ORAL ARGUMENT NOT YET SCHEDULED

No. 15-1385 (consolidated with Nos. 15-1392, 15-1490, 15-1491, and 15-1494)

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

MURRAY ENERGY CORPORATION,

Petitioner,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

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

JOINT OPENING BRIEF OF INDUSTRY PETITIONERS

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to D.C. Circuit Rule 28(a)(1), petitioners in Case Nos. 15-1385 and 15-1491 (jointly "Industry Petitioners") state as follows:

A. Parties, Intervenors, and *Amici*.

Since these consolidated cases involve direct review of a final agency action, the requirement to furnish a list of parties, intervenors, and *amici curiae* that appeared below is inapplicable. These cases involve the following parties:

Petitioners:

Case No. 15-1385: Murray Energy Corporation.

Case No. 15-1392: State of Arizona, State of Arkansas, New Mexico Environment Department, State of North Dakota, and State of Oklahoma.

Case No. 15-1490: Sierra Club, Physicians for Social Responsibility, National Parks Conservation Association, Appalachian Mountain Club, and West Harlem Environmental Action, Inc.

Case No. 15-1491: Chamber of Commerce of the United States of America, National Association of Manufacturers, American Petroleum Institute, Utility Air Regulatory Group, Portland Cement Association, American Coke and Coal Chemicals Institute, Independent Petroleum Association of America, National Oilseed Processors Association, and American Fuel & Petrochemical Manufacturers.

Case No. 15-1494: State of Texas and Texas Commission on Environmental Quality.

Respondents

Respondents are the United States Environmental Protection Agency (in all of the above cases) and Gina McCarthy, Administrator of the United States Environmental Protection Agency (in Case Nos. 15-1392, 15-1490, 15-1491, and 15-1494).

Intervenors

Intervenors in support of Petitioners in Case No. 15-1392 are the States of Wisconsin, Utah, and Kentucky and, through a separate motion, the State of Louisiana.

Intervenors in support of Respondents consist of two groups: (1) American Lung Association, Sierra Club, Natural Resources Defense Council, and Physicians for Social Responsibility; and (2) Chamber of Commerce of the United States of America, National Association of Manufacturers, American Petroleum Institute, Utility Air Regulatory Group, Portland Cement Association, American Coke and Coal Chemicals Institute, Independent Petroleum Association of America, National Oilseed Processors Association, American Fuel & Petrochemical Manufacturers, American Chemistry Council, American Forest &

Paper Association, American Foundry Society, American Iron and Steel Institute, and American Wood Council.

Amici Curiae

The American Thoracic Society has been granted leave to file a brief as *amicus curiae* in support of Petitioners in Case No. 15-1490. The Institute for Policy Integrity at the New York University School of Law has been granted leave to file a brief as *amicus curiae* in support of Respondents.

B. Rulings Under Review

These consolidated cases involve final action of the United States Environmental Protection Agency entitled "National Ambient Air Quality Standards for Ozone," published in the *Federal Register* at 80 FR 65292 (Oct. 26, 2015).

C. Related Cases

These consolidated cases have not previously been before this Court or any other court.

RULE 26.1 DISCLOSURE STATEMENTS

Pursuant to Rule 26.1 of the Federal Rules of Appellate Procedure and D.C. Circuit Rule 26.1, Industry Petitioners make the following statements:

Murray Energy Corporation ("Murray Energy") is a corporation organized and existing under the laws of the State of Ohio. It is the largest privately owned coal company in the United States, and the largest underground coal mine operator in the United States, with combined operations that produce and ship approximately 80 million tons of bituminous coal annually. Murray Energy has no publicly traded parent corporation, and no publicly held company owns 10% or more of its stock.

The ***Chamber of Commerce of the United States of America*** (the "Chamber") is the world's largest business federation. The Chamber is a not-for-profit corporation that represents 300,000 direct members and indirectly represents the interests of more than 3 million companies, state and local chambers, and trade associations of every size, in every industry sector, and from every region of the country. A central function of the Chamber is to advocate for the interests of its members in matters before Congress, the Executive Branch, and the courts. The Chamber has no parent corporation, and no publicly held company has 10% or greater ownership in the Chamber.

The ***National Association of Manufacturers*** ("NAM") is the largest manufacturing association in the United States. It is a national not-for-profit trade association representing small and large manufacturers in every industrial sector and in all 50 states. Manufacturing employs nearly 12 million men and women, contributes more than $2.17 trillion to the U.S. economy annually, has the largest economic impact of any major sector, and accounts for three-quarters of private-sector research and development. The NAM's mission is to enhance the competitiveness of manufacturers by shaping a legislative and regulatory environment conducive to U.S. economic growth and to increase understanding among policymakers, the media, and the general public about the vital role of manufacturing to America's economic future and living standards. It is the powerful voice of the manufacturing community and the leading advocate for a policy agenda that helps manufacturers compete in the global economy and create jobs across the United States. The NAM has no parent corporation, and no publicly held company has 10% or greater ownership in the NAM.

The ***American Petroleum Institute*** ("API") is a national not-for-profit trade association representing over 650 oil and natural gas companies from all segments of the industry, including producers, refiners, suppliers, pipeline operators, and marine transporters, as well as service and supply companies that support all segments of the industry. Its members are leaders of a technology-driven industry

that supplies most of America's energy, supports more than 9.8 million jobs and 8% of the U.S. economy, and, since 2000, has invested nearly $2 trillion in U.S. capital projects to advance all forms of energy, including alternatives. API has no parent corporation, and no publicly held company owns a 10% or greater interest in API.

The ***Utility Air Regulatory Group*** ("UARG") is a group of individual electric generating companies and national trade associations. UARG's purpose is to participate on behalf of its members collectively in administrative proceedings under the Clean Air Act that affect electric generators and in litigation arising from those proceedings. UARG has no outstanding shares or debt securities in the hands of the public and has no parent company. No publicly held company has a 10% or greater ownership interest in UARG.

The ***Portland Cement Association*** ("PCA") is a national not-for-profit trade association representing companies responsible for more than 92% of cement-making capacity in the United States. Its members operate manufacturing plants in 35 states, with distribution centers in all 50 states. PCA conducts market development, engineering, research, education, technical assistance, and public affairs programs on behalf of its members. Its mission includes a focus on improving and expanding the quality and uses of cement and concrete, raising the quality of construction, and contributing to a better environment. PCA has no

parent corporation, and no publicly held company owns a 10% or greater interest in PCA.

The ***American Coke and Coal Chemicals Institute*** ("ACCCI"), founded in 1944, is an international trade association that represents 100% of the U.S. producers of metallurgical coke used for iron and steelmaking, and 100% of the Nation's producers of coal chemicals, who combined have operations in 12 states. It also represents chemical processors, metallurgical coal producers, coal and coke sales agents, and suppliers of equipment, goods, and services to the industry. ACCCI has no parent corporation, and no publicly held company has 10% or greater ownership in ACCCI.

The ***Independent Petroleum Association of America*** ("IPAA") is a national not-for-profit trade association that represents the thousands of independent oil and natural gas producers and service companies across the United States. Independent producers develop 90% of American oil and gas wells, produce 54% of American oil, and produce 85% of American natural gas. IPAA has over 6,000 members, including companies that produce oil and natural gas ranging in size from large publicly traded companies to small businesses, companies that support this production such as drilling contractors, service companies, and financial institutions. IPAA has no parent corporation, and no publicly held company owns a 10% or greater interest in IPAA.

The ***National Oilseed Processors Association*** ("NOPA") is a national not-for-profit trade association that represents 12 companies engaged in the production of vegetable meals and vegetable oils from oilseeds, including soybeans. NOPA's member companies process more than 1.6 billion bushels of oilseeds annually at 63 plants in 19 states, including 57 plants which process soybeans. NOPA has no parent corporation, and no publicly held company has 10% or greater ownership in NOPA.

The ***American Fuel & Petrochemical Manufacturers*** ("AFPM") is a national not-for-profit trade association whose members comprise more than 400 companies, including virtually all United States refiners and petrochemical manufacturers, and supply consumers with a wide range of products and services that are used daily in homes and businesses. AFPM has no parent corporation, and no publicly held company owns a 10% or greater interest in AFPM.

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GLOSSARY OF TERMS

Act	Clean Air Act
ATS	American Thoracic Society
CAA	Clean Air Act
CASAC	Clean Air Scientific Advisory Committee
EPA	U.S. Environmental Protection Agency
FEV_1	Forced expiratory volume in one second
FR	Federal Register
ISA	Integrated Science Assessment
JA	Joint Appendix
NAAQS	National Ambient Air Quality Standard
NOx	nitrogen oxides
O_3	ozone
ppb	parts per billion
ppm	parts per million
RBL	relative biomass loss
SIP	State Implementation Plan
VOCs	volatile organic compounds

JURISDICTIONAL STATEMENT

Industry Petitioners (Murray Energy Corporation and the Chamber of Commerce of the United States *et al*.) seek review of a final rule of the U.S. Environmental Protection Agency ("EPA") entitled "National Ambient Air Quality Standards for Ozone," issued under Section 109 of the Clean Air Act ("CAA" or "Act").[1] 80 *Federal Register* ("FR") 65292 (Oct. 26, 2015), Joint Appendix ("JA") ____-____. Petitions for review were filed within the 60-day period prescribed by Section 307(b) of the Act. This Court has jurisdiction under that provision.

STATEMENT OF ISSUES

Whether EPA's adoption of the revised national ambient air quality standards ("NAAQS") for ozone was arbitrary and capricious, an abuse of discretion, or contrary to the CAA because:

(1) EPA failed to take adequate account of the impact of uncontrollable background levels of ozone in preventing achievement of those standards, and set standards that cannot be achieved in numerous areas given such background levels;

(2) The above legal defect has not been and cannot be cured by EPA's reliance on alternative regulatory mechanisms;

[1] All statutory citations are to the CAA; the Table of Authorities provides parallel U.S. Code citations.

(3) EPA failed to take into account relevant contextual factors, including the adverse economic, social, and energy impacts of adopting these stricter standards; and/or

(4) EPA did not provide a reasoned explanation for changing its conclusions drawn from the same basic underlying scientific evidence considered in the prior NAAQS revision.

STATUTORY PROVISIONS

Pertinent statutory provisions are reproduced in the Statutory Addendum (separately bound). No existing regulations are relied upon herein.

INTRODUCTION

The CAA requires that NAAQS be achievable by regulation of U.S. sources. However, in revising the ozone NAAQS to a level lower than the prior standard, EPA failed to take into account the critical fact that naturally-occurring or internationally-transported background ozone that cannot be controlled under the Act can prevent achievement of those NAAQS in numerous areas of the country. That failure violated the Act.

Additionally, although the Supreme Court has held that, in setting NAAQS, EPA cannot consider the costs of implementation, EPA can and must consider contextual factors such as the acceptability of, and the public's tolerance for, the risks being addressed; and those contextual factors can all be influenced by the

overall adverse economic, social, and energy impacts that could result from a revised NAAQS. Yet EPA did not consider those impacts here.

Finally, despite the absence of any intervening study that changed the fundamental scientific understanding of ozone effects, EPA changed its conclusion regarding the acceptability of the risks from those drawn in the prior ozone NAAQS revision without providing a reasoned explanation for that change. That was arbitrary and capricious.

STATEMENT OF THE CASE AND FACTS

A. Pertinent Requirements of the CAA

Section 109 of the CAA directs EPA to set NAAQS for pollutants from numerous or diverse sources that may endanger public health or welfare. It requires EPA, based on its judgment, to set "primary" NAAQS at a level whose "attainment and maintenance" is "requisite to protect the public health" with "an adequate margin of safety," and to set "secondary" NAAQS at a level "requisite to protect the public welfare from any known or anticipated adverse effects." CAA §§109(b)(1)&(2). Section 109(d)(1) further requires EPA to review the NAAQS at least every five years and "make such revisions … as may be appropriate" in accordance with Sections 108 and 109(b).[2] The NAAQS are implemented through

[2] The CAA also provides that EPA's scientific advisory group, the Clean Air Scientific Advisory Committee ("CASAC"), shall recommend to EPA any new or

state-adopted regulatory programs, known as state implementation plans ("SIPs"), which must provide for "the implementation, maintenance, and enforcement" of the NAAQS within the state. *Id*. §110(a)(1).

As EPA acknowledges, 80 FR at 65295 (JA ___), NAAQS are not intended to eliminate all risk or to reduce pollutant concentrations to "background" levels – *i.e.*, levels that would exist in the absence of anthropogenic emissions that are subject to regulation under the Act. Section 108 textually tethers NAAQS to pollutants that "result[] from numerous or diverse mobile or stationary sources," not from nature. CAA §108(a)(1)(B). The House Report on the 1977 CAA amendments makes this clear:

> Some have suggested that since the standards are to protect against all known or anticipated effects and since no safe thresholds can be established, the ambient standards should be set at zero or background levels. *Obviously, this no-risk philosophy ignores all economic and social consequences and is impractical.*

H.R. Rep. 95-294 at 127, 1977 U.S.C.C.A.N 1077 (emphasis added).

Further, as the Supreme Court has explained, "requisite to protect" means "not lower or higher than is necessary." *Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 476 (2001). Thus, EPA must determine the levels of a pollutant that are "sufficient, but not more than necessary" to protect the public health and welfare.

