.C. § 7409(b)(1). The critical question at the heart of this case is: requisite to protect the public health from *what*? "Possible" threats that could materialize in some hypothetical scenario, as the D.C. Circuit held? Pet. App. 18a. Or actual threats identified by EPA based on facts in the rulemaking record?

It is the latter. The NAAQS-setting process is not an exercise in the hypothetical; it is intensely focused on the practical effects of air pollution. The statutory text, this Court's precedent, and EPA's own interpretation of the law confirm as much.

1. The Court of Appeals believed that a seemingly modest statutory phrase—"adequate margin of safety," 42 U.S.C. § 7409(b)(1)—authorizes EPA to set national environmental policy without regard to the facts on the ground. That was error. Courts do not "'construe statutory phrases in isolation'"; they "'read statutes as a whole.'" *Samantar* v. *Yousuf*, 130 S. Ct. 2278, 2289 (2010) (citation omitted). And the whole of the Clean Air Act confirms that each NAAQS must be set at a level that is not higher or lower than necessary to prevent a reasonably anticipated threat of harm to the public health.

Sections 108 and 109 of the Clean Air Act establish a two-step process for promulgating a NAAQS. Section 108 functions as a gatekeeping provision. Before EPA may regulate a pollutant at all, it must first determine that emissions of the pollutant "cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7408(a)(1)(A). The statute "condition[s] the exercise of EPA's authority on its formation of a 'judgment'" that the presence of pollutant in the air is, or will likely become, a threat to the public health. Massachusetts v. EPA, 549 U.S. 497, 532 (2007) (construing identical language in Clean Air Act section 202). The Court has referred to this threshold judgment as an "endangerment finding." Id. at 534.

Only after making an endangerment finding can EPA move to the next step—setting an appropriate NAAQS for the pollutant. Section 109 requires EPA to propose a NAAQS for a pollutant within a year after identifying that pollutant as a threat to the public health under Section 108. 42 U.S.C. § 7409(a)(2). The proposed NAAQS must be set at the level that, in EPA's judgment, is "requisite to protect the public health," allowing an "adequate margin of safety." Id. § 7409(b)(1). Requisite, in turn, means "'sufficient, but not more than necessary.'" American Trucking, 531 U.S. at 473 (quoting Tr. of Oral Arg. in No. 99-1257, at 7). And "public health" means the health of "the general population, or of population groups, rather than of any specific individual." Brief for Federal Respondents at 36 n.28, Whitman v. American Trucking Ass'ns, Inc., 531 U.S. 457 (2001) (No. 99-1426). The question before EPA is accordingly whether attainment of a

new air quality standard is necessary to "protect" the health of the general population.

But protect the public health from what? Sections 108 and 109, read in tandem, supply the answer. Only a "reasonably * * * anticipated" danger identified under Section 108 justifies establishing a NAAQS under Section 109. That statutory language calls for a risk assessment—a prediction regarding the likelihood and magnitude of the potential harm. EPA need not be certain that the harm in question will materialize, but any judgment that "harm is threatened" must take into account the available facts and use rational assumptions. Ethyl Corp. v. EPA, 541 F.2d 1, 28, 29 (D.C. Cir. 1976) (en banc) (construing similar endangerment requirement in Clean Air Act section 211). The agency's prediction, in other words, must be "reasonabl[e]," 42 U.S.C. § 7408(a)(1)(A); EPA cannot act on "hunches or wild guesses," Ethyl Corp., 541 F.2d at 28.

The threshold endangerment requirement necessarily informs the inquiry into what level of air quality must be achieved and maintained in order to protect the public health. Pollutants are regulated under the NAAQS program precisely because their actual or reasonably anticipated presence in the ambient air poses a threat to public health. The corresponding NAAQS must therefore be set at a level that is "not lower or higher than is necessary" to protect the public health from that threat. American Trucking, 531 U.S. at 476. Like a physician prescribing medication, EPA must tailor its remedy to the diagnosis.

That is precisely what this Court held in *American Trucking*: "'EPA must establish uniform national standards at a level that is requisite to protect public

health from the adverse effects of the pollutant in the air." Id. at 473 (quoting Tr. of Oral Arg. in No. 99-1257, at 5) (emphasis added). Or to put it slightly differently, EPA may establish a new NAAQS only if attainment of that standard is necessary to protect the public health from a reasonably anticipated threat of harm.

