

AMERICAN PETROLEUM INSTITUTE
v.
COSTLE

UNITED STATES COURT OF AP-
PEALS, DISTRICT OF COLUMBIA
CIRCUIT

665 F.2d 1176

September 3, 1981, Decided

PRIOR HISTORY: Petitions for Review of Orders of the Environmental Protection Agency.

CASE SUMMARY:

JUDGES: Before ROBB, WALD and MIK-VA, Circuit Judges. Opinion for the Court filed by Circuit Judge ROBB. Opinion dissenting in part filed by Circuit Judge WALD.

OPINION BY: ROBB

OPINION

[*1181] The petitions for review consolidated in this case challenge the primary and secondary national ambient air quality standards for ozone promulgated by the Environmental Protection Agency (EPA) under the Clean Air Act, as amended. * * *. EPA established both the primary and secondary standards for ozone at 0.12 parts per million (ppm) in final regulations published on February 8, 1979. * * *. Petitioners American Petroleum Institute (API), et al., the City of Houston, and the Commonwealth of Virginia contend that the Administrator of EPA erred by establishing too stringent standards. Petitioner National Resources Defense Council (NRDC), et al., argues that the Administrator erred by establishing standards that are too lenient. Various petitioners raise procedural challenges, and certain petitioners challenge regulations which implement the standards. We uphold

the ozone standards because they are proper under the Act and such procedural errors as did occur do not require invalidation of the final standards.

I.

The standards challenged in this case establish restrictions on permissible levels of ozone. As with other photochemical oxidants, ozone is not emitted directly into the air, but is produced by complex chemical reactions between organic compounds (precursors) and nitrogen oxides in the presence of sunlight. Oxidant precursors are organic compounds which can occur naturally but are in large measure man-made. Sources of precursors include automobile emissions of hydrocarbons, chemical plant emissions, and gasoline vapors. Photochemical oxidant concentrations can also exist where ozone from the stratosphere intrudes into the lower atmosphere or where naturally occurring nitrogen oxides react with hydrocarbons produced by vegetation. Although ozone is but one of many photochemical oxidants, total oxidant pollution has been measured by reference to the ozone level in the air since 1971.

Ozone is the primary cause of the ill effects associated with smog, of which it usually comprises 65-100%. * * *. Due to its irritating nature, ozone can aggravate asthma, bronchitis, and emphysema. * * *.

The goal of the Clean Air Act is to protect the public health and welfare by improving the quality of the nation's air. * * *. Improved air quality is accomplished by the establishment of national ambient air quality standards (NAAQS) and by implementation thereof through state programs to control local sources of pollution. * * *. The Act directs the Administrator to establish two types of NAAQS. Primary ambient air quality standards are "standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allow-

ing an adequate margin of safety, are requisite to protect the public health." * * *. Secondary standards "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." * * *. State control programs must provide for [*1182] the attainment of primary standards "as expeditiously as practicable but ... in no case later than three years from the date of approval of such plan . . ." * * *. State programs that implement secondary standards must specify a "reasonable time at which such secondary standard will be attained". * * *. Thus, the ozone standards at issue in this case must be implemented through state plans within three years for the primary standard and within a reasonable time for the secondary standards.² * * *.

EPA promulgated primary and secondary standards for photochemical oxidants (i.e., ozone) in 1971. Both standards were established at an 0.08 ppm hourly average not to be exceeded more than once a year. * * *. The method used to determine compliance with the 1971 standards measured only ozone. * * *. In 1976 EPA began to revise the 1971 standards and in April 1977 requested data and information relevant to the revision. * * *.

As part of the revision, EPA established a working group within the Criteria and Special Studies Office of its Office of Research and Development to develop a "criteria document". A criteria document "accurately re-

² Under 42 U.S.C. § 7502(a)(2) a state that cannot meet the NAAQS for ozone by December 31, 1982 despite the implementation of "all reasonably available measures" may seek approval of a plan that extends the deadline for compliance to December 31, 1987

flect(s) the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities." * * *. In the early stages of preparing the ozone criteria document EPA retained a panel of expert environmental consultants (the Shy Panel) . . . The Shy Panel concluded that "short term exposures to ozone in the range of 0.15 to 0.25 ppm may impair mechanical function of the lung, and may induce respiratory and related symptoms in sensitive segments of the population". * * *. The panel recommended that the primary standard remain at 0.08 ppm. * * *. The panel's recommendations and conclusions were included in the draft criteria document.