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revised NAAQS, §109(d)(2)(B), and that EPA must explain any important deviation from CASAC's recommendations, §307(d)(3)&(6)(A).

Id. at 473 (internal quotation marks omitted). This requires an assessment of the extent to which the risks from exposure to the pollutant are unacceptable, and that assessment requires EPA to take into account contextual considerations. As Justice Breyer noted in *Whitman*, Section 109 "does not require the EPA to eliminate every health risk, however slight, at any economic cost, however great." *Id*. at 494 (Breyer, J., concurring in part and concurring in the judgment). Instead, when determining the levels "requisite" to protect the public health, EPA may consider various contextual factors, including: "the public's ordinary tolerance of the particular health risk in the particular context at issue"; "the severity of a pollutant's potential adverse health effects, the number of those likely to be affected, the distribution of the adverse effects, and the uncertainties surrounding each estimate"; "comparative health consequences"; and "the acceptability of small risks to health." *Id*. at 494-95.

Consistent with the recognition that NAAQS are not intended to eliminate all risk or to be set at background levels that cannot be controlled under the Act, it is clear that NAAQS are to be standards that *can be achieved* by regulation of U.S. sources. This is demonstrated by the requirement in Section 107(a) that SIPs specify the manner in which the NAAQS "*will be* achieved and maintained," and the requirement of Section 110(a)(2)(C) that SIPs include an enforcement and

regulation program "as necessary *to assure that [NAAQS] are achieved*" (emphases added).

B. Ozone in the Ambient Air

This case involves EPA's 2015 decision to lower the level of the NAAQS for ozone ("O_3"). Ozone is not emitted directly from sources. It is formed in the air near the Earth's surface through the reaction of certain precursor chemicals – notably, nitrogen oxides ("NOx") and volatile organic compounds ("VOCs"). As explained by EPA, "[t]he precursor emissions leading to O_3 formation can result from both man-made sources (*e.g.*, motor vehicles and electric power generation) and natural sources (*e.g.*, vegetation and wildfires)." 80 FR at 65299 (JA ___). Further, "O_3 that is created naturally in the stratosphere can also contribute to O_3 levels near the surface." *Id*. Finally, "[o]nce formed, O_3 near the surface can be transported by winds before eventually being removed from the atmosphere …." *Id*. Due to such transport, emissions from Canada and Mexico and as far away as Asia contribute to ozone concentrations in the U.S. *Id*. at 65443.[3]

The ozone concentrations that come from sources other than anthropogenic U.S. emissions – *i.e.*, those arising from natural sources on the Earth's surface and in the stratosphere and those resulting from international transport – are referred to

[3] See also EPA's Integrated Science Assessment for Ozone and Related Photochemical Oxidants (February 2013) ("ISA"), Docket No. EPA-HQ-OAR-2008-0699-0405, at Section 3.4.2 (JA ___-___).

as background. Since background contributions cannot be controlled through regulation of U.S. sources, even total elimination of all anthropogenic sources of NOx and VOCs in the U.S. (which is impossible) would not eliminate ozone in the ambient air. Further, as EPA has recognized, "O_3 concentrations in some locations in the U.S. on some days can be substantially influenced by sources that cannot be addressed by domestic control measures." *Id*. at 65300 (JA ___). In fact, at some locations, "there can be events where O_3 levels approach or exceed the concentration levels of the revised O_3 standards in large part due to background sources." *Id*. at 65436 (JA ___).

C. History of EPA's Prior Revisions to Ozone NAAQS

EPA initially adopted NAAQS for ozone in 1979 and has periodically revised them.

1. 1997 Revisions

In 1997, EPA revised the primary NAAQS for ozone from a one-hour average standard of 0.12 parts per million ("ppm") (with one allowable exceedance per year) to an 8-hour standard of 0.08 ppm, based on the annual 4th highest daily maximum 8-hour average concentration over a three-year period. 62 FR 38856 (July 18, 1997) (JA ___-___). EPA determined, *inter alia*, that, although a lower standard of 0.07 ppm, would be more protective, it was "not requisite to protect public health with an adequate margin of safety." *Id*. at 38868 (JA ___). EPA's

reasons included that, at levels below 0.08 ppm, the "most certain O_3-related effects, while judged to be adverse, are transient and reversible" and the "more serious effects … are less certain," and that a standard of 0.07 ppm "would be closer to peak background levels that infrequently occur in some areas due to nonanthropogenic sources of O_3 precursors." *Id*.

With respect to the secondary standard, which is based on the effects of ozone on vegetation, EPA noted that "the available scientific information supports the conclusion that a cumulative seasonal exposure index … is more biologically relevant than a single event or mean index." *Id*. at 38875 (JA ___). However, EPA set the secondary standard equal to the new 8-hour primary standard, considering the "substantial uncertainties" regarding whether increased welfare protection would result from a seasonal standard. *Id*. at 38877-78 (JA ___).

The primary and secondary NAAQS promulgated in 1997 were challenged as both overly stringent and not stringent enough, but were ultimately upheld against those challenges. See *Am. Trucking Ass'ns v. EPA*, 283 F.3d 355, 378-80 (D.C. Cir. 2002).

2. 2008 Revisions

EPA issued revised primary and secondary NAAQS for ozone again in 2008. 73 FR 16436 (Mar. 27, 2008) (JA ___-___). EPA revised the primary 8-hour standard to a level of 0.075 ppm, concluding that the prior standard was not

requisite to protect the public health. EPA relied particularly on controlled human exposure studies (*i.e.*, clinical laboratory studies), which it said provided the "most compelling" evidence of ozone-related effects. *Id*. at 16444 (JA ___). EPA stated that those studies showed consistent evidence of respiratory effects (lung function decrements and respiratory symptoms) in healthy exercising subjects at ozone levels of 0.080 ppm and above, and it also cited two new studies (by Adams in 2002 and 2006) showing such effects in some subjects at lower levels (specifically, 0.060 ppm). *Id*. at 16476, 16478 (JA ___, ___). EPA also relied on information indicating that people with asthma or other lung disease are likely to experience larger and more serious effects, or effects at lower levels, than healthy people. *Id*. at 16476, 16480 (JA ___, ___). Further, EPA asserted that new epidemiological evidence showed significant associations of ozone exposure with a wide range of health effects at ozone levels at and below 0.080 ppm. *Id*. at 16471, 16476 (JA ___, ___).

Although CASAC had recommended setting the primary standard in the range of 0.060 to 0.070 ppm, EPA explained that the data did not warrant such a lower standard due to the "limited" human clinical evidence of effects at lower levels and the uncertainties in the epidemiological studies regarding causal exposure-effect relationships at levels below the then-current standard. *Id*. at 16479, 16483 (JA ___, ___).

EPA also revised the secondary standard to be the same as the primary standard. EPA again noted that a cumulative seasonal standard was the most "biologically relevant way to relate [ozone] exposure to plant growth response." *Id*. at 16500 (JA ___). However, it determined that adopting such a standard was unnecessary due to the "significant overlap between the revised 8-hour primary standard and selected levels of the [seasonal] standard form being considered." *Id*. at 16499 (JA ___).

In July 2013, this Court issued a decision on several challenges to the 2008 NAAQS. *Mississippi v. EPA*, 744 F.3d 1334 (D.C. Cir. 2013). It upheld the primary standard of 0.075 ppm, concluding that EPA reasonably determined that reducing the previous standard of 0.08 ppm was appropriate given the studies linking health effects to ozone levels below 0.08 ppm. *Id*. at 1345. The Court also held that EPA was not required to reduce the standard below 0.075 ppm, given EPA's determinations regarding the limitations in the human clinical evidence and the uncertainties in the epidemiological studies regarding effects at lower levels. *Id*. at 1350-52. It noted specifically that the two Adams clinical studies reporting effects at 0.060 ppm "indicate some degree of risk that some number of individuals might continue to experience health effects at and below 0.075 ppm, but we have

previously acknowledged the impossibility of eliminating all risk of health effects from 'non-threshold' pollutants like ozone." *Id*. at 1350-51.[4]

The Court remanded the secondary standard to EPA, holding that EPA had not satisfied the CAA's requirement to identify the level of protection that was "requisite to protect the public welfare." *Id*. at 1359. The Court concluded that EPA could not simply "compare the level of protection afforded by the primary standard to possible secondary standards and find the two roughly equivalent," but was obligated to expressly determine the level requisite to protect public welfare. *Id*. at 1360-61.

D. EPA's 2015 Revision of the NAAQS

After another review, EPA proposed further revisions to the ozone NAAQS on December 17, 2014, 79 FR 75234 (JA ___-___), and published its final revised NAAQS on October 26, 2015. 80 FR 65292 (JA___-___). EPA reduced the level of the 8-hour primary standard from 0.075 to 0.070 ppm, equivalent to 75 and 70 parts per billion ("ppb"), respectively[5]; and it made the secondary standard the

[4] The Court additionally held that EPA had adequately explained its reasons for not accepting CASAC's recommendations, given the lack of clarity as to whether CASAC based those recommendations on scientific or policy grounds. *Id*. at 1355-58.

[5] One ppm equals 1,000 ppb. In the remainder of this brief, for consistency with EPA's preamble to its final rule, ozone concentrations are generally expressed in ppb.

same as the primary standard. In doing so, EPA did not take into account the impact of background ozone concentrations in preventing achievement of those revised NAAQS. See Section I below.

1. Conclusions on Primary Standard

EPA concluded that the 2008 primary standard of 75 ppb was no longer requisite to protect the public health with an adequate margin of safety, and that lowering the standard level to 70 ppb was necessary. *Id*. at 65346, 65365 (JA ___, ___).

EPA again put the greatest weight on the controlled human exposure studies. *Id*. at 65343, 65352, 65362 (JA ___, ___, ___). EPA noted that these studies show a "continuum" of respiratory effects over a range of ozone exposures, with "[t]he largest respiratory effects, and the broadest range of effects, … following exposures of healthy adults to 80 ppb O_3 or higher," a "combination of lung function decrements and respiratory symptoms in healthy [subjects]" at ozone levels "as low as 72 ppb," and some effects (including lung function decrements) at levels "as low as 60 ppb." *Id*. at 65343 (JA ___); see also *id*. at 65352, 65363 (JA ___, ___).

As EPA recognized, only one such study at levels below 80 ppb reported a "combination of lung function decrements and respiratory symptoms," which EPA stated constituted a prerequisite for adverse effects under criteria developed by the

American Thoracic Society ("ATS"), referenced by EPA. *Id*. at 65309 (JA ___).[6] That study, by Schelegle *et al*. (2009) (Docket No. EPA-HQ-OAR-2008-0699-0198, JA ___-___),[7] evaluated healthy subjects exposed to mean ozone levels of 88, 81, 72, and 63 ppb during exercise. It reported a temporary decrease in lung function (a mean decrease of approximately 6% in the measurement of FEV_1[8]) and an increase in subjective symptoms (mean score of approximately 13 on a severity scale of 0-40) at the 72 ppb exposure level (but no significant effects at 63 ppb). See 80 FR at 65303, 65352-53 (JA ___, ___-___). EPA concluded that the effects reported in that study at 72 ppb constituted adverse effects,[9] and it relied heavily on this study for the determination that the primary standard must be set at a level below 72 ppb. *Id*. at 65343, 65353, 65363 (JA ___, ___, ___).

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[6] EPA noted that "there are no universally accepted criteria by which to judge the adversity of the observed effects," *id*. at 65363 (JA ___), but used the ATS criteria as a guideline.

[7] The full citations for scientific references discussed herein are given in the Table of Authorities.

[8] FEV_1 stands for forced expiratory volume in one second, a common measure of lung function. The ATS considers a decrease of greater than 10% in FEV_1 as an abnormal response. 80 FR at 65303 (JA ___).

[9] This assertion was referring to responses of individual study subjects, because EPA (as well as ATS) admits that transitory FEV_1 decrements less than 10% (such as the group mean decrease of 6% in this study) are not adverse. 80 FR at 65346 (JA ___). Only six of the 31 study subjects exhibited an FEV_1 decrement of 10% or greater. Moreover, subjects that exhibited FEV_1 decrements at 72 ppb ozone were not always the same individuals that reported respiratory symptoms. See *id*. at 65330 (JA ____).

EPA also continued to assert, as it had in 2008, that "at-risk" groups, such as children and asthmatics, could experience larger and/or more serious effects or effects at lower levels. *Id*. at 65314 (JA ___). EPA recognized, however, that no controlled human exposure studies have evaluated such groups exposed to ozone levels at or below those involved here. *Id*. at n.55; 79 FR at 75273 (JA ___).

EPA placed less weight on epidemiological studies reporting associations of ozone levels with respiratory effects, 80 FR at 65341, 65359 (JA ___, ___), due to "important uncertainties and limitations" associated with these studies, such that they "lend only limited support to establishing a specific level for a revised standard." *Id*. at 65335 (JA ___). These uncertainties and limitations include uncertainties regarding the actual ambient ozone concentrations in the cities where the studies were conducted and uncertainties stemming from the presence of co-occurring pollutants or pollutant mixtures. *Id*. at 65335, 65341 (JA ___, ___).