2. The Court of Appeals contravened these basic principles when it authorized EPA to establish a new NAAQS based on a fictional risk. In judging the adequacy of the annual NO₂ standard, EPA specifically relied on a finding that "risks estimated to be associated with air quality adjusted upward to simulate just meeting the current standard can reasonably be concluded to be important from a public health perspective." Pet. App. 92a. But as EPA itself recognized, there was no chance that ambient NO₂ would ever reach that level. Indeed, EPA had predicted just the opposite: that NO₂ emissions "will decrease substantially over the next 20 years," even without a new standard. Pet. App. 30a (emphasis added). The agency simply imagined a scenario that "could exist" under current law, Pet. App. 86a, and considered that imagined scenario to pose a sufficiently grave risk to public health to justify new regulation.

EPA's reliance on the fictional "just meets" scenario is inconsistent with the Clean Air Act's requirements. NAAQS must be based on actual or reasonably anticipated risks, not hypothetical ones. The Court of Appeals accordingly departed from the plain text of the statute and the prior instructions of this Court in upholding the NO₂ NAAQS.

Moreover, by authorizing EPA to target any "possible" risk, Pet. App. 18a, the D.C. Circuit introduced a

potential constitutional problem. This Court held in *American Trucking* that the statutory directive "to set air quality standards at the level that is 'requisite'—that is, not lower or higher than is necessary—to protect the public health with an adequate margin of safety" sufficiently constrained EPA's discretion to save the NAAQS from invalidity under the nondelegation doctrine. *See American Trucking*, 531 U.S. at 475-76. The D.C. Circuit's decision permits EPA to go far beyond what is "necessary" to protect the public health—neutralizing the "intelligible principle" this Court identified in *American Trucking* and bringing the Clean Air Act's constitutionality into question anew.

3. The Court of Appeals purported to find authority for its interpretation in Section 109's "margin of safety" clause. That clause requires EPA to "allow an adequate margin of safety" when it identifies the level of pollution that must be attained to protect the public health. The D.C. Circuit concluded that the "margin of safety" clause authorized EPA to act based on the mere "possib[ility]" that air quality would substantially deteriorate from current levels. Pet. App. 18a. Because air quality could theoretically decrease, "it was not unreasonable for the EPA to measure expected benefits from the new NAAQS in part upon the assumption that, if the new NAAQS were not adopted, then each area would in the future just meet the existing standard." *Id*.

That holding conflicts with this Court's decisions and with EPA's own interpretation of the Clean Air Act. Congress borrowed the "margin of safety" concept from engineering. In that context, the margin is "'a safety factor * * * meant to compensate for uncertainties and variabilities.'" Natural Resources

Defense Council, Inc. v. EPA, 824 F.2d 1146, 1152 (D.C. Cir. 1987) (en banc) (quoting Khristine L. Hall, The Control of Toxic Pollutants Under the Federal Water Pollution Control Act Amendments of 1972, 63 Iowa L. Rev. 609, 629 (1978)). A bridge, for example, might be built to withstand the maximum weight it is likely to bear, plus an additional margin of safety. The extra margin accounts for a variety of unpredictable factors that might cause the bridge to fail at a lower weight than expected.

In the NAAQS context, the "margin of safety" guards against health effects that cannot be precisely measured. A pollutant that is known to cause harm at 150 ppb, for example, can be capped at 120 ppb if gaps in the medical evidence suggest, but do not conclusively establish, the possibility of harm at the lower threshold. See, e.g., American Petroleum Inst., 665 F.2d at 1187. As this Court confirmed in American Trucking, the Clean Air Act requires EPA to implement the margin of safety through just that sort of minor adjustment to the NAAQS level: The agency must "identify the maximum airborne concentration of a pollutant that the public health can tolerate, decrease the concentration to provide an 'adequate' margin of safety, and set the standard at that level." 531 U.S. at 465. The margin of safety simply adds some minimal padding to EPA's factbased risk analysis.

This Court's interpretation of the margin of safety in *American Trucking* was hardly novel. Until recently, the D.C. Circuit had adhered to that same understanding for over thirty years. *See, e.g., Coalition of Battery Recyclers Ass'n* v. *EPA*, 604 F.3d 613, 618 (D.C. Cir. 2010); *American Farm Bur. Fed'n* v. *EPA*, 559 F.3d 512, 533 (D.C. Cir. 2009); *Natural*

Resources Defense Council, 824 F.2d at 1152; American Petroleum Inst., 665 F.2d at 1186-87; Lead Indus. Ass'n v. EPA, 647 F.2d 1130, 1154 (D.C. Cir. 1980); Environmental Defense Fund v. EPA, 598 F.2d 62, 80-81 (D.C. Cir. 1978). In each of those cases, the D.C. Circuit was careful to affirm that the margin of safety is a risk-management tool, not an open-ended invitation to over-regulate: Any agency decision incorporating a margin of safety must be "supported by the record" and may not amount to "sheer guesswork." American Petroleum Inst., 665 F.2d at 1186-87. The margin selected ultimately must be "rooted in an analysis of risk." Leather Indus. of Am., Inc. v. EPA, 40 F.3d 392, 400 (D.C. Cir. 1994).

