United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued February 20, 2014 Decided May 9, 2014

No. 13-1069

NATIONAL ASSOCIATION OF MANUFACTURERS,
PETITIONER

v.

ENVIRONMENTAL PROTECTION AGENCY AND GINA
MCCARTHY, ADMINISTRATOR, EPA,
RESPONDENTS

AMERICAN LUNG ASSOCIATION, ET AL.,
INTERVENORS

Consolidated with 13-1071

On Petitions for Review of Final Rule of the
United States Environmental Protection Agency

William L. Wehrum Jr. argued the cause for petitioner. With him on the briefs were *Andrea Bear Field*, *Allison D. Wood*, *Lucinda Minton Langworthy*, *Roger R. Martella Jr.*, *Timothy K. Webster*, *Joel F. Visser*, *Rachel L. Brand*, *Sheldon Gilbert*, and *Quentin Riegel*.

Eric G. Hostetler, Attorney, U.S. Department of Justice, argued the cause for respondents. With him on the brief were

Robert G. Dreher, Acting Assistant Attorney General, and *John T. Hannon, Steven E. Silverman, David P.W. Orlin, Brian L. Doster, Geoffrey L. Wilcox,* Attorneys, U.S. Environmental Protection Agency.

Peter Zalzal, *John D. Walke*, *Nicholas Morales*, and *David S. Baron* were on the brief for intervenors Environmental Defense Fund, et al. in support of respondents.

Before: TATEL, BROWN, and KAVANAUGH, *Circuit Judges*.

Opinion for the Court filed by *Circuit Judge* KAVANAUGH.

KAVANAUGH, *Circuit Judge*: In 2013, EPA tightened the primary National Ambient Air Quality Standards, or NAAQS, for fine particulate matter. The National Association of Manufacturers and other industry groups challenge that decision. Consistent with the general principle that the Clean Air Act gives EPA substantial discretion in setting the NAAQS, we deny the petitions for review.

I

The Clean Air Act requires EPA to establish National Ambient Air Quality Standards for six common air pollutants. 42 U.S.C. §§ 7408(a)(1), 7409(a)-(b). Each NAAQS consists of four components: (i) the "indicator," or regulated pollutant; (ii) the "level," or allowable concentration of the pollutant; (iii) the "averaging time," which is the time period over which pollutant concentration measurements are averaged; and (iv) the "form," which refers to the way that compliance with the level will be determined within the averaging time (for example, that the level not be exceeded more than once per

year). *See American Farm Bureau Federation v. EPA*, 559 F.3d 512, 516 (D.C. Cir. 2009). "Primary" NAAQS – the standards at issue in this case – must be set at a level that EPA determines is "requisite to protect the public health" with "an adequate margin of safety." 42 U.S.C. § 7409(b)(1). The Supreme Court has interpreted "requisite" to mean "sufficient, but not more than necessary." *Whitman v. American Trucking Associations, Inc.*, 531 U.S. 457, 473 (2001) (internal quotation mark omitted). After EPA establishes the NAAQS, the States assume primary responsibility for implementing and enforcing the standards. *See* 42 U.S.C. § 7407(a).[1]

To ensure that the NAAQS take account of current science, the Clean Air Act directs EPA to review the standards at least once every five years. *See id.* § 7409(d).

One pollutant regulated under the NAAQS program is particulate matter. The term "particulate matter" is a shorthand for a variety of substances that form particles in the ambient air. So-called "fine particles" – the kind of particulate pollution at issue in this case – are produced mainly by automobiles and power plants. *See American Farm Bureau Federation*, 559 F.3d at 515.