EPA rejected the need to set a primary standard at a level below 70 ppb. It noted that, at levels below 72 ppb, "the combination of statistically significant increases in respiratory symptoms and decrements in lung function has not been reported," including in studies of exposures to 60 or 63 ppb. *Id*. at 65357 (JA ___). EPA also concluded that there is "greater uncertainty" regarding the adversity of effects at levels "as low as 60 ppb," *id*. at 65361 (JA ___), and that a standard below 70 ppb "would be expected to achieve virtually no additional reductions" in

repeated occurrences of the exposures about which EPA is "most concerned," *id*. at 65365 (JA ___).

2. Conclusions on Secondary Standard

In revising the secondary NAAQS, EPA noted that the currently available information on the effects of ozone on vegetation "is largely consistent with the evidence available at the time of the last review," although the newer information "has strengthened" the prior evidence in "some respects." *Id*. at 65383 (JA ___). It also explained that the level at which ozone causes adverse welfare effects is not a "bright-line determination," *id.* at 65376 (JA ___), and that identifying an appropriate level for the secondary standard depends on "judgments regarding the weight to place on the evidence of specific vegetation-related effects estimated to result across a range of cumulative seasonal concentration-weighted O_3 exposures and judgments on the extent to which such effects in such areas may be considered adverse to public welfare." *Id*. at 65398 (JA ___).

EPA concluded that the secondary standard needed to be revised and that the cumulative seasonal metric was appropriate for considering the level of protection. *Id*. at 65389, 65399 (JA ___, ___). EPA then concluded that, to provide the level of protection "requisite to protect the public welfare," the revised secondary standard "should restrict cumulative seasonal exposures to 17 ppm-hrs or lower [using the seasonal standard form] in nearly all instances," *id*. at 65408 (JA ___),

and that an 8-hour standard of 70 ppb using the current form would provide that level of protection, *id*. at 65409 (JA ___).

For this conclusion, EPA relied primarily on exposure-response information regarding the Relative Biomass Loss ("RBL") in tree growth, particularly in certain protected areas. *Id*. at 65384, 65405 (JA ___, ___). EPA concluded that a median RBL benchmark of 6% was appropriate for defining welfare protection, that the standard should limit cumulative exposures to those associated with a median RBL estimate "somewhat lower than 6%," and that a standard that limits cumulative seasonal exposures to 17 ppm-hrs or lower would "eliminate or virtually eliminate cumulative exposures associated with a median RBL of 6% or greater." *Id*. at 65407, 65409 (JA ___, ___). EPA also considered information on visible foliar injury and crop loss, but gave it less weight due to the uncertainties and limitations in the exposure-response data on such effects and their significance to public welfare. *Id*. at 65388, 65390, 65407 (JA ___, ___, ___).

E. Implications of the Revised NAAQS

Promulgation of revised NAAQS triggers requirements for States to adopt and submit to EPA revised SIPs that provide for achieving and maintaining the revised NAAQS within their borders. CAA §110(a)(1)&(2). Reductions in ozone levels can be achieved only by reducing the emissions of precursor chemicals (NOx and VOCs) from the myriad emission sources across virtually all sectors of

the economy, including manufacturing, energy, transportation, agriculture, construction, and general commercial services. Thus, States must develop revised SIPs with additional regulatory control requirements for sources of the ozone precursors. This will impose significant additional emission reduction obligations on existing, new, and modified sources. EPA has acknowledged that existing emission control technologies will not be sufficient to achieve the 2015 revised NAAQS, and that States, along with regulated sources, will instead have to rely on what EPA refers to as "unidentified controls" (which have yet to be developed) to further reduce ambient ozone levels to achieve those NAAQS.[10]

Additionally, because many areas of the country have ambient ozone concentrations that exceed the revised NAAQS (but not the prior NAAQS),[11] States will be required to designate many new areas as "nonattainment" for the revised standard and/or to expand existing nonattainment areas, and EPA will promulgate those nonattainment area designations. *Id*. §107(d)(1)(A)&(B). The CAA imposes rigorous SIP requirements for nonattainment areas generally (*id*. §§172-173) and additional requirements for ozone nonattainment areas specifically (*id*. §182). These involve stringent regulatory requirements for both existing and

[10] See EPA's *Regulatory Impact Analysis of the Final Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone* (September 2015), Docket No. EPA-HQ-OAR-2013-0169-0057, at ES-7, 4-1 (JA ___, ___).

[11] See page 34, note 17, *infra*.

new/modified sources within such areas, including that the latter must install emission controls more stringent than the control requirements applicable in other areas and must obtain emissions offsets at a greater than 1:1 ratio from other facilities in the region. *Id.* §§173(a)(2)&(c), 182.

Moreover, even in attainment (or unclassifiable) areas, permit applicants for new or modified sources must show that the source's emissions "will not cause, or contribute to, air pollution in excess of" the revised ozone NAAQS. CAA §165(a)(3). The revised NAAQS will make that showing significantly more difficult and burdensome.

SUMMARY OF ARGUMENT

1. The CAA requires that NAAQS be achievable by regulation of U.S. sources through SIPs. Consequently, in setting NAAQS, EPA must consider whether those standards can be achieved through such regulation and may not set standards that cannot be achieved. In lowering the ozone NAAQS level, EPA did not take appropriate account of evidence that naturally-occurring or internationally-transported background ozone that cannot be controlled under the Act can, in some circumstances, prevent achievement of those NAAQS, particularly given that the Act does not require man-made U.S. emissions to be totally eliminated (which is impossible in any event). Although EPA claims that it was prohibited from considering the impacts of background levels on the

achievability of the revised standards here, that claim is unsupported by the Act, the case law, or common sense and is inconsistent with EPA's prior position. To the contrary, the Act *requires* such consideration. Further, EPA's identification of three alternate regulatory programs that it asserts would provide relief from nonattainment due to background does not excuse its failure to take background properly into account in setting the level of the NAAQS; and in any event, those programs would not provide sufficient relief. Thus, EPA's issuance of the revised NAAQS was arbitrary, capricious, and contrary to the CAA.

2. Although the Supreme Court has held that, in setting NAAQS, EPA cannot consider the costs of implementation, that holding does not preclude EPA from considering contextual "risk assessment" factors such as those described by Justice Breyer in *Whitman*, including "the public's ordinary tolerance for a particular health risk," "comparative health risks," and "the acceptability of small risks to health. See page 5, *supra*. In fact, the determination of levels "requisite to protect" public health and welfare necessitates such a contextual assessment. These contextual factors can all be influenced by the overall adverse economic, social, and energy impacts that could result from a revised NAAQS. Moreover, the separate requirement of Section 109(d)(1) that EPA is to revise the NAAQS as "appropriate" encompasses consideration of such impacts. Here, EPA did not

consider any of these contextual factors. That was also arbitrary, capricious, and unlawful.

3. EPA is required to provide a reasoned explanation for a change in a prior conclusion or interpretation. Here, no new study since EPA last revised the ozone NAAQS in 2008 changed the fundamental scientific understanding of ozone effects or the exposure-response relationships. Yet EPA changed its conclusion to find that levels of risk that were judged acceptable in 2008 are no longer acceptable, and it did not provide a reasoned explanation for that change in judgment. As such, its decision was arbitrary and capricious.

STANDARD OF REVIEW

Section 307(d)(9) of the CAA provides that the Court may set aside EPA's action if it finds that action to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law" or "in excess of statutory … authority."

STANDING

Industry Petitioners include several business associations and a coal company (Murray Energy) that collectively represent much of the nation's leading manufacturing, energy, and other business sectors.

Murray Energy has standing due to its supply of fuel to facilities that emit ozone precursors and thus will be substantially affected by the regulatory requirements stemming from the revised NAAQS.

The business associations' standing is obvious because: (1) "at least one of [their] members would have standing to sue in [its] own right"; (2) the interests they "seek to protect are germane to [their] purpose"; and (3) neither their claims nor requested relief "requires that an individual member of the association[s] participate in the lawsuit." *Sierra Club v. EPA*, 292 F.3d 895, 898 (D.C. Cir. 2002).

First, the business associations each have many members that would have standing to sue because they own or operate facilities that emit ozone precursors, and thus will be substantially affected by the emission control and other requirements imposed in revised SIPs resulting from the revised NAAQS. Furthermore, members that wish to build or modify emitting facilities will be directly affected by the stringent new source review requirements that will apply to such facilities in newly designated nonattainment areas for the revised NAAQS, as well as additional requirements that will apply to such facilities in other areas.

Second, the interests that the business associations seek to protect – *i.e.*, to avoid undue burdens on their members resulting from revised ozone NAAQS – are germane to their organizational purposes of promoting the well-being of their member companies and industries.

Third, neither the claims asserted nor the relief requested requires the participation of the associations' individual members. The issues here relate to the

general lawfulness of EPA's action in promulgating revised NAAQS, and do not depend on the circumstances of any specific company or facility. Similarly, the relief requested – *i.e.*, vacating the revised ozone NAAQS – would apply nationwide, rather than only to specific companies.

ARGUMENT

I. EPA's Failure to Take into Account the Impact of Background Ozone Levels on Achievability of the Revised NAAQS Was Unlawful.

An agency decision must be set aside as arbitrary and capricious if the agency failed to consider an important aspect of the problem or the full range of factors required by Congress. *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983); *Pub. Citizen v. Fed. Motor Carrier Safety Admin.*, 374 F.3d 1209, 1216 (D.C. Cir. 2004). The influence of uncontrollable background levels of ozone on the achievability of the ozone NAAQS was an important aspect of the problem faced by EPA in deciding whether to revise the NAAQS. Indeed, as discussed in Section A of the Statement of the Case and Facts (hereinafter "Statement"), the CAA requires EPA to consider the achievability of the NAAQS through regulation under SIPs and to set NAAQS at a level that can be attained through such regulation. Here, EPA failed to account for the influence of background ozone on the achievability of the revised NAAQS and, in fact, set standards that cannot be achieved in numerous areas of the country

because of background ozone that cannot be controlled by SIP regulation. Although EPA cited certain other regulatory mechanisms that it claims can help address nonattainment of the revised NAAQS due to background ozone levels, those mechanisms fail to cure that defect. Accordingly, EPA's decision was arbitrary, capricious, and contrary to the CAA.

A. Background Ozone Levels Inhibit Achievement of the Revised NAAQS.

As previously discussed, ozone in the ambient air results not only from emissions of precursor chemicals from U.S. sources, but also from sources that cannot be controlled under U.S. regulations, such as wildfires and vegetative emissions, atmospheric intrusions from the stratospheric ozone layer, and transport of ozone and ozone precursors from foreign countries. EPA acknowledged that, in some circumstances, ozone concentrations in U.S. ambient air "can be substantially influenced" by these uncontrollable sources. 80 FR at 65300 (JA ___). It stated further:

> In particular, certain high-elevation sites in the western U.S. are impacted by a combination of non-U.S. sources like international transport, or natural sources such as stratospheric O_3, and O_3 originating from wildfire emissions.… [A]t these locations, there can be episodic events with substantial background contributions where O_3 concentrations approach or exceed the level of the [prior] NAAQS (*i.e.*, 75 ppb).

Id. at 65300 (JA ___). More generally, EPA stated that "there can be events where O_3 levels approach or exceed the concentration level of the revised O_3 standards in large part due to background sources." *Id.* at 65436 (JA ___).

Evidence in the record demonstrates further that background ozone concentrations can, in some areas and some times of the year, reach levels at or approaching the revised NAAQS of 70 ppb so as to cause exceedance of that standard. See, *e.g.*, Lefohn and Oltmans (2014) (Docket No. EPA-HQ-OAR-2008-0699-0118) at 7 (JA ___) (reporting background concentrations of 30-70 ppb at certain high-elevation sites); Zhang *et al.* (2011) (*id.*-3744, JA ___) (estimating annual fourth highest background concentrations of 50-60 ppb in the Intermountain West, with some levels exceeding 60 ppb); Electric Power Research Institute (2015) (*id.*-1394) at 24-26 (JA ___) (model showing fourth highest daily maximum background 8-hour levels close to 65 ppb in some locations); Air Permitting Forum Comments (2015) (*id.*-3578) at 9 (JA ___) citing Lin *et al.* (2012) (finding that several stratospheric ozone incursions over a three-month period in 2010 elevated background concentrations to daily maximum 8-hour levels of 60-75 ppb); Langford *et al.* (2014) (*id.*-3744) at 16 (JA ___) (finding mean concentration of 67 ppb during two summer months at rural site predominantly influenced by background).

Given these reported background ozone concentrations, together with the undisputed fact that NAAQS are not intended to reduce all man-made emissions from U.S. sources to zero, it is clear that, in many areas, background ozone levels (even if they do not by themselves exceed 70 ppb) can and will prevent attainment and maintenance of the revised NAAQS.[12]

B. EPA Has Unlawfully Failed to Account for the Impact of Background Ozone in Preventing Achievement of the Revised NAAQS.

In reducing the level of the NAAQS, EPA did not take into account the proximity of the 70 ppb standard to background levels or the impact of background levels on the achievability of that standard. That failure – and EPA's consequent issuance of a national standard that cannot be attained in numerous parts of the country given uncontrollable background ozone – was arbitrary, capricious, and contrary to the CAA.