In 1974 the Administrator of the EPA established a Science Advisory Board (SAB) to assist in establishing NAAQS, among other functions. During the revision of the ozone standards Congress passed the Environmental Research, Development, and Demonstration Authorization Act of 1978, . . ., which requires the Administrator to submit to the SAB any "proposed criteria document, standard, limitation, or regulation, together with relevant scientific and technical information in the possession of the (EPA) . . . on which the proposed action is based." * * *. [S]ix of the eleven SAB members voted to approve the criteria document, with reservations and recommended changes. Two members rejected the document, and three members offered no judgment. The parties dispute the effect of this "approval" under the Clean Air Act. * * *.

. . . [The] EPA conducted a "risk assessment study". This study combined medical opinions as to the necessary ozone levels for creation of certain adverse health effects . . . with predictions as to peak ozone levels in a five-year period. * * *. The study attempted to predict [*1183] the probability of creating certain

health problems under various possible standards. The Shy Panel relied on the results of this study in recommending that the primary standard remain at 0.08 ppm. * * *.

On June 22, 1978 EPA published the proposed primary and secondary standards for ozone. * * *. The proposed primary standard was raised to 0.10 ppm, while the proposed secondary standard remained at 0.08 ppm. EPA also proposed a revision in the measuring standard (the one-exceedance-per-year attainment measure) by substitution of a new standard. Under the old standard, as long as the 0.08 ppm standard was not exceeded more than once a year, the standard was met. The new measuring standard is met when "the expected number of hour(s) per calendar year with concentrations above 0.10 ppm is less than or equal to one (over a three year period)". * * *. In setting the proposed primary standard at 0.10 ppm the Administrator relied on studies showing adverse health effects at ozone concentrations of 0.15 to 0.35 ppm. * * *. He also relied on medical opinions and some of the conclusions of the risk assessment study. * * *. The proposed secondary standard was based on predictions as to the effects of certain ozone concentrations on crop yields due to leaf damage. * * *.

After publication of the proposed standards, EPA conducted four public hearings on the standards and received numerous comments. Various governmental agencies commented on the proposed standards, . . . * * *. Some of these comments occurred after the official comment period closed and are the subject of dispute in this case.

In February 1979 EPA published final primary and secondary standards for ozone, raising both to 0.12 ppm. * * *. The Administrator determined that "the most probable level for adverse health effects in sensitive persons, as well as in healthier (less sensitive) persons who are exercising vigorously, falls in the range of 0.15 to 0.25 ppm." * * *. He based

his conclusion on the criteria document, the comments submitted on the proposed standards, the report of the Shy Panel, and medical opinions collected during the risk assessment study. * * *. The Administrator also concluded that the 0.12 ppm standard provides an adequate margin of safety. * * *. He raised the proposed secondary standard based on a determination that average daily maximum ozone concentrations of 0.12 ppm would not harm crop yields. * * *. Finally, in addition to establishing ozone standards, EPA published four models for determining the amount of hydrocarbon reduction necessary to meet the standards. * * *. No petitions for reconsideration of the standards were filed with EPA. Petitions for review pursuant to . . .

II. ISSUES PRESENTED BY THE PETITIONS

The petitions for review present both substantive and procedural challenges to the primary and secondary ozone standards promulgated by EPA. Some petitioners contend that the standards are irrational and unsupported by the record. Other petitioners argue that the standards do not contain an adequate margin of safety, are too stringent given naturally occurring ozone levels, and are not economically feasible. It is also argued that the measurement standards and control strategies promulgated [*1184] by EPA are unreasonable and unsupported by the record. As to the procedural allegations, it is argued that the Administrator erred in his use of the Science Advisory Board, the Shy Panel, and the risk assessment study. Various petitioners contend that certain items excluded from the record should have been included, while other petitioners argue that some material was untimely inserted in the record. After discussing the standard of review which governs petitions for review under the Clean Air Act, we address each significant argument in turn.