In 1971, EPA first set NAAQS for particulate matter. Several times since then, the agency has considered whether to revise those standards. *See id.* at 516-17. The most recent revision process began in 2007. By 2013, both EPA and the Clean Air Scientific Advisory Committee ultimately determined that the then-existing standards for particulate matter were not sufficiently protective of public health, based

[1] Under the NAAQS program, EPA also establishes a "secondary" set of standards "requisite to protect the public welfare." 42 U.S.C. § 7409(b)(2). The secondary NAAQS are not at issue in this case.

on an "increased confidence in the association between exposure" to particulate matter and "serious public health effects." National Ambient Air Quality Standards for Particulate Matter, 78 Fed. Reg. 3086, 3120 (Jan. 15, 2013). In reaching that conclusion, EPA explained that several key epidemiological studies had reported statistically significant associations between adverse health effects and particulate matter exposure at concentrations between 12.8 and 14.8 $\mu g/m^3$. *See id.* at 3106-08, 3135 Fig. 4. In 2013, EPA therefore issued a Final Rule revising the level of the annual standard for particulate matter emissions from 15.0 $\mu g/m^3$ to 12.0 $\mu g/m^3$, a level slightly lower than the lowest concentrations reported as causing adverse health effects in the epidemiological studies analyzed by EPA. *See id.* at 3162-64.

EPA's Final Rule also revised the form of the standard to eliminate a provision that had allowed certain areas to demonstrate compliance based on the averaged results from multiple monitoring sites. EPA reasoned that the averaging provision, called "spatial averaging," could result in a standard that was not sufficiently protective of sensitive individuals living in areas with high particulate matter concentrations. *See id.* at 3124-26.

Finally, EPA amended regulations regarding the monitors used to measure concentrations of particulate matter in the air. The amended regulations require the installation of additional monitors near heavily trafficked roads in urban areas where more than 1 million people live. *See id.* at 3238-41.

Petitioners here challenge EPA's Final Rule pursuant to Section 307(b)(1) of the Clean Air Act. *See* 42 U.S.C. § 7607(b)(1), 7607(d)(9). Citing the arbitrary and capricious standard of review, petitioners argue that EPA's revisions to

the level and form of the particulate matter NAAQS were unreasonable. Petitioners also contend that EPA acted unreasonably by amending the monitoring network provisions. Petitioners further assert that EPA acted unreasonably by promulgating the Final Rule without first issuing certain implementation documents that petitioners contend are necessary to enable compliance with the Rule. We address those arguments in turn.

II

In the 2013 Rule, EPA lowered the level of the particulate matter NAAQS from 15.0 $\mu g/m^3$ to 12.0 $\mu g/m^3$. EPA did so after it considered a broad array of scientific sources, as well as the views of EPA staff and the Clean Air Scientific Advisory Committee. *See* 78 Fed. Reg. at 3106-21; Letter from Dr. Jonathan M. Samet, Chair, Clean Air Scientific Advisory Committee, to Lisa P. Jackson, EPA Administrator i-ii (Sept. 10, 2010). EPA selected the 12.0 $\mu g/m^3$ level because it was somewhat below the lowest long-term mean concentration shown by certain key epidemiologic studies to cause adverse health effects. *See* 78 Fed. Reg. at 3158-59, 3161. EPA followed a similar approach in earlier particulate matter NAAQS revisions, and we upheld those EPA decisions. *See American Farm Bureau Federation v. EPA*, 559 F.3d 512, 526-27 (D.C. Cir. 2009) (EPA "reasonably decided to address long-term exposure with an annual standard somewhat below the long-term mean concentrations in the ACS and Six Cities studies"); *American Trucking Associations, Inc. v. EPA*, 283 F.3d 355, 372 (D.C. Cir. 2002) (upholding particulate matter NAAQS where "EPA ultimately set the standard just below the range of mean annual [particulate matter] concentrations observed in studies showing a statistically significant association between fine particulate matter and health effects").

Petitioners raise several arguments about EPA's decision.