As discussed in Statement Section A, Congress intended that NAAQS be achievable by regulation of U.S. sources through SIPs, as demonstrated by the requirements that SIPs specify the manner in which the NAAQS "*will be* achieved and maintained," CAA §107(a), and include an enforcement and regulation program "as necessary *to assure that [NAAQS] are achieved*," *id*. §110(a)(2)(C)

[12] This is exacerbated by the fact that, as EPA acknowledges, no existing emission control technologies are sufficient to achieve the revised NAAQS. See Statement Section E.

(emphases added). Section 109(b) itself links the setting of "requisite" NAAQS to their "attainment and maintenance." NAAQS were not intended to address pollution that is beyond the control of the States or EPA. It follows that, in revising NAAQS, EPA must consider whether the standards can be achieved through the regulation provided for by the CAA, and may not set a standard that is not achievable on a nationwide basis through such regulation, considering that NAAQS are not even intended to eliminate all anthropogenic U.S. emissions, much less naturally-occurring emissions.

In arguing to the contrary, EPA cited this Court's decision in *API v. Costle*, 665 F.2d 1176, 1185 (D.C. Cir. 1981), stating that "[a]ttainability and technological feasibility are not relevant considerations in the promulgation of [NAAQS]." See 80 FR at 65328 (JA ___). EPA misconstrues that decision. In addressing attainability, the Court focused on cost and technological feasibility, not on other factors that prevent attainment. The Court merely quoted its opinion in *Lead Industries Ass'n v. EPA*, 647 F.2d 1130, 1149 (D.C. Cir. 1980), that "'the Administrator may not consider economic and technological feasibility in setting air quality standards.'" Although the Court also addressed an argument by the city of Houston that natural factors made attainment impossible there, it decided only that Houston's particular circumstances were not a basis for vacating a national standard. See *API*, 665 F.2d at 1186. That is very different from a situation where

numerous areas of the country cannot attain the NAAQS due to background levels. In the latter situation, setting a standard that cannot be achieved due to background levels conflicts with the Act's requirement that NAAQS should be broadly achievable and maintainable through regulation under SIPs.

This Court's subsequent decisions in *American Trucking* make clear that it did not resolve that broader issue in *API*, and support that position that setting a standard that cannot be achieved due to background is inappropriate. In its first *American Trucking* opinion, this Court addressed EPA's statement, in setting the 1997 ozone NAAQS, that a 70 ppb standard was inappropriate because it would be "'closer to peak background levels that infrequently occur in some areas.'" *Am. Trucking Ass'ns v. EPA*, 175 F.3d 1027, 1036 (D.C. Cir. 1999), *rev'd in part, aff'd in part on other grounds* in *Whitman*, 531 U.S. 457 (2001). The Court stated that this rationale may amount to "saying that, given the national character of the NAAQS, it is inappropriate to set a standard below a level that can be achieved throughout the country without action affirmatively *extracting* chemicals from nature"; and it noted "*[t]hat may well be a sound reading of the statute*, [although] EPA has not explicitly adopted it." 175 F.3d at 1036 (second emphasis added). In defending its interpretation before the Supreme Court, EPA did adopt that reading. See Statement of Solicitor General Seth Waxman in *Am. Trucking Ass'ns v. Browner*, No. 99-1426, Oral Arg. Tr. at 35 (Nov. 7, 2000) (JA ___) ("EPA

reasonably interprets the Clean Air Act as not either requiring or permitting it to set levels that are at or below background levels"). Following remand from the Supreme Court, this Court again relied, in part, on EPA's determination that a standard of 70 ppb was too close to background, and stated that the "relative proximity to peak background ozone concentrations" was a factor that "EPA could consider" when selecting a standard. *Am. Trucking Ass'ns*, 283 F.3d at 379.

EPA has also claimed that it may consider background levels only "within the range of reasonable values" supported by the data and the Administrator's judgments, and that it could not do so here because the scientific evidence compelled it to reduce the standard. 80 FR at 65328 (JA ___). That claim is incorrect. First, EPA recognizes that the scientific data show a continuum of respiratory effects, decreasing in magnitude and incidence, over a range of ozone levels from over 80 ppb to 60 ppb, *id*. at 65343 (JA ___), and that in choosing a specific level "requisite to protect the public health," EPA must make a "judgment in the face of scientific uncertainty," *id*. at 65327 (JA ___), where there is no scientific bright line between acceptable and unacceptable risks.[13] Similarly, for the secondary standard, EPA acknowledges that, within the range of interest here,

[13] To the extent that EPA may be claiming that the new human clinical study by Schelegle *et al*. (2009) provided such a bright line at 72 ppb, that is contradicted by the nature of the reported responses in that study, as shown in Section III, and in any event, could not justify setting the standard at 70 ppb.

there is no bright-line level at which ozone causes adverse welfare effects, and hence the determination of the secondary standard level depends on judgments regarding the weight to give to specific vegetation-related effects and the extent to which those effects may be considered adverse to public welfare. *Id*. at 65398. In these circumstances, EPA was not legally precluded from considering background.

To the contrary, regardless of its judgments on these issues, the Act *requires* EPA to set NAAQS that can be achieved through regulation of U.S. sources, as shown above, and thus *requires* EPA to take into account the impact of background levels in order to ensure that the NAAQS can be achieved.

EPA has contended further that, even if it could consider background, its modeling analyses show that, even in remote locations, U.S. anthropogenic emissions make up part of the ambient ozone concentrations (10-20% or more), and that there are no locations where uncontrollable background levels *by themselves* are "expected" to totally preclude attainment of a 70 ppb NAAQS. *Id*. at 65328 (JA ___). That contention is unsupportable. As shown in Section I.A, there is evidence that background concentrations may actually reach 70 ppb in some areas, which EPA does not deny. *Id*. Even accepting EPA's modeling-based assertion that background concentrations *by themselves* would not exceed 70 ppb, EPA concedes that situations exist where background concentrations would approach that level and thus be the primary contributor to an exceedance of the

standard, *id*. at 65428, 65436 (JA ___, ___); and the record bolsters that conclusion. As previously noted, because the NAAQS are not intended to require elimination of all anthropogenic emissions from U.S. sources, there must be *some* allowance for such emissions. Given that fact, in cases where background levels approach the standard, they *would* cause nonattainment of the standard. EPA has not taken those situations into account in reducing the level of the NAAQS, and thus has issued a standard that cannot be met in numerous areas.

In addition, as discussed below, a federal agency must provide a reasoned explanation for a change in a prior conclusion or interpretation. See pages 36-37, *infra*. Here, although EPA concluded in 1997 that a standard of 70 ppb would be too close to background (see Statement Section C.1), it has now concluded that, despite such proximity to background (which remains true), setting the standard at 70 ppb is appropriate.[14] EPA has not provided an explanation for that change in conclusion – which by itself renders its decision arbitrary and capricious.

C. The Alternative Regulatory Mechanisms Identified by EPA to Address Background Ozone Are Inadequate.

Instead of taking unattainability due to background into account in determining the appropriate level of the ozone NAAQS (as required by law), EPA

[14] In 2008, in deciding not to reduce the NAAQS below 75 ppb, EPA relied on the limited and uncertain evidence of effects at lower levels (see Statement Section C.2) and thus did not need to rely on proximity to background.

identifies three regulatory programs that it claims will provide relief for events where "O_3 levels approach or exceed … the revised O_3 standards in large part due to background sources." 80 FR at 65436 (JA ___). They are: (1) exceptional event exclusions, (2) treatment as rural transport areas, and (3) international transport provisions. *Id*. The theoretical availability of these regulatory mechanisms does not excuse EPA's failure to comply with the Act by properly accounting for background ozone in setting the NAAQS. Moreover, EPA's reliance on these regulatory mechanisms is arbitrary and capricious because none of them can provide sufficient relief for situations where background ozone causes or contributes significantly to exceedances of the revised NAAQS. This is demonstrated in Section I.C of the Opening Brief of State Petitioners, which is incorporated by reference herein.

II. EPA's Failure to Take into Account the Adverse Impacts from Reducing the NAAQS Was Unlawful.

Although the Supreme Court has held that EPA cannot consider the costs of implementation when establishing or revising NAAQS, *Whitman*, 531 U.S. at 464-71, that does not absolve EPA from considering the overall adverse economic, social, and energy impacts of the standards. As Justice Breyer explained in *Whitman*, "§ 109 [of the Act] does not require the EPA to eliminate every health risk, however slight, at any economic cost, however great, to the point of hurtling

industry over the brink of ruin or even forcing deindustrialization." *Id.* at 494 (Breyer, J., concurring in part and concurring in the judgment) (internal quotations omitted). Instead, in determining what levels of a pollutant are "requisite to protect" the public health and welfare, EPA must necessarily make an assessment of the extent to which the risks from exposure to the pollutant are unacceptable, and this, in turn, requires EPA to take into account the contextual factors that Justice Breyer identified. This Court has confirmed that revising primary NAAQS "may indeed require [such] a contextual assessment of acceptable risk." *Mississippi*, 744 F.3d at 1343.

As Justice Breyer noted, relevant contextual factors include "the public's ordinary tolerance of the particular health risk in the particular context at issue," the "comparative health risks," and "the acceptability of small risks to health." *Whitman*, 531 U.S. at 494-95 (Breyer, J., concurring in part and concurring in the judgment). Those factors can all be influenced by the overall adverse economic, social, and energy impacts that could result from a revised NAAQS. For example, the public's "tolerance" and "acceptability" of a particular level of risk can be affected by the standard's adverse impacts on the public through reductions in economic growth, job loss, increased energy prices, etc.[15] Indeed, where, as here,

[15] Consideration of such broader impacts is not precluded by the Supreme Court's decision in *Whitman*. Although the Court discussed other impacts from a stricter

there is a continuum of exposures/effects over the range of concentrations under consideration, consideration of the adverse impacts from reducing the standard is particularly important in judging what level in that continuum is "requisite" to protect public health and welfare.

The need to consider such impacts when evaluating a potential revision of the NAAQS is further supported by the requirement of Section 109(d)(1) that, during its periodic reviews, EPA is to make such revisions of the NAAQS "as may be appropriate." That language must be given some effect. Under established statutory construction canons, all words of a statute must be given effect to avoid rendering any statutory language superfluous. See, *e.g.*, *Corley v. United States*, 556 U.S. 303, 314 (2009). That applies to the use of the word "appropriate" in Section 109(d)(1), and an evaluation of "appropriateness" must take into account the adverse socioeconomic and energy impacts of a standard.[16] Indeed, doing so would comport with Executive Order 13563, which requires generally that

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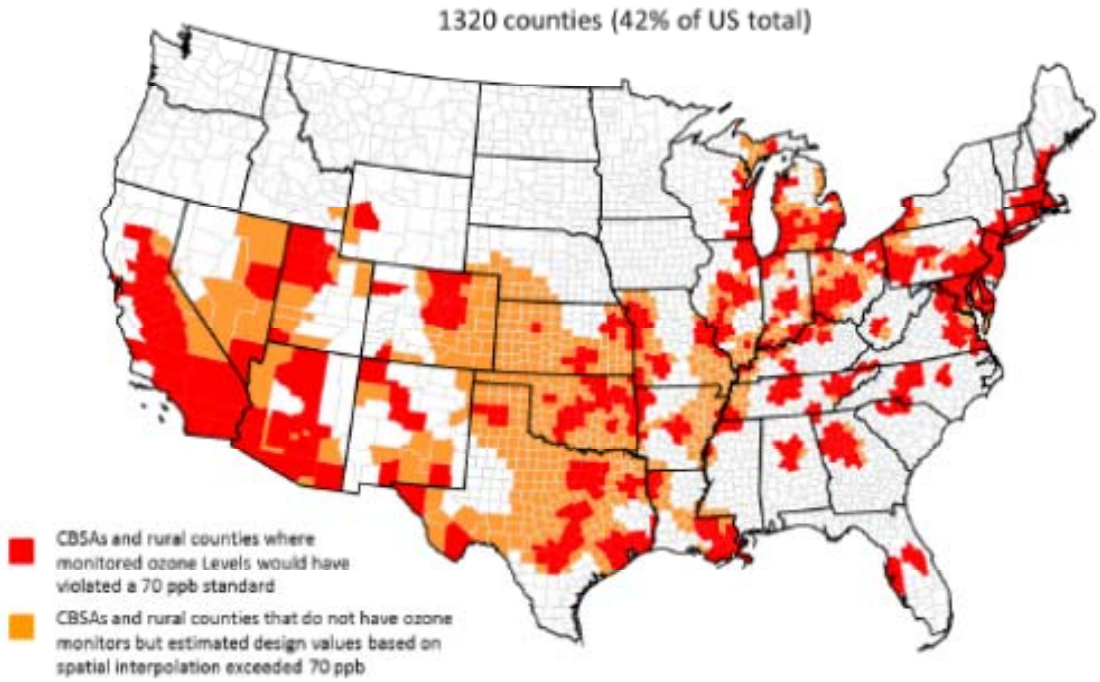
standard, 531 U.S. at 466, its holding was simply that EPA may not consider the costs of implementation. To the extent that decision, or prior decisions of this Court, are interpreted to preclude consideration of the broader impacts, they would be inconsistent with the Act.