III. STANDARD OF REVIEW

Section 307 of the Clean Air Act provides, in relevant part:

* * *

(d)(1)(A)(9) In the case of review of any action of the Administrator to which this subsection applies, the court may reverse any such action found to be-

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

(B) contrary to constitutional right, power, privilege or immunity;

(C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; or

(D) without observance of procedure required by law, if (i) such failure to observe such procedure is arbitrary or capricious, (ii) the requirement of ... (a timely objection) has been met, and (iii) (the errors were so serious and related to matters of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made)

42 U.S.C. § 7607.

These provisions of the Act assign this court a restricted role in reviewing air quality standards. * * *. The Administrator's construction of the Act will be upheld if it is reasonable, . . . , and though it is our duty to undertake a "searching and careful" inquiry into the facts, our view of the evidence "is not designed to enable us to second-guess the agency's expert decisionmaker." * * *. Reversal for procedural defaults under the Act will be rare because the court must first find that the Administrator was arbitrary or capricious, that he overruled a relevant and timely objection on the point in

question, and that the errors were so significant that the challenged rule would likely have been different without the error. * * *.

IV. SUBSTANTIVE CHALLENGES TO THE OZONE STANDARDS

Petitioner American Petroleum Institute contends that the primary ozone standard is not rational because, it alleges, no adverse health effects have been proven below 0.25 ppm with two hours exposure. * * *. API also argues that EPA must consider whether the 0.12 ppm standard is attainable and whether the anticipated costs of meeting that standard are justified when compared with the results to be achieved. * * * Petitioner Houston contends that the ozone standards are arbitrary and capricious because natural ozone levels and other physical phenomena in the Houston area prevent it from meeting the standards.* * *. [*1185] Houston argues that the standards are also arbitrary and capricious because the control strategies promulgated by EPA will not reduce ozone levels. * * *.

Petitioner Commonwealth of Virginia contends that EPA acted arbitrarily and capriciously in retaining the single hour averaging test for measuring compliance with the ozone standards. * * *. Petitioner Natural Resources Defense Council contends that the Administrator misinterpreted the Act in adopting standards for ozone alone and thus rescinding existing standards for other photochemical oxidants. * * *. NRDC also argues that the Administrator failed to establish an adequate margin of safety in the primary ozone standard. * * *.

API's argument that the Administrator erred in not considering attainability and cost justifications for the ozone standards was specifically rejected in the Lead Industries case, We stated there that under section 109 of the Act "the Administrator may not consider economic and technological feasibility in setting air quality standards . . . (because) of a deli-

berate decision by Congress to subordinate such concerns to the achievement of health goals." [W]e concluded that the "technology-forcing" requirements of the Act were expressly designed to force regulated sources to develop pollution control devices that might at the time appear to be economically or technologically infeasible. * * *.

API's other argument is that the standards are not supported by substantial evidence. We reject this argument because the record is replete with support for the final standards. * * *. The proper function of the court is not to weigh the evidence anew and make technical judgments; our role is limited to determining if the Administrator made a rational judgment. We find that the Administrator's conclusion that normal body functions are "disrupted" at low ozone levels, 4 . . ., is supported The court finds no reason to hold that the Administrator abused his discretion in crediting the various studies relied on, even given the acknowledged uncertainties in some of the conclusions. The Administrator noted that "a clear threshold of adverse health effects cannot be identified with certainty for ozone." * * *. Because the Administrator acknowledged the uncertainty of his task and made a rational judgment, we cannot second-guess his conclusion. * * *.

Houston's argument that because natural factors make attainment impossible the Administrator acted arbitrarily and capriciously in setting the primary ozone standard at an "unattainable" level is addressed in part by our analysis of API's attainability argument. Attainability and technological feasibility are not relevant considerations in the promulgation of national ambient air quality standards. * * *. Further, the agency need not tailor national regulations to fit each region or locale. * * *. We also note that compliance extensions are available in some cases, . . ., and that Congress [*1186] is aware that some regions

are having difficulty in meeting the national standards. * * *.

Houston also contends that EPA's strategies for deducing ozone concentrations rely on a faulty premise: that ozone is caused in part by high concentrations of hydrocarbons in the air. In arguing this point Houston relies on a study which allegedly establishes that reduction of hydrocarbon levels will not reduce ozone levels. The study in question was considered by EPA and rejected on several grounds which undercut the reliability of its conclusions. * * *. Because control of ozone by reduction of hydrocarbon levels is an established methodology * * *. and because Houston's record evidence in rebuttal is sparse, we cannot find that the Administrator is wrong on this issue.