EPA too has long recognized that the margin of safety has a modest role. As the agency underscored in its brief to this Court in *American Trucking*, the clause affords it a degree of flexibility to "'draw conclusions from suspected, but not completely substantiated, relationships between facts, from trends among facts, from theoretical projections from imperfect data, from probative preliminary data not yet certifiable as "fact," and the like.' "Brief for Petitioners at 28, Whitman v. American Trucking Ass'ns, Inc., 531 U.S. 457 (2001) (No. 99-1257) (quoting Natural Resources Defense Council, 824 F.2d at 1152). It does not give EPA "unfettered discretion" to promulgate whatever air quality standards it pleases. Id. at 33.

The D.C. Circuit inexplicably broke with this longstanding and sensible understanding in the decision below. Now, in the Court of Appeals' estimation, the margin of safety clause is much more than a simple risk-management tool; it is a license to take precautions against any "possible" threat to the

public health, no matter how remote or unlikely. Pet. App. 18a. EPA can thus promulgate a NAAQS—and set in motion the state implementation process and all that follows—simply by conceiving of a purely hypothetical scenario in which the public health would need added protection.

The Court of Appeals justified its expansive view of EPA's power by observing that attempts to predict future air quality can be "vexing." Pet. App. 18a. That is undoubtedly true. But the presence of some uncertainty does not free EPA from the constraints of the statute. Cf. Massachusetts, 549 U.S. at 534. A margin of safety is not supposed to eliminate every imaginable risk. "Safe," after all, does not mean "risk-free." Industrial Union Dep't, AFL-CIO v. American Petroleum Inst., 448 U.S. 607, 642 (1980) (plurality opinion). Nor is it plausible to think that Congress gave EPA through those "modest words" the power to circumvent an otherwise finely wrought statutory scheme. See American Trucking, 531 U.S. at 468. As this Court aptly observed in American Trucking, 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." *Id*.

The D.C. Circuit's sweeping new interpretation of the "margin of safety" clause disregards this Court's precedent and introduces grave uncertainty into a settled area of the law. And its approach has no discernible limit. If the Court of Appeals were correct, EPA could promulgate dozens of new NAAQS to protect against wholly unrealistic, but theoretically "possible," public health risks. Pet. App. 18a. Congress assuredly did not intend that result. That is why the D.C. Circuit previously forbade EPA from

"engag[ing] in sheer guesswork" when it sets a margin of safety. *American Petroleum Inst.*, 665 F.2d at 1187. And that is also why, tellingly, not even EPA advocated the Court of Appeals' interpretation in this case.

Review is warranted to reaffirm *American Trucking* and restore the margin of safety to its proper office.

II. THE QUESTION PRESENTED IS RECURRING AND IMPORTANT.

The proper construction of Section 109—and the limits of EPA's authority to set national air quality standards—are issues of vital national importance. The Clean Air Act is a "far-reaching statute" that affects the daily lives of all Americans. David P. Currie, Air Pollution § 1.14 (1981). And the NAAQS are the "engine that drives nearly all" the Act's most important title. American Trucking, 531 U.S. at 468; see also Roy S. Belden, Clean Air Act 11 (2001) (the NAAQS "serve as one of the key building blocks of the scheme for addressing air pollution"). Indeed, a longtime official of the White House Office of Information and Regulatory Affairs recently observed that the "biggest rules—the biggest decisions—during [his] almost thirty-year tenure [at OIRA] involved the National Ambient Air Quality Standards." Arthur Fraas, Observations on OIRA's Policies and Procedures, 63 Admin. L. Rev. 79, 81 (2011).

It is not difficult to see why the NAAQS are so significant. A decision to promulgate or revise a NAAQS affects every State, every major city, a broad range of industries and businesses, and (ultimately) every American consumer. Few other federal regulatory decisions have such a broad impact. The costs of compliance can be staggering, too. For instance,

EPA estimated the cost of attaining the 1997 ozone and particulate matter NAAQS to be \$10 billion and \$38 billion, respectively. *Id.* at 82; see also American Trucking, 531 U.S. at 475 (NAAQS "affect the entire national economy").

The D.C. Circuit has now effectively given EPA a free hand to establish whatever NAAQS it pleases. The decision below provides a roadmap: To *justify* a new standard, EPA need only identify a *possible* scenario in which the public health would be endangered. There is no need to link the regulatory decision to an *actual* public health threat. In light of the NAAQS's importance, that freedom will have farreaching consequences.