[16] *Cf. Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015), noting that "'appropriate' is 'the classic broad and all-encompassing term that naturally and traditionally includes consideration of all the relevant factors'" (quoting opinion of Judge Kavanaugh below). Although that decision involved a different CAA program and in fact distinguished *Whitman* on that ground, *id*. at 2709, it does support a broad interpretation of the term "appropriate."

regulations "protect public health, welfare, safety, and our environment *while promoting economic growth, innovation, competitiveness, and job creation*." 76 FR 3821 (Jan. 11, 2011) (emphasis added).

It is undisputed that the reduced NAAQS will have such impacts and that EPA did not consider them. The revised standard will dramatically increase the number of areas designated nonattainment for the ozone NAAQS, as shown on Figure 1.[17]

Figure 1:



[17] This figure was provided in Comments of American Petroleum Institute (Docket No. EPA-HQ-OAR-2008-0699-2465) at 116 (JA ___). See also Comments of U.S. Chamber of Commerce *et al.* (Docket No. EPA-HQ-OAR-2008-0699-2397) at Attachment A (JA ___-___) (showing that 15 of the nation's top 20 metropolitan area economies would be classified as nonattainment for a 70 ppb standard, compared to 8 for the prior standard).

These additional nonattainment area designations will require imposition of the very stringent extra requirements applicable in such areas. See Statement Section E. Moreover, EPA acknowledges that the revised NAAQS cannot be achieved by known controls, but would require currently unidentified controls. *Id*. The utter lack of control mechanisms only exacerbates the traditional economic harms caused by a nonattainment designation.

Stricter standards can stymie economic growth by forcing the early retirement of facilities unable to implement controls, contributing to job losses; discouraging existing businesses from expanding in nonattainment regions; and driving away potential new investments. Indeed, the record contains considerable information regarding these and other adverse impacts of lowered ozone standards. For example, a detailed analysis in the record estimated that, over the period from 2017 through 2040, a standard of 65 ppb could reduce the U.S. Gross Domestic Product by an average of about $140 billion per year (totaling about $1.7 trillion), result in a loss of approximately 1.4 million job equivalents, reduce the average U.S. household consumption by about $830 per year, lead to the premature retirement of many coal-fired power plants, and cause the average residential cost of electricity to rise by 1.7%.[18] A standard of 70 ppb would have the same types of

[18] See analysis by NERA Economic Consulting (2015) (Docket No. EPA-HQ-OAR-2008-0699-2463) at 11-13 (JA ___-___).

impacts, differing only in degree, and EPA had an obligation to identify and consider such impacts. In any event, the adverse impacts of the stricter standards being considered constituted pertinent information that EPA had a duty to consider, even if it did not adopt those stricter standards.

EPA failed to consider any of this information in reaching its decision, and did not make its own analysis of the adverse economic, social, and energy impacts of the potential revised standards. Nor did EPA solicit CASAC's advice on this important issue, despite the Act's requirement that CASAC "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." CAA §109(d)(2)(C)(iv).

In these circumstances, it was arbitrary and capricious, an abuse of discretion, and contrary to the Act for EPA to revise the NAAQS without considering these broader contextual factors.

III. EPA's Failure to Provide a Reasoned Explanation for Its Change in Conclusions from the Relevant Scientific Evidence Was Unlawful.

Where a federal agency issues a decision that changes a prior conclusion or interpretation, it must provide a reasoned explanation for that change; otherwise, its decision will be found to be arbitrary and capricious. See, *e.g.*, *Catawba Cnty.*

v. EPA, 571 F.3d 20, 52 (D.C. Cir. 2009); *Dillmon v. NTSB*, 588 F.3d 1085, 1089-90 (D.C. Cir. 2009); *Troy Corp. v. Browner*, 120 F.3d 277, 286 (D.C. Cir. 1997).

In revising the ozone NAAQS, EPA changed the conclusions it drew from the same basic scientific evidence considered in 2008 without providing a reasoned explanation. In adopting a primary standard of 75 ppb in 2008, EPA relied on three main bases: (1) The consistent body of clinical evidence of respiratory effects in healthy subjects at exposure levels of 80 ppb and above, as well as "some indication of lung function decrements and respiratory symptoms at lower levels"; (2) the clinical evidence indicating that asthmatics and other at-risk populations are likely to experience larger and more serious effects, or effects at lower levels, than healthy people; and (3) the epidemiological evidence indicating associations for a wide range of health effects at and below 80 ppb. See 73 FR at 16476 (JA ___).. Based on these principal considerations, EPA determined that a standard of 75 ppb was "requisite to protect public health with an adequate margin of safety, including the health of sensitive subpopulations, from serious health effects," and that a lower standard was not needed or warranted. 73 FR at 16483 (JA ___). This Court in *Mississippi* upheld that judgment.

Although EPA cites a handful of new but limited studies that became available after 2008, those studies do not alter in any fundamental way the information on which EPA relied in 2008. With respect to the controlled human

exposure studies, on which EPA continues to place the greatest weight, the prior studies showed, as EPA concluded in 2008, that the types of respiratory effects of concern occur at ozone levels at and above 80 ppb and decrease in size and severity and in the number of individuals affected down to 60 ppb. The newer studies simply confirmed that expected continuum, as shown by the following:

- In issuing the revised NAAQS, EPA continued to note that the "largest" and "broadest range" of effects has been reported in healthy subjects exposed to ozone levels at and above 80 ppb, and it continued to note the findings of some effects at lower levels. 80 FR at 65343, 65352, 65363 (JA ___, ___, ___); see also Statement Section D.1.
- Although EPA relied heavily on the study by Schelegle *et al*. (2009) reporting lung function decrements and respiratory symptoms in healthy subjects exposed to 72 ppb during exercise, that study simply confirmed EPA's 2008 determination that the evidence provides "some indication" of lung function decrements and respiratory symptoms at levels below 80 ppb. This is especially true given that, at the 72 ppb level in that study: (a) the effects reported were admittedly small, namely, a mean FEV_1 decrease of approximately 6% (less than the ATS and EPA criterion of 10% for an abnormal effect) and a modest increase in subjective symptoms; (b) there were only 31 subjects, of whom only six exhibited an FEV_1 decrement of

10% or greater; and (c) individuals that exhibited FEV_1 decrements were not always the same as individuals that reported respiratory symptoms.

- The new reports of even smaller effects at 63 and 60 ppb (which EPA says are of "uncertain" adversity) provide further confirmation of EPA's prior conclusions in 2008 of some effects at those levels, including its conclusions from the Adams studies (see Statement Section C.1).

Thus, the new studies did not provide any new basic information regarding the types or magnitude of healthy subjects' responses at these ozone concentrations or the expected exposure-response relationship.[19]

Further, EPA has continued to claim that at-risk groups such as asthmatics are likely to experience larger and more serious effects, or effects at lower levels, than healthy people, but it recognizes that there are *no new* clinical studies on this topic. See Statement Section D.1. Moreover, although there are some new epidemiological studies, EPA has continued to acknowledge that important uncertainties remain in attempting to rely on those and the older epidemiological studies to attribute the effects to particular ozone exposure levels below 75 ppb, and it thus put less reliance on them. See *id*.

[19] Even if EPA were correct (which it is not) that Schelegle *et al*. (2009) provided new evidence of adverse health effects at 72 ppb, EPA has not provided a reasoned explanation for selecting a standard of 70 ppb rather than 71 or 72 ppb, thus rendering that judgment arbitrary.

Similarly, EPA acknowledged that the newly available evidence on welfare effects "is largely consistent with the evidence available at the time of the last review" and simply "strengthened" the prior evidence. 80 FR at 65383 (JA ___); see also Statement Section D.2. EPA continued to recognize that the cumulative seasonal metric is appropriate for considering the level of protection and that there is no bright line in selecting a specific level for welfare protection. See *id*. Notably, the key exposure-response information regarding Relative Biomass Loss in tree growth, on which EPA placed primary reliance, came from studies that were considered in 2008,[20] but EPA has now re-interpreted that evidence to support a standard of 70 ppb. 80 FR at 65407, 65409 (JA ___. ___).

Given the absence of any fundamental change in the scientific understanding of ozone effects since the 2008 review, the main change is in the *conclusions* that EPA draws from the evidence – *i.e.*, its conclusions regarding the level of protection that is "requisite" to protect public health and welfare. EPA appears to have determined simply that levels of risk that were judged acceptable in 2008 are no longer acceptable. While EPA's preamble contains lengthy discussions of the scientific evidence, including the new studies, it does not present a reasoned

[20] See EPA's ISA at 9-127 (JA ___), noting that since the completion of detailed analyses that were considered in 2008, "almost no studies have been published that could provide a basis for estimates of exposure-response that can be compared to [the prior estimates]."

explanation or justification for this apparent change in the policy judgment regarding the acceptable level of risk. As shown by the cases cited at the beginning of this section, in the absence of such a reasoned explanation, EPA's revised standard is arbitrary and capricious.

CONCLUSION

For the foregoing reasons, this Court should vacate the revised NAAQS and remand them to EPA for: (a) consideration of their achievability in light of background ozone concentrations and establishment of NAAQS at a level that is achievable given background concentrations; (b) consideration of the adverse economic, social, and energy impacts of the standards; and (c) a reasoned explanation for any change in EPA's conclusions from the scientific effects evidence.

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

Pursuant to Rule 32(a)(7)(C) of the Federal Rules of Appellate Procedure and Circuit Rule 32(e)(3), I hereby certify that the foregoing Joint Opening Brief of Industry Petitioners contains 9,357 words, as counted by a word processing system that includes headings, footnotes, quotations, and citations in the count (as supplemented by a manual count of the words in Figure 1), and that thus this brief together with the Joint Opening Brief of State Petitioners (which contains 9,639 words) are within the joint word limit of 19,000 words for those briefs together, as set by the Court in its Order dated March 9, 2016.

/s/ James R. Bieke
James R. Bieke

CERTIFICATE OF SERVICE

Pursuant to Rule 25 of the Federal Rules of Appellate Procedure and Circuit Rule 25(c), I hereby certify that on this 22nd day of April, 2016, I served one copy of the foregoing Joint Opening Brief of Industry Petitioners, as well as the Statutory Addendum thereto, on all registered counsel in these consolidated cases through the Court's CM/ECF system.

/s/ James R. Bieke
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ORAL ARGUMENT NOT YET SCHEDULED

No. 15-1385 (consolidated with Nos. 15-1392, 15-1490, 15-1491, and 15-1494)

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

MURRAY ENERGY CORPORATION,

Petitioner,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

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

STATUTORY ADDENDUM TO JOINT OPENING BRIEF OF INDUSTRY PETITIONERS

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INDEX TO STATUTORY ADDENDUM

CAA §§ 107(a) & (d)(1), 42 U.S.C. §§ 7407(a) & (d)(1), Air quality control regions

(a) Responsibility of each State for air quality; submission of implementation plan

Each State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State by submitting an implementation plan for such State which will specify the manner in which national primary and secondary ambient air quality standards will be achieved and maintained within each air quality control region in such State.

* * *

(d) Designations

(1) Designations generally

(A) Submission by Governors of initial designations following promulgation of new or revised standards

By such date as the Administrator may reasonably require, but not later than 1 year after promulgation of a new or revised national ambient air quality standard for any pollutant under section 7409 of this title [CAA § 109], the Governor of each State shall (and at any other time the Governor of a State deems appropriate the Governor may) submit to the Administrator a list of all areas (or portions thereof) in the State, designating as--

(i) nonattainment, any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant,

(ii) attainment, any area (other than an area identified in clause (i)) that meets the national primary or secondary ambient air quality standard for the pollutant, or

(iii) unclassifiable, any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

The Administrator may not require the Governor to submit the required list sooner than 120 days after promulgating a new or revised national ambient air quality standard.

(B) Promulgation by EPA of designations

(i) Upon promulgation or revision of a national ambient air quality standard, the Administrator shall promulgate the designations of all areas (or portions thereof) submitted under subparagraph (A) as expeditiously as practicable, but in no case later than 2 years from the date of promulgation of the new or revised national ambient air quality standard. Such period may be extended for up to one year in the event the Administrator has insufficient information to promulgate the designations.

(ii) In making the promulgations required under clause (i), the Administrator may make such modifications as the Administrator deems necessary to the designations of the areas (or portions thereof) submitted under subparagraph (A) (including to the boundaries of such areas or portions thereof). Whenever the Administrator intends to make a modification, the Administrator shall notify the State and provide such State with an opportunity to demonstrate why any proposed modification is inappropriate. The Administrator shall give such notification no later than 120 days before the date the Administrator promulgates the designation, including any modification thereto. If the Governor fails to submit the list in whole or in part, as required under subparagraph (A), the Administrator shall promulgate the designation that the Administrator deems appropriate for any area (or portion thereof) not designated by the State.

(iii) If the Governor of any State, on the Governor's own motion, under subparagraph (A), submits a list of areas (or portions thereof) in the State designated as nonattainment, attainment, or unclassifiable, the Administrator shall act on such designations in accordance with the procedures under paragraph (3) (relating to redesignation).

(iv) A designation for an area (or portion thereof) made pursuant to this subsection shall remain in effect until the area (or portion thereof) is redesignated pursuant to paragraph (3) or (4).