First, petitioners assert that EPA "prejudged" the outcome of the review process by failing to request comment on whether to revise the NAAQS at all. Although it is true that EPA did not specifically ask for comments on whether revision was necessary, the preamble to EPA's Notice of Proposed Rulemaking requested comments on "all issues" related to the agency's proposal to lower the level of the particulate matter NAAQS. *See* National Ambient Air Quality Standards for Particulate Matter, 77 Fed. Reg. 38,890, 38,899 (June 29, 2012). That broad request necessarily encompassed the question of whether any revision of the particulate matter NAAQS was warranted. Moreover, when EPA requested comments on *how* to revise the NAAQS, regulated entities could have responded by disputing the premise that revisions were required in the first place. Indeed, some petitioners did just that by submitting comments advocating retention of the 2006 NAAQS. *See* Comments of Utility Air Regulatory Group at 7-8 (Aug. 31, 2012). EPA's notice sufficed.

Second, petitioners challenge EPA's weighing of the scientific evidence. Among other things, petitioners argue that EPA applied inconsistent peer-review standards and afforded disproportionate weight to certain studies finding statistically significant associations between particulate matter exposure and adverse health effects. Under the arbitrary and capricious standard, we exercise great deference when we evaluate claims about competing bodies of scientific research. *See City of Waukesha v. EPA*, 320 F.3d 228, 247 (D.C. Cir. 2003). Here, we can be brief: Petitioners simply have not identified any way in which EPA jumped the rails of reasonableness in examining the science. EPA offered reasoned explanations for how it approached and weighed the

evidence, and why the scientific evidence supported revision of the NAAQS.

Third, according to petitioners, EPA did not respond when petitioners' comments cited certain studies that supported retention of the existing particulate matter NAAQS. EPA admittedly did not directly address every study that petitioners cited to the agency. But our precedents do not require as much, and EPA acted within its discretion in this case in addressing the more significant comments. *See Northside Sanitary Landfill, Inc. v. Thomas*, 849 F.2d 1516, 1519 (D.C. Cir. 1988) ("Comments must be significant enough to step over a threshold requirement of materiality before any lack of agency response or consideration becomes of concern.") (alteration omitted); *see also City of Waukesha*, 320 F.3d at 257 (an agency "need not address every comment") (internal quotation mark omitted).

III

In the Final Rule, EPA also amended the form of the particulate matter standard by eliminating "spatial averaging." Citing the arbitrary and capricious standard, petitioners challenge EPA's decision as unreasonable.

With spatial averaging, certain areas can demonstrate compliance with emission standards by averaging results from multiple monitoring sites within that area. In 1997, EPA first adopted spatial averaging in the particulate matter NAAQS. *See* National Ambient Air Quality Standards for Particulate Matter, 62 Fed. Reg. 38,652, 38,671-72 (July 18, 1997). In the 2006 NAAQS, EPA retained spatial averaging, but the agency restricted the circumstances under which spatial averaging could be used due to concerns that spatial averaging might allow greater exposures for sensitive populations. *See* National Ambient Air Quality Standards for

Particulate Matter, 71 Fed. Reg. 61,144, 61,165-67 (Oct. 17, 2006). In the 2013 NAAQS, EPA eliminated spatial averaging altogether. *See* 78 Fed. Reg. at 3124-27.

Petitioners contend that EPA acted unreasonably by eliminating spatial averaging. Their claim rests on EPA's supposed failure to explain empirically why the constraints imposed on spatial averaging in the 2006 NAAQS no longer sufficed to protect against exposure hazards. That argument misunderstands the nature of our review. For example, when EPA revises the level of the NAAQS, this Court does "not ask why the prior NAAQS once was 'requisite' but is no longer up to the task." *Mississippi v. EPA*, 744 F.3d 1334, 1343 (D.C. Cir. 2013). Rather, the only inquiry is "whether EPA's proposed NAAQS is 'requisite.'" *Id.* In other words, we do not assign "presumptive validity" to the prior NAAQS; the question is whether EPA reasonably explains the current standards. *Id.* So it is with the form of the standards as well.

EPA here fulfilled its obligation to reasonably explain its decision not to employ spatial averaging. As the agency stated, spatial averaging would enable some portions of a compliance area – particularly those areas where sensitive individuals are likely to live – to exceed the NAAQS for periods of time. *See* 78 Fed. Reg. at 3124-27. EPA reasonably concluded that allowing those excess emissions under all the circumstances here was inconsistent with EPA's goal of ensuring that the NAAQS provide requisite protection for all individuals. *Id.*; *see also id.* at 3168.