There is every reason to believe EPA will follow the D.C. Circuit's roadmap in future. EPA's use of the hypothetical "just meet" scenario in this case was no isolated incident. Quite the contrary: The agency has relied on such hypothetical projections with increasing frequency in recent years. See, e.g., 76 Fed. Reg. 54294, 54301 (Aug. 31, 2011) (carbon monoxide NAAQS); 75 Fed. Reg. 35520, 35527 (June 22, 2010) (sulfur dioxide NAAQS); 73 Fed. Reg. 66964, 66984 (Nov. 12, 2008) (lead NAAQS); 73 Fed. Reg. 16436, 16441 (Mar. 27, 2008) (ozone NAAQS); 71 Fed. Reg. 61144, 61152 (Oct. 17, 2006) (particulate matter NAAQS). Indeed, EPA's most recent proposed NAAQS revision is based in part on risks associated with the "just meets" scenario. Fed. Reg. 38890, 38893 (June 29, 2012) (proposed revision of particulate matter NAAQS).⁵ EPA has

⁵ EPA sought to base another recent NAAQS revision on the "just meets" scenario, *see* 75 Fed. Reg. 2938, 2946 (Jan. 19, 2010) (proposed revision of ozone NAAQS), but the President asked the agency to table the proposal, *see* Letter

defended its approach too. In one recent rulemaking, it forthrightly declared that the substantial divergence between the "just meets" scenario and reality was "irrelevant to the question of whether the current standards are requisite to protect public health with an [adequate] margin of safety." 75 Fed. Reg. at 35533-34 (emphasis added).

The agency thus refuses to correct its own course. And the D.C. Circuit—which has "exclusive jurisdiction to hear a challenge to a NAAQS," Pet. App. 8a (citing 42 U.S.C. § 7607(b))—is unwilling to intervene. Just three days after approving EPA reliance on the "just meets" scenario in this case, the D.C. Circuit issued a similar decision in connection with the most recent sulfur dioxide NAAQS. See National Envt'l Dev. Ass'ns Clean Air Project v. EPA, 686 F.3d 803 (D.C. Cir. 2012). The petitioners in that case argued that EPA could not "revise the standards when current air quality does not warrant a revision to protect public health." 686 F.3d at 813. But the D.C. Circuit rejected that argument, just as it did in this case: "Nothing in the [Clean Air Act] requires EPA to give the current air quality such a controlling role in setting NAAQS." Id.EPA's "significant discretion to decide whether to revise NAAQS," id., apparently includes the authority to base its decisions on fictional scenarios. (A petition for certiorari challenging the D.C. Circuit's holding in that case is currently pending under docket number 12-510.)

The negative consequences of the decision below will not be limited to the NAAQS context, either.

from Cass Sunstein to Lisa Jackson (Sept. 2, 2011), available at http://www.whitehouse.gov/sites/default/files/ozone_national_ambient_air_quality_standards_letter.pdf.

The "margin of safety" concept is common in federal legislation. See, e.g., 15 U.S.C. § 2057c(b)(3) (Consumer Product Safety Act); 33 U.S.C. § 1311(m)(2) (Clean Water Act); 33 U.S.C. § 1313 (Clean Water Act); 33 U.S.C. § 1317(a)(4) (Clean Water Act); 42 U.S.C. § 300g-1(b)(4)(A) (Safe Drinking Water Act); 42 U.S.C. § 4904(a)(2) (Noise Control Act); 42 U.S.C. § 7412(f)(2)(A) (Clean Air Act Section 112). If the D.C. Circuit's expansive interpretation of that concept is allowed to stand, it will inevitably bleed into other statutory domains. See, e.g., Leather Indus. of Am., 40 F.3d at 400 (applying Section 109 precedent to Clean Water Act's margin of safety clause). The decision below may also inspire agencies administering statutes with similar language to test the boundaries of their regulatory authority.

It is thus essential for this Court to act now to correct the D.C. Circuit's misinterpretation of the Clean Air Act's key provision. Further percolation will not aid the Court's consideration. EPA and the D.C. Circuit have made their positions clear, and no other circuit will have the opportunity to consider the issue. The vitally important question presented in this petition is thus ripe for review. The Court should uproot the D.C. Circuit's erroneous interpretation before it becomes ingrained in our environmental jurisprudence and causes systemic problems.

CONCLUSION

For the foregoing reasons, the petition for a writ of certiorari should be granted.

December 2012

Respectfully submitted,

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