(C) Designations by operation of law

(i) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(A), (B), or (C) of this subsection (as in effect immediately before November 15, 1990) is designated, by operation of law, as a nonattainment area for such pollutant within the meaning of subparagraph (A)(i).

(ii) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(E) (as in effect immediately before November 15, 1990) is designated by operation of law, as an attainment area for such pollutant within the meaning of subparagraph (A)(ii).

(iii) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(D) (as in effect immediately before November 15, 1990) is designated, by operation of law, as an unclassifiable area for such pollutant within the meaning of subparagraph (A)(iii).

CAA §§ 108(a)- (c), 42 U.S.C. §§ 7408(a)-(c), Air quality criteria and control technologies

(a) Air pollutant list; publication and revision by Administrator; issuance of air quality criteria for air pollutants

(1) For the purpose of establishing national primary and secondary ambient air quality standards, the Administrator shall within 30 days after December 31, 1970, publish, and shall from time to time thereafter revise, a list which includes each air pollutant--

(A) emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare;

(B) the presence of which in the ambient air results from numerous or diverse mobile or stationary sources; and

(C) for which air quality criteria had not been issued before December 31, 1970 but for which he plans to issue air quality criteria under this section.

(2) The Administrator shall issue air quality criteria for an air pollutant within 12 months after he has included such pollutant in a list under paragraph (1). Air quality criteria for an air pollutant shall accurately reflect 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. The criteria for an air pollutant, to the extent practicable, shall include information on--

(A) those variable factors (including atmospheric conditions) which of themselves or in combination with other factors may alter the effects on public health or welfare of such air pollutant;

(B) the types of air pollutants which, when present in the atmosphere, may interact with such pollutant to produce an adverse effect on public health or welfare; and

(C) any known or anticipated adverse effects on welfare.

(b) Issuance by Administrator of information on air pollution control techniques; standing consulting committees for air pollutants; establishment; membership

(1) Simultaneously with the issuance of criteria under subsection (a) of this section, the Administrator shall, after consultation with appropriate advisory committees and Federal departments and agencies, issue to the States and appropriate air pollution control agencies information on air pollution control techniques, which information shall include data relating to the cost of installation and operation, energy requirements, emission reduction benefits, and environmental impact of the emission control technology. Such information shall include such data as are available on available technology and alternative methods of prevention and control of air pollution. Such information shall also include data on alternative fuels, processes, and operating methods which will result in elimination or significant reduction of emissions.

(2) In order to assist in the development of information on pollution control techniques, the Administrator may establish a standing consulting committee for each air pollutant included in a list published pursuant to subsection (a)(1) of this section, which shall be comprised of technically qualified individuals representative of State and local governments, industry, and the academic community. Each such committee shall submit, as appropriate, to the Administrator information related to that required by paragraph (1).

(c) Review, modification, and reissuance of criteria or information

The Administrator shall from time to time review, and, as appropriate, modify, and reissue any criteria or information on control techniques issued pursuant to this section. Not later than six months after August 7, 1977, the Administrator shall revise and reissue criteria relating to concentrations of NO_2 over such period (not more than three hours) as he deems appropriate. Such criteria shall include a discussion of nitric and nitrous acids, nitrites, nitrates, nitrosamines, and other carcinogenic and potentially carcinogenic derivatives of oxides of nitrogen.

CAA § 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) 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. Such primary standards may be revised in the same manner as promulgated.

(2) Any national secondary ambient air quality standard prescribed under subsection (a) of this section 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 NO_2 concentrations over a period of not more than 3 hours unless, based on the criteria issued under section 7408(c) of this title [CAA § 108(c)], 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 [CAA § 108] 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 [CAA § 108] 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 [CAA § 108] 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 [CAA § 108] 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.

CAA § 110(a), 42 U.S.C. § 7410(a), State implementation plans for national primary and secondary ambient air quality standards

(a) Adoption of plan by State; submission to Administrator; content of plan; revision; new sources; indirect source review program; supplemental or intermittent control systems

(1) Each State shall, after reasonable notice and public hearings, adopt and submit to the Administrator, within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national primary ambient air quality standard (or any revision thereof) under section 7409 of this title [CAA § 109] for any air pollutant, a plan which provides for implementation, maintenance, and enforcement of such primary standard in each air quality control region (or portion thereof) within such State. In addition, such State shall adopt and submit to the Administrator (either as a part of a plan submitted under the preceding sentence or separately) within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national ambient air quality secondary standard (or revision thereof), a plan which provides for implementation, maintenance, and enforcement of such secondary standard in each air quality control region (or portion thereof) within such State. Unless a separate public hearing is provided, each State shall consider its plan implementing such secondary standard at the hearing required by the first sentence of this paragraph.

(2) Each implementation plan submitted by a State under this chapter shall be adopted by the State after reasonable notice and public hearing. Each such plan shall--

(A) include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this chapter;

(B) provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to--

(i) monitor, compile, and analyze data on ambient air quality, and

(ii) upon request, make such data available to the Administrator;

(C) include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D of this subchapter;

(D) contain adequate provisions--

(i) prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will--

(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or

(II) interfere with measures required to be included in the applicable implementation plan for any other State under part C of this subchapter to prevent significant deterioration of air quality or to protect visibility,

(ii) insuring compliance with the applicable requirements of sections 7426 and 7415 of this title [CAA §§ 126 and 115] (relating to interstate and international pollution abatement);

(E) provide (i) necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof), (ii) requirements that the State comply with the requirements respecting State boards under section 7428 of this title [CAA § 128], and (iii) necessary assurances that, where the State has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of such plan provision;

(F) require, as may be prescribed by the Administrator--

(i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources,

(ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and

(iii) correlation of such reports by the State agency with any emission limitations or standards established pursuant to this chapter, which reports shall be available at reasonable times for public inspection;

(G) provide for authority comparable to that in section 7603 of this title and adequate contingency plans to implement such authority;

(H) provide for revision of such plan--

(i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard, and

(ii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements or to otherwise comply with any additional requirements established under this chapter;

(I) in the case of a plan or plan revision for an area designated as a nonattainment area, meet the applicable requirements of part D of this subchapter (relating to nonattainment areas);

(J) meet the applicable requirements of section 7421 of this title [CAA § 121] (relating to consultation), section 7427 of this title [CAA § 127] (relating to public notification), and part C of this subchapter (relating to prevention of significant deterioration of air quality and visibility protection);

(K) provide for--

(i) the performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and

(ii) the submission, upon request, of data related to such air quality modeling to the Administrator;

(L) require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this chapter, a fee sufficient to cover--

(i) the reasonable costs of reviewing and acting upon any application for such a permit, and

(ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action),

until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under subchapter V of this chapter; and

(M) provide for consultation and participation by local political subdivisions affected by the plan.

(3)(A) Repealed. Pub.L. 101-549, Title I, § 101(d)(1), Nov. 15, 1990, 104 Stat. 2409

(B) As soon as practicable, the Administrator shall, consistent with the purposes of this chapter and the Energy Supply and Environmental Coordination Act of 1974 [15 U.S.C.A. § 791 et seq.], review each State's applicable implementation plans and report to the State on whether such plans can be revised in relation to fuel burning stationary sources (or persons supplying fuel to such sources) without interfering with the attainment and maintenance of any national ambient air quality standard within the period permitted in this section. If the Administrator determines that any such plan can be revised, he shall notify the State that a plan revision may be submitted by the State. Any plan revision which is submitted by the State shall, after public notice and opportunity for public hearing, be approved by the Administrator if the revision relates only to fuel burning stationary sources (or persons supplying fuel to such sources), and the plan as revised complies with paragraph (2) of this subsection. The Administrator shall approve or disapprove any revision no later than three months after its submission.

(C) Neither the State, in the case of a plan (or portion thereof) approved under this subsection, nor the Administrator, in the case of a plan (or portion thereof) promulgated under subsection (c) of this section, shall be required to revise an applicable implementation plan because one or more exemptions under section 7418 of this title [CAA § 118] (relating to Federal facilities),

enforcement orders under section 7413(d) of this title [CAA § 113(d)], suspensions under subsection (f) or (g) of this section (relating to temporary energy or economic authority), orders under section 7419 of this title [CAA § 119] (relating to primary nonferrous smelters), or extensions of compliance in decrees entered under section 7413(e) of this title [CAA § 113(e)] (relating to iron- and steel-producing operations) have been granted, if such plan would have met the requirements of this section if no such exemptions, orders, or extensions had been granted.

(4) Repealed. Pub.L. 101-549, Title I, § 101(d)(2), Nov. 15, 1990, 104 Stat. 2409

(5)(A)(i) Any State may include in a State implementation plan, but the Administrator may not require as a condition of approval of such plan under this section, any indirect source review program. The Administrator may approve and enforce, as part of an applicable implementation plan, an indirect source review program which the State chooses to adopt and submit as part of its plan.

(ii) Except as provided in subparagraph (B), no plan promulgated by the Administrator shall include any indirect source review program for any air quality control region, or portion thereof.

(iii) Any State may revise an applicable implementation plan approved under this subsection to suspend or revoke any such program included in such plan, provided that such plan meets the requirements of this section.

(B) The Administrator shall have the authority to promulgate, implement and enforce regulations under subsection (c) of this section respecting indirect source review programs which apply only to federally assisted highways, airports, and other major federally assisted indirect sources and federally owned or operated indirect sources.

(C) For purposes of this paragraph, the term “indirect source” means a facility, building, structure, installation, real property, road, or highway which attracts, or may attract, mobile sources of pollution. Such term includes parking lots, parking garages, and other facilities subject to any measure for management of parking supply (within the meaning of subsection (c)(2)(D)(ii) of this section), including regulation of existing off-street parking but such term does not include new or existing on-street parking. Direct emissions sources or facilities at, within, or associated with, any indirect source shall not be deemed indirect sources for the purpose of this paragraph.

(D) For purposes of this paragraph the term “indirect source review program” means the facility-by-facility review of indirect sources of air pollution, including such measures as are necessary to assure, or assist in assuring, that a new or modified indirect source will not attract mobile sources of air pollution, the emissions from which would cause or contribute to air pollution concentrations--

(i) exceeding any national primary ambient air quality standard for a mobile source-related air pollutant after the primary standard attainment date, or

(ii) preventing maintenance of any such standard after such date.

(E) For purposes of this paragraph and paragraph (2)(B), the term "transportation control measure" does not include any measure which is an "indirect source review program".

(6) No State plan shall be treated as meeting the requirements of this section unless such plan provides that in the case of any source which uses a supplemental, or intermittent control system for purposes of meeting the requirements of an order under section 7413(d) of this title [CAA § 113(d)] or section 7419 of this title [CAA § 119] (relating to primary nonferrous smelter orders), the owner or operator of such source may not temporarily reduce the pay of any employee by reason of the use of such supplemental or intermittent or other dispersion dependent control system.

CAA § 165(a), 42 U.S.C. § 7475(a), Preconstruction requirements

(a) Major emitting facilities on which construction is commenced

No major emitting facility on which construction is commenced after August 7, 1977, may be constructed in any area to which this part applies unless--

(1) a permit has been issued for such proposed facility in accordance with this part setting forth emission limitations for such facility which conform to the requirements of this part;

(2) the proposed permit has been subject to a review in accordance with this section, the required analysis has been conducted in accordance with regulations promulgated by the Administrator, and a public hearing has been held with opportunity for interested persons including representatives of the Administrator to appear and submit written or oral presentations on the air quality impact of such source, alternatives thereto, control technology requirements, and other appropriate considerations;

(3) the owner or operator of such facility demonstrates, as required pursuant to section 7410(j) of this title [CAA § 110(j)], that emissions from construction or operation of such facility will not cause, or contribute to, air pollution in excess of any (A) maximum allowable increase or maximum allowable concentration for any pollutant in any area to which this part applies more than one time per year, (B) national ambient air quality standard in any air quality control region, or (C) any other applicable emission standard or standard of performance under this chapter;

(4) the proposed facility is subject to the best available control technology for each pollutant subject to regulation under this chapter emitted from, or which results from, such facility;

(5) the provisions of subsection (d) of this section with respect to protection of class I areas have been complied with for such facility;

(6) there has been an analysis of any air quality impacts projected for the area as a result of growth associated with such facility;

(7) the person who owns or operates, or proposes to own or operate, a major emitting facility for which a permit is required under this part agrees to conduct such monitoring as may be necessary to determine the effect which emissions from any such facility may have, or is having, on air quality in any area which may be affected by emissions from such source; and

(8) in the case of a source which proposes to construct in a class III area, emissions from which would cause or contribute to exceeding the maximum allowable increments applicable in a class II area and where no standard under section 7411 of this title [CAA § 111] has been promulgated subsequent to August 7, 1977, for such source category, the Administrator has approved the determination of best available technology as set forth in the permit.

CAA § 172, 42 U.S.C. § 7502, Nonattainment plan provisions in general

(a) Classifications and attainment dates

(1) Classifications

(A) On or after the date the Administrator promulgates the designation of an area as a nonattainment area pursuant to section 7407(d) of this title [CAA § 107(d)] with respect to any national ambient air quality standard (or any revised standard, including a revision of any standard in effect on November 15, 1990), the Administrator may classify the area for the purpose of applying an attainment date pursuant to paragraph (2), and for other purposes. In determining the appropriate classification, if any, for a nonattainment area, the Administrator may consider such factors as the severity of nonattainment in such area and the availability and feasibility of the pollution control measures that the Administrator believes may be necessary to provide for attainment of such standard in such area.