Petitioner Commonwealth of Virginia challenges the method which EPA selected to measure compliance with the primary standard. The method chosen by EPA measures the highest average ozone level in any one hour to determine compliance. * * *. Virginia argues that it would be better to use a daily average ozone level to measure exposure. We find that the Administrator's selection of the maximum hourly average method is reasonable because it is calculated to measure the maximum exposure, which has been found to be a relevant factor in determining the likely consequences of ozone exposure.

Petitioner National Resources Defense Counsel argues that the Administrator has abdicated responsibility for regulation of photochemical oxidants other than ozone by relabeling the regulations here at issue. In 1971 when the first air quality standards were promulgated, the title of the regulation was "National primary and secondary ambient air quality standards for photochemical oxidants". * * *. The title was somewhat misleading because the 1971 standards applied only to ozone, which was the sole photochem-

ical oxidant measured for compliance. * * *. The new standards challenged in this case expressly apply only to ozone and do not attempt to establish permissible levels for other photochemical oxidants. * * *.

Despite NRDC's characterization of the Administrator's action, it appears that EPA has not abandoned its statutory responsibility to regulate pollutants which "may reasonably be anticipated to endanger public health or welfare." * * *. Rather, the Administrator has chosen to regulate the photochemical oxidant (ozone) that, in his judgment presents a predictable danger. * * *. The setting of the ozone standard is not the only action taken by the agency with regard to photochemical oxidants; research concerning the less well known oxidants continues. * * *. The Administrator's approach to photochemical oxidants is reasonable, given the uncertain information concerning the class as a whole.

NRDC also argues that the Administrator failed to establish an adequate margin of safety in the primary standard. As required by the statute, the Administrator promulgated air quality standards that are calculated to "protect individuals who are particularly sensitive to the effects of pollution." * * *. In setting margins of safety the Administrator need not regulate only the known dangers to health, but may "err" on the side of overprotection by setting a fully adequate margin of safety. * * *. Of course the Administrator's conclusions [*1187] must be supported by the record, and he may not engage in sheer guesswork. Where the Administrator bases his conclusion as to an adequate margin of safety on a reasoned analysis and evidence of risk, the court will not reverse. * * *. The Administrator, however, was required to take into account all the relevant studies revealed in the record. Because he did so in a rational manner we will not overrule his judgment as to the margin of safety.

The Administrator concluded that the medical evidence "suggest(ed) the real possibility of significant human adverse health effects below 0.15 ppm. Consequently ... (he) determined that a standard of 0.12 ppm is necessary and is sufficiently prudent unless and until further studies demonstrate reason to doubt that it adequately protect public health". * * *. Having determined that the "probable level for adverse effects in sensitive persons is in the range of 0.15-0.25 ppm", . . ., the Administrator considered the evidence in the record that related to less predictable risks of ozone exposure, a relevant consideration in setting margins of safety. * * *. Given the nature of the task assigned to the Administrator, which is to make an informed judgment based on available evidence, we find that the Administrator's selection of a margin of safety is rational. * * *

V. PROCEDURAL CHALLENGES

Petitioners allege numerous procedural errors: EPA's relationship with the Science Advisory Board (SAB) and Advisory Panel on Health Effects of Photochemical Oxidants (Shy Panel), post-comment period contacts between EPA and the White House, exclusion of documents from the record, and last-minute additions to the record by EPA.

Under the procedural provisions of the Clean Air Act, . . ., we may invalidate the ozone standard because of procedural error only if (1) the agency's failure to observe procedural requirements was arbitrary and capricious, (2) an objection was raised during the comment period, or, where the grounds for such an objection arose after the comment period and the objection is of "central relevance to the outcome of the rule," the objection was raised on a petition for reconsideration before the agency, and (3) "the errors were so serious and related to matters of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly

changed if such errors had not been made." . . . "[T]he essential message of so rigorous a standard is that Congress was concerned that EPA's rulemaking not be casually overturned for procedural reasons, and we of course must respect that judgment."

1. Science Advisory Board (SAB)

API and Houston contend that in promulgating the ozone standards EPA violated section 8(e) of ERDDAA, 42 U.S.C. § 4365(e) (Supp. III 1979) by failing to obtain approval of the criteria document from the SAB and to submit the proposed [*1188] standards to the SAB for review. * * *.

* * *

* * *. Although the failure to submit the proposed standards to the SAB was a violation . . ., the circumstances indicate that the error was not so central as to constitute grounds for invalidating the final standards.