IV

Petitioners also challenge EPA's new requirement that States place monitors near heavily trafficked roads in large metropolitan areas.

Under the NAAQS program, States must develop and operate (subject to EPA approval) monitoring networks to measure concentrations of the six NAAQS pollutants in the air. *See* 42 U.S.C. §§ 7619, 7410(a)(2)(B); 40 C.F.R. pt. 58. EPA uses the data from those networks for several purposes, including for research and for determining compliance with air quality standards.

As part of the review process for the 2013 particulate matter NAAQS revision, EPA proposed adding a new, "near-road" component to the particulate matter monitoring network to "better understand the potential health impacts" of particulate matter exposures around heavily traveled roads. 77 Fed. Reg. at 39,009. In the Final Rule, EPA adopted that approach, concluding that requiring "a modest network" of near-road compliance particulate matter monitors "is necessary . . . including for comparison to the NAAQS." 78 Fed. Reg. at 3238. The Rule requires approximately 50 new monitors to be installed near heavily traveled roads in large metropolitan areas. *Id.* at 3238-41.

Petitioners challenge that decision on substantive and procedural grounds. On the substantive side, petitioners contend that near-road monitoring will make the NAAQS for particulate matter overly stringent. As petitioners see it, near-road monitoring will generate data from areas with unrepresentatively high particulate matter concentrations. EPA responds that the goal here was to ensure that the NAAQS represent real-world conditions. The point of the NAAQS program is to safeguard the quality of the "ambient air," which is defined as the "portion of the atmosphere, external to buildings, to which the general public has access." 42 U.S.C. § 7409(a); 40 C.F.R. § 50.1(e). That definition obviously includes near-road areas. Therefore, EPA explained that monitoring near-road areas – and not just non-

near-road areas – was important in order to obtain an accurate, area-wide picture of ambient air quality. It stated: "Ignoring monitoring results from [near-road] areas (or not monitoring at all) would abdicate this responsibility. Put another way, monitoring in such areas does not make the standard more stringent, but rather affords requisite protection to the populations, among them at-risk populations, exposed to fine particulate in these areas." 78 Fed. Reg. at 3240.

In the context of this statutory scheme that grants EPA substantial discretion, EPA's decision and explanation are at least reasonable.

On the procedural side, petitioners maintain that EPA did not afford them an opportunity to comment generally on near-road monitoring, and specifically on EPA's decision to use near-road data for compliance purposes, not simply for research. But EPA's proposal mentioned using near-road monitors for many purposes, including "collection of NAAQS comparable data" – in other words, to assess compliance. 77 Fed. Reg. at 39,009. That statement sufficed to put regulated entities on notice regarding the possible uses of near-road data. Petitioners themselves had no problem understanding the scope of the issues up for consideration; several petitioners submitted comments opposing the use of near-road monitors for compliance purposes. *See, e.g.*, Comments of Utility Air Regulatory Group at 54-55 (Aug. 31, 2012) ("[B]ecause reliance on near-road monitors to judge compliance would be unreasonable, the Agency does not have an adequate basis to require states to incur the cost to install and operate them.").

Petitioners also suggest that EPA improperly relied on data from a Census Bureau study without providing opportunity to comment on the study. Petitioners have filed a

petition for reconsideration with EPA raising their objections on that issue. We therefore do not address that challenge at this time. *See Utility Air Regulatory Group v. EPA*, 744 F.3d 741, 746-47 (D.C. Cir. 2014).

V

Finally, petitioners argue that EPA should not have issued, or at least should not require compliance with, the 2013 NAAQS without first providing States and regulated parties certain implementation guidance. We disagree. The NAAQS sets a clear numerical target specifying the maximum levels of emissions in the States. Under the law, States will devise implementation plans to meet that target. Nothing in the law dictates additional guidance from EPA at this point.

* * *

We have considered all of petitioners' arguments. We deny the petitions for review.

So ordered.