(B) The Administrator shall publish a notice in the Federal Register announcing each classification under subparagraph (A), except the Administrator shall provide an opportunity for at least 30 days for written comment. Such classification shall not be subject to the provisions of sections 553 through 557 of Title 5 (concerning notice and comment) and shall not be subject to judicial review until the Administrator takes final action under subsection (k) or (l) of section 7410 of this title [CAA § 110] (concerning action on plan submissions) or section 7509 of this title [CAA § 179] (concerning sanctions) with respect to any plan submissions required by virtue of such classification.

(C) This paragraph shall not apply with respect to nonattainment areas for which classifications are specifically provided under other provisions of this part.

(2) Attainment dates for nonattainment areas

(A) The attainment date for an area designated nonattainment with respect to a national primary ambient air quality standard shall be the date by which attainment can be achieved as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment under section 7407(d) of this title [CAA § 107(d)], except that the Administrator may extend the attainment date to the extent the Administrator determines appropriate, for a period no greater than 10 years from the date of designation as nonattainment, considering the severity of nonattainment and the availability and feasibility of pollution control measures.

(B) The attainment date for an area designated nonattainment with respect to a secondary national ambient air quality standard shall be the date by which attainment can be achieved as expeditiously as practicable after the date such area was designated nonattainment under section 7407(d) of this title [CAA § 107(d)].

(C) Upon application by any State, the Administrator may extend for 1 additional year (hereinafter referred to as the "Extension Year") the attainment date determined by the Administrator under subparagraph (A) or (B) if--

(i) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

(ii) in accordance with guidance published by the Administrator, no more than a minimal number of exceedances of the relevant national ambient air quality standard has occurred in the area in the year preceding the Extension Year.

No more than 2 one-year extensions may be issued under this subparagraph for a single nonattainment area.

(D) This paragraph shall not apply with respect to nonattainment areas for which attainment dates are specifically provided under other provisions of this part.

(b) Schedule for plan submissions

At the time the Administrator promulgates the designation of an area as nonattainment with respect to a national ambient air quality standard under section 7407(d) of this title [CAA § 107(d)], the Administrator shall establish a schedule according to which the State containing such area shall submit a plan or plan revision (including the plan items) meeting the applicable requirements of subsection (c) of this section and section 7410(a)(2) of this title [CAA § 110(a)(2)]. Such schedule shall at a minimum, include a date or dates, extending no later than 3 years from the date of the nonattainment designation, for the submission of a plan or plan revision (including the plan items) meeting the applicable requirements of subsection (c) of this section and section 7410(a)(2) of this title [CAA § 110(a)(2)].

(c) Nonattainment plan provisions

The plan provisions (including plan items) required to be submitted under this part shall comply with each of the following:

(1) In general

Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards.

(2) RFP

Such plan provisions shall require reasonable further progress.

(3) Inventory

Such plan provisions shall include a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in such area, including such periodic revisions as the Administrator may determine necessary to assure that the requirements of this part are met.

(4) Identification and quantification

Such plan provisions shall expressly identify and quantify the emissions, if any, of any such pollutant or pollutants which will be allowed, in accordance with section 7503(a)(1)(B) of this title [CAA § 173(a)(1)(B)], from the construction and operation of major new or modified stationary sources in each such area. The plan shall demonstrate to the satisfaction of the Administrator that the emissions quantified for this purpose will be consistent with the achievement of reasonable further progress and will not interfere with attainment of the applicable national ambient air quality standard by the applicable attainment date.

(5) Permits for new and modified major stationary sources

Such plan provisions shall require permits for the construction and operation of new or modified major stationary sources anywhere in the nonattainment area, in accordance with section 7503 of this title [CAA § 173].

(6) Other measures

Such plan provisions shall include enforceable emission limitations, and such other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emission rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment of such standard in such area by the applicable attainment date specified in this part.

(7) Compliance with section 7410(a)(2) [CAA § 110(a)(2)]

Such plan provisions shall also meet the applicable provisions of section 7410(a)(2) of this title [CAA § 110(a)(2)].

(8) Equivalent techniques

Upon application by any State, the Administrator may allow the use of equivalent modeling, emission inventory, and planning procedures, unless the Administrator determines that the proposed techniques are, in the aggregate, less effective than the methods specified by the Administrator.

(9) Contingency measures

Such plan shall provide for the implementation of specific measures to be undertaken if the area fails to make reasonable further progress, or to attain the national primary ambient air quality standard by the attainment date applicable under this part. Such measures shall be included in the plan revision as contingency measures to take effect in any such case without further action by the State or the Administrator.

(d) Plan revisions required in response to finding of plan inadequacy

Any plan revision for a nonattainment area which is required to be submitted in response to a finding by the Administrator pursuant to section 7410(k)(5) of this title [CAA § 110(k)(5)]

(relating to calls for plan revisions) must correct the plan deficiency (or deficiencies) specified by the Administrator and meet all other applicable plan requirements of section 7410 of this title [CAA § 110] and this part. The Administrator may reasonably adjust the dates otherwise applicable under such requirements to such revision (except for attainment dates that have not yet elapsed), to the extent necessary to achieve a consistent application of such requirements. In order to facilitate submittal by the States of adequate and approvable plans consistent with the applicable requirements of this chapter, the Administrator shall, as appropriate and from time to time, issue written guidelines, interpretations, and information to the States which shall be available to the public, taking into consideration any such guidelines, interpretations, or information provided before November 15, 1990.

(e) Future modification of standard

If the Administrator relaxes a national primary ambient air quality standard after November 15, 1990, the Administrator shall, within 12 months after the relaxation, promulgate requirements applicable to all areas which have not attained that standard as of the date of such relaxation. Such requirements shall provide for controls which are not less stringent than the controls applicable to areas designated nonattainment before such relaxation.

CAA § 173, 42 U.S.C. § 7503, Permit requirements

(a) In general

The permit program required by section 7502(b)(6) of this title [CAA § 172(b)(6)] shall provide that permits to construct and operate may be issued if--

(1) in accordance with regulations issued by the Administrator for the determination of baseline emissions in a manner consistent with the assumptions underlying the applicable implementation plan approved under section 7410 of this title [CAA § 110] and this part, the permitting agency determines that--

(A) by the time the source is to commence operation, sufficient offsetting emissions reductions have been obtained, such that total allowable emissions from existing sources in the region, from new or modified sources which are not major emitting facilities, and from the proposed source will be sufficiently less than total emissions from existing sources (as determined in accordance with the regulations under this paragraph) prior to the application for such permit to construct or modify so as to represent (when considered together with the plan provisions required under section 7502 of this title [CAA § 172]) reasonable further progress (as defined in section 7501 of this title [CAA § 171); or

(B) in the case of a new or modified major stationary source which is located in a zone (within the nonattainment area) identified by the Administrator, in consultation with the Secretary of Housing and Urban Development, as a zone to which economic development should be targeted, that emissions of such pollutant resulting from the proposed new or modified major stationary source will not cause or contribute to emissions levels which exceed the allowance permitted for such pollutant for such area from new or modified major stationary sources under section 7502(c) of this title [CAA § 172(c)];

(2) the proposed source is required to comply with the lowest achievable emission rate;

(3) the owner or operator of the proposed new or modified source has demonstrated that all major stationary sources owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in such State are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applicable emission limitations and standards under this chapter;

(4) the Administrator has not determined that the applicable implementation plan is not being adequately implemented for the nonattainment area in which the proposed source is to be constructed or modified in accordance with the requirements of this part; and

(5) an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

Any emission reductions required as a precondition of the issuance of a permit under paragraph (1) shall be federally enforceable before such permit may be issued.

(b) Prohibition on use of old growth allowances

Any growth allowance included in an applicable implementation plan to meet the requirements of section 7502(b)(5) of this title [CAA § 172(b)(5)] (as in effect immediately before November 15, 1990) shall not be valid for use in any area that received or receives a notice under section 7410(a)(2)(H)(ii) of this title [CAA § 110(a)(2)(H)(ii)] (as in effect immediately before November 15, 1990) or under section 7410(k)(1) of this title [CAA § 110(k)(1)] that its applicable implementation plan containing such allowance is substantially inadequate.

(c) Offsets

(1) The owner or operator of a new or modified major stationary source may comply with any offset requirement in effect under this part for increased emissions of any air pollutant only by obtaining emission reductions of such air pollutant from the same source or other sources in the same nonattainment area, except that the State may allow the owner or operator of a source to obtain such emission reductions in another nonattainment area if (A) the other area has an equal or higher nonattainment classification than the area in which the source is located and (B) emissions from such other area contribute to a violation of the national ambient air quality standard in the nonattainment area in which the source is located. Such emission reductions shall be, by the time a new or modified source commences operation, in effect and enforceable and shall assure that the total tonnage of increased emissions of the air pollutant from the new or modified source shall be offset by an equal or greater reduction, as applicable, in the actual emissions of such air pollutant from the same or other sources in the area.

(2) Emission reductions otherwise required by this chapter shall not be creditable as emissions reductions for purposes of any such offset requirement. Incidental emission reductions which are not otherwise required by this chapter shall be creditable as emission reductions for such purposes if such emission reductions meet the requirements of paragraph (1).

(d) Control technology information

The State shall provide that control technology information from permits issued under this section will be promptly submitted to the Administrator for purposes of making such information available through the RACT/BACT/LAER clearinghouse to other States and to the general public.

(e) Rocket engines or motors

The permitting authority of a State shall allow a source to offset by alternative or innovative means emission increases from rocket engine and motor firing, and cleaning related to such firing, at an existing or modified major source that tests rocket engines or motors under the following conditions:

(1) Any modification proposed is solely for the purpose of expanding the testing of rocket engines or motors at an existing source that is permitted to test such engines on November 15, 1990.

(2) The source demonstrates to the satisfaction of the permitting authority of the State that it has used all reasonable means to obtain and utilize offsets, as determined on an annual basis, for the emissions increases beyond allowable levels, that all available offsets are being used, and that sufficient offsets are not available to the source.

(3) The source has obtained a written finding from the Department of Defense, Department of Transportation, National Aeronautics and Space Administration or other appropriate Federal agency, that the testing of rocket motors or engines at the facility is required for a program essential to the national security.

(4) The source will comply with an alternative measure, imposed by the permitting authority, designed to offset any emission increases beyond permitted levels not directly offset by the source. In lieu of imposing any alternative offset measures, the permitting authority may impose an emissions fee to be paid to such authority of a State which shall be an amount no greater than 1.5 times the average cost of stationary source control measures adopted in that area during the previous 3 years. The permitting authority shall utilize the fees in a manner that maximizes the emissions reductions in that area.

CAA § 179, 42 U.S.C. § 7509, Sanctions and consequences of failure to attain

(a) State failure

For any implementation plan or plan revision required under this part (or required in response to a finding of substantial inadequacy as described in section 7410(k)(5) of this title [CAA § 110(k)(1)]), if the Administrator--

(1) finds that a State has failed, for an area designated nonattainment under section 7407(d) of this title [CAA § 107(D)], to submit a plan, or to submit 1 or more of the elements (as determined by the Administrator) required by the provisions of this chapter applicable to such an area, or has failed to make a submission for such an area that satisfies the minimum criteria established in relation to any such element under section 7410(k) of this title [CAA § 110(k)],

(2) disapproves a submission under section 7410(k) of this title [CAA § 110(k)], for an area designated nonattainment under section 7407 of this title [CAA § 107], based on the submission's failure to meet one or more of the elements required by the provisions of this chapter applicable to such an area,

(3)(A) determines that a State has failed to make any submission as may be required under this chapter, other than one described under paragraph (1) or (2), including an adequate maintenance plan, or has failed to make any submission, as may be required under this chapter, other than one described under paragraph (1) or (2), that satisfies the minimum criteria established in relation to such submission under section 7410(k)(1)(A) of this title [CAA § 110(k)(1)(A)], or

(B) disapproves in whole or in part a submission described under subparagraph (A), or

(4) finds that any requirement of an approved plan (or approved part of a plan) is not being implemented,

unless such deficiency has been corrected within 18 months after the finding, disapproval, or determination referred to in paragraphs (1), (2), (3), and (4), one of the sanctions referred to in subsection (b) of this section shall apply, as selected by the Administrator, until the Administrator determines that the State has come into compliance, except that if the Administrator finds a lack of good faith, sanctions under both paragraph (1) and paragraph (2) of subsection (b) of this section shall apply until the Administrator determines that the State has come into compliance. If the Administrator has selected one of such sanctions and the deficiency has not been corrected within 6 months thereafter, sanctions under both paragraph (1) and paragraph (2) of subsection (b) of this section shall apply until the Administrator determines that the State has come into compliance. In addition to any other sanction applicable as provided in this section, the Administrator may withhold all or part of the grants for support of air pollution planning and control programs that the Administrator may award under section 7405 of this title.