2. Shy Health Effects Panel and Risk Assessment Study

API and Houston also argue that the EPA Advisory Panel on Health Effects of Photochemical Oxidants (Shy Panel) was an advisory committee within the meaning of the Federal Advisory Committee Act (FACA). * * *. Petitioners assert that because EPA failed to observe several requirements of FACA, the actions of the Shy Panel and the EPA reliance on the panel's risk assessment study require invalidation of the standard.

* * *.

We need not reach the questions whether the Shy Panel was an advisory committee within the meaning of FACA and whether violations of FACA occurred. Even were we to find that the panel was subject to FACA, that violations of the Act occurred, and that reliance on the risk assessment study was therefore illegal, we would not be able to say that there is a

substantial likelihood that the 0.12 ppm standard would have been significantly different if such errors had not been made. The ultimate adoption of a 0.12 ppm standard constitutes a rejection of the Shy Panel's conclusion that the ozone standard should not be relaxed. Moreover, even though the Shy Report was cited as one of the bases for the final standards, the criteria document otherwise fully supports the 0.12 ppm standard as a figure representing a margin of safety below the 0.15-0.25 ppm danger zone. In short, absent the Shy Panel report, there is a substantial likelihood that the standard would have been the same. We therefore cannot invalidate the standard based on the alleged procedural irregularities.

3. EPA Exclusion of API Submission Regarding Natural Hydrocarbons

API asserts that the EPA erred in failing to consider and by excluding from the docket and record an API post-comment period submission concerning natural organic emissions from vegetation.

. . . [T]he Clean Air Act, . . . requires the Administrator to place in the docket all documents, even those not submitted during the comment period, determined to be "centrally relevant" to the rulemaking. API, in submitting the above documents, noted in its request that they related to the issue of whether "attainment of the proposed standards would be precluded in most areas of the nation by natural background levels of ozone resulting in part from natural hydrocarbon emissions." . . . EPA refused to docket most of the documents submitted by API on the ground that the question of attainability is not relevant to the setting of ambient air quality standards under the Clean Air Act. . . [T]he EPA position that attainability is not central to a rulemaking of this type is correct. Accordingly, EPA's decision to exclude the API submission was proper.

4. EPA's Last-Minute Addition to the Record

Finally, NRDC contends that EPA violated the administrative procedure requirements of the Clean Air Act by placing in the record, after the close of the comment period and one day before promulgation of the final rule, an EPA staff paper entitled "Evaluation of Alternative Secondary Ozone Air Quality Standards". * * *

The last-minute addition to the record of a study which constituted the basis for the final secondary standard is disturbing. The study was never exposed to public scrutiny or comment. However, the procedural requirements of the Clean Air Act do not permit NRDC to raise this objection for the first time on appeal. * * *

* * *

The statute states that before this court may review a procedural objection the parties must raise the objection on petition for reconsideration before the EPA when the grounds for such objection "arose after the period for public comment (but within the time specified for judicial review)". * * *

The record before us does not suggest that any party, including NRDC, filed petitions for reconsideration with the EPA. The grounds for NRDC's objection were clear as of the date of promulgation of the final rule. Had NRDC complied with the statutory requirement of filing a petition for reconsideration, it could have commented on the staff study and the EPA could have responded during the period when the petition was pending. Because the required petition for reconsideration was never filed, we cannot reach the merits of the NRDC objection. * * *

5. Post-Comment Period White House Contacts

NRDC contends that a series of post-comment period oral contacts between officials of the EPA and the White House and its agencies were not documented in the docket or the record. NRDC argues that this constitutes a violation of Clean Air Act. . . * * *

* * *. [*1192]

As we have said, a petitioner must raise a procedural objection with the EPA if this court is to consider the objection. * * *. This rule applies even when the grounds for the objection first became known to the petitioner after the comment period ended, but before the period for petitioning for review expired. * * *

According to NRDC, it was alerted to the White House contacts as early as February 26 and 27, 1979, when hearings on executive branch review of environmental regulations were held by the Senate Subcommittee on Environmental Pollution. * * *. Because NRDC failed to exhaust the administrative remedy specifically required by the Act we may not and do not consider this objection to the Administrator's action. * * *

VI. CONCLUSION

In summary, we hold that the primary and secondary standards for ozone emission are supported by a rational basis in the record. Although the EPA procedures were not a model of regulatory action, we hold that none of the alleged procedural errors warrants invalidation of the final standards.

Affirmed.

DISSENT BY: WALD (In part) [Omitted.]