(b) Sanctions

The sanctions available to the Administrator as provided in subsection (a) of this section are as follows:

(1) Highway sanctions

(A) The Administrator may impose a prohibition, applicable to a nonattainment area, on the approval by the Secretary of Transportation of any projects or the awarding by the Secretary of any grants, under Title 23 other than projects or grants for safety where the Secretary determines, based on accident or other appropriate data submitted by the State, that the principal purpose of the project is an improvement in safety to resolve a demonstrated safety problem and likely will result in a significant reduction in, or avoidance of, accidents. Such prohibition shall become effective upon the selection by the Administrator of this sanction.

(B) In addition to safety, projects or grants that may be approved by the Secretary, notwithstanding the prohibition in subparagraph (A), are the following--

(i) capital programs for public transit;

(ii) construction or restriction of certain roads or lanes solely for the use of passenger buses or high occupancy vehicles;

(iii) planning for requirements for employers to reduce employee work-trip-related vehicle emissions;

(iv) highway ramp metering, traffic signalization, and related programs that improve traffic flow and achieve a net emission reduction;

(v) fringe and transportation corridor parking facilities serving multiple occupancy vehicle programs or transit operations;

(vi) programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration particularly during periods of peak use, through road use charges, tolls, parking surcharges, or other pricing mechanisms, vehicle restricted zones or periods, or vehicle registration programs;

(vii) programs for breakdown and accident scene management, nonrecurring congestion, and vehicle information systems, to reduce congestion and emissions; and

(viii) such other transportation-related programs as the Administrator, in consultation with the Secretary of Transportation, finds would improve air quality and would not encourage single occupancy vehicle capacity.

In considering such measures, the State should seek to ensure adequate access to downtown, other commercial, and residential areas, and avoid increasing or relocating emissions and congestion rather than reducing them.

(2) Offsets

In applying the emissions offset requirements of section 7503 of this title [CAA § 173] to new or modified sources or emissions units for which a permit is required under this part, the ratio of emission reductions to increased emissions shall be at least 2 to 1.

(c) Notice of failure to attain

(1) As expeditiously as practicable after the applicable attainment date for any nonattainment area, but not later than 6 months after such date, the Administrator shall determine, based on the area's air quality as of the attainment date, whether the area attained the standard by that date.

(2) Upon making the determination under paragraph (1), the Administrator shall publish a notice in the Federal Register containing such determination and identifying each area that the Administrator has determined to have failed to attain. The Administrator may revise or supplement such determination at any time based on more complete information or analysis concerning the area's air quality as of the attainment date.

(d) Consequences for failure to attain

(1) Within 1 year after the Administrator publishes the notice under subsection (c)(2) of this section (relating to notice of failure to attain), each State containing a nonattainment area shall submit a revision to the applicable implementation plan meeting the requirements of paragraph (2) of this subsection.

(2) The revision required under paragraph (1) shall meet the requirements of section 7410 of this title and section 7502 of this title [CAA §§ 110 and 172]. In addition, the revision shall include such additional measures as the Administrator may reasonably prescribe, including all measures that can be feasibly implemented in the area in light of technological achievability, costs, and any nonair quality and other air quality-related health and environmental impacts.

(3) The attainment date applicable to the revision required under paragraph (1) shall be the same as provided in the provisions of section 7502(a)(2) of this title [CAA § 172(a)(2)], except that in applying such provisions the phrase “from the date of the notice under section 7509(c)(2) of this title” [CAA § 179(c)(2)] shall be substituted for the phrase “from the date such area was designated nonattainment under section 7407(d) of this title” [CAA § 107(d)] and for the phrase “from the date of designation as nonattainment”.

CAA § 179B, 42 U.S.C. § 7509a, International border areas

(a) Implementation plans and revisions

Notwithstanding any other provision of law, an implementation plan or plan revision required under this chapter shall be approved by the Administrator if--

(1) such plan or revision meets all the requirements applicable to it under the chapter other than a requirement that such plan or revision demonstrate attainment and maintenance of the relevant national ambient air quality standards by the attainment date specified under the applicable provision of this chapter, or in a regulation promulgated under such provision, and

(2) the submitting State establishes to the satisfaction of the Administrator that the implementation plan of such State would be adequate to attain and maintain the relevant national ambient air quality standards by the attainment date specified under the applicable provision of this chapter, or in a regulation promulgated under such provision, but for emissions emanating from outside of the United States.

(b) Attainment of ozone levels

Notwithstanding any other provision of law, any State that establishes to the satisfaction of the Administrator that, with respect to an ozone nonattainment area in such State, such State would have attained the national ambient air quality standard for ozone by the applicable attainment date, but for emissions emanating from outside of the United States, shall not be subject to the provisions of section 7511(a)(2) or (5) of this title [CAA § 181(a)(2) o5 (5)] or section 7511d of this title [CAA § 185].

(c) Attainment of carbon monoxide levels

Notwithstanding any other provision of law, any State that establishes to the satisfaction of the Administrator, with respect to a carbon monoxide nonattainment area in such State, that such State has attained the national ambient air quality standard for carbon monoxide by the applicable attainment date, but for emissions emanating from outside of the United States, shall not be subject to the provisions of section 7512(b)(2) or (9) of this title [CAA § 186(b)(2) or (9)].

(d) Attainment of PM-10 levels

Notwithstanding any other provision of law, any State that establishes to the satisfaction of the Administrator that, with respect to a PM-10 nonattainment area in such State, such State would have attained the national ambient air quality standard for carbon monoxide by the applicable attainment date, but for emissions emanating from outside the United States, shall not be subject to the provisions of section 7513(b)(2) of this title [CAA § 188(b)(2)].

CAA § 182, 42 U.S.C. § 7511a, Plan submissions and requirements

(a) Marginal Areas

Each State in which all or part of a Marginal Area is located shall, with respect to the Marginal Area (or portion thereof, to the extent specified in this subsection), submit to the Administrator the State implementation plan revisions (including the plan items) described under this subsection except to the extent the State has made such submissions as of November 15, 1990.

(1) Inventory

Within 2 years after November 15, 1990, the State shall submit a comprehensive, accurate, current inventory of actual emissions from all sources, as described in section 7502(c)(3) of this title [CAA § 172(c)(3)], in accordance with guidance provided by the Administrator.

(2) Corrections to the State implementation plan

Within the periods prescribed in this paragraph, the State shall submit a revision to the State implementation plan that meets the following requirements--

(A) Reasonably available control technology corrections

For any Marginal Area (or, within the Administrator's discretion, portion thereof) the State shall submit, within 6 months of the date of classification under section 7511(a) of this title [CAA § 181(a)], a revision that includes such provisions to correct requirements in (or add requirements to) the plan concerning reasonably available control technology as were required under section 7502(b) of this title [CAA § 172(b)] (as in effect immediately before November 15, 1990), as interpreted in guidance issued by the Administrator under section 7408 of this title [CAA § 108] before November 15, 1990.

(B) Savings clause for vehicle inspection and maintenance

(i) For any Marginal Area (or, within the Administrator's discretion, portion thereof), the plan for which already includes, or was required by section 7502(b)(11)(B) of this title [CAA § 172(b)(11)(B)] (as in effect immediately before November 15, 1990) to have included, a specific schedule for implementation of a vehicle emission control inspection and maintenance program, the State shall submit, immediately after November 15, 1990, a revision that includes any provisions necessary to provide for a vehicle inspection and maintenance program of no less stringency than that of either the program defined in House Report Numbered 95-294, 95th Congress, 1st Session, 281-291 (1977) as interpreted in guidance of the Administrator issued pursuant to section 7502(b)(11)(B) of this title [CAA § 172(b)(11)(B)] (as in effect immediately before November 15, 1990) or the program already included in the plan, whichever is more stringent.

(ii) Within 12 months after November 15, 1990, the Administrator shall review, revise, update, and republish in the Federal Register the guidance for the States for motor vehicle inspection and maintenance programs required by this chapter, taking into consideration the Administrator's investigations and audits of such program. The guidance shall, at a minimum, cover the

frequency of inspections, the types of vehicles to be inspected (which shall include leased vehicles that are registered in the nonattainment area), vehicle maintenance by owners and operators, audits by the State, the test method and measures, including whether centralized or decentralized, inspection methods and procedures, quality of inspection, components covered, assurance that a vehicle subject to a recall notice from a manufacturer has complied with that notice, and effective implementation and enforcement, including ensuring that any retesting of a vehicle after a failure shall include proof of corrective action and providing for denial of vehicle registration in the case of tampering or misfueling. The guidance which shall be incorporated in the applicable State implementation plans by the States shall provide the States with continued reasonable flexibility to fashion effective, reasonable, and fair programs for the affected consumer. No later than 2 years after the Administrator promulgates regulations under section 7521(m)(3) of this title [CAA § 202(m)(3)] (relating to emission control diagnostics), the State shall submit a revision to such program to meet any requirements that the Administrator may prescribe under that section.

(C) Permit programs

Within 2 years after November 15, 1990, the State shall submit a revision that includes each of the following:

(i) Provisions to require permits, in accordance with sections 7502(c)(5) and 7503 of this title [CAA §§ 172(c)(5) and 173], for the construction and operation of each new or modified major stationary source (with respect to ozone) to be located in the area.

(ii) Provisions to correct requirements in (or add requirements to) the plan concerning permit programs as were required under section 7502(b)(6) of this title [CAA § 172(b)(6)] (as in effect immediately before November 15, 1990), as interpreted in regulations of the Administrator promulgated as of November 15, 1990.

(3) Periodic inventory

(A) General requirement

No later than the end of each 3-year period after submission of the inventory under paragraph (1) until the area is redesignated to attainment, the State shall submit a revised inventory meeting the requirements of subsection (a)(1) of this section.

(B) Emissions statements

(i) Within 2 years after November 15, 1990, the State shall submit a revision to the State implementation plan to require that the owner or operator of each stationary source of oxides of nitrogen or volatile organic compounds provide the State with a statement, in such form as the Administrator may prescribe (or accept an equivalent alternative developed by the State), for classes or categories of sources, showing the actual emissions of oxides of nitrogen and volatile organic compounds from that source. The first such statement shall be submitted within 3 years after November 15, 1990. Subsequent statements shall be submitted at least every year thereafter. The statement shall contain a certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement.

(ii) The State may waive the application of clause (i) to any class or category of stationary sources which emit less than 25 tons per year of volatile organic compounds or oxides of nitrogen if the State, in its submissions under subparagraphs[1] (1) or (3)(A), provides an inventory of emissions from such class or category of sources, based on the use of the emission factors established by the Administrator or other methods acceptable to the Administrator.

(4) General offset requirement

For purposes of satisfying the emission offset requirements of this part, the ratio of total emission reductions of volatile organic compounds to total increased emissions of such air pollutant shall be at least 1.1 to 1.

The Administrator may, in the Administrator's discretion, require States to submit a schedule for submitting any of the revisions or other items required under this subsection. The requirements of this subsection shall apply in lieu of any requirement that the State submit a demonstration that the applicable implementation plan provides for attainment of the ozone standard by the applicable attainment date in any Marginal Area. Section 7502(c)(9) of this title [CAA § 172(c)(9)] (relating to contingency measures) shall not apply to Marginal Areas.

(b) Moderate Areas

Each State in which all or part of a Moderate Area is located shall, with respect to the Moderate Area, make the submissions described under subsection (a) of this section (relating to Marginal Areas), and shall also submit the revisions to the applicable implementation plan described under this subsection.

(1) Plan provisions for reasonable further progress

(A) General rule

(i) By no later than 3 years after November 15, 1990, the State shall submit a revision to the applicable implementation plan to provide for volatile organic compound emission reductions, within 6 years after November 15, 1990, of at least 15 percent from baseline emissions, accounting for any growth in emissions after 1990. Such plan shall provide for such specific annual reductions in emissions of volatile organic compounds and oxides of nitrogen as necessary to attain the national primary ambient air quality standard for ozone by the attainment date applicable under this chapter. This subparagraph shall not apply in the case of oxides of nitrogen for those areas for which the Administrator determines (when the Administrator approves the plan or plan revision) that additional reductions of oxides of nitrogen would not contribute to attainment.

(ii) A percentage less than 15 percent may be used for purposes of clause (i) in the case of any State which demonstrates to the satisfaction of the Administrator that--

(I) new source review provisions are applicable in the nonattainment areas in the same manner and to the same extent as required under subsection (e) of this section in the case of Extreme Areas (with the exception that, in applying such provisions, the terms “major source” and “major stationary source” shall include (in addition to the sources described in section 7602 of this title)

any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 5 tons per year of volatile organic compounds);

(II) reasonably available control technology is required for all existing major sources (as defined in subclause (I)); and

(III) the plan reflecting a lesser percentage than 15 percent includes all measures that can feasibly be implemented in the area, in light of technological achievability.

To qualify for a lesser percentage under this clause, a State must demonstrate to the satisfaction of the Administrator that the plan for the area includes the measures that are achieved in practice by sources in the same source category in nonattainment areas of the next higher category.

(B) Baseline emissions

For purposes of subparagraph (A), the term "baseline emissions" means the total amount of actual VOC or NO_x emissions from all anthropogenic sources in the area during the calendar year 1990, excluding emissions that would be eliminated under the regulations described in clauses (i) and (ii) of subparagraph (D).

(C) General rule for creditability of reductions

Except as provided under subparagraph (D), emissions reductions are creditable toward the 15 percent required under subparagraph (A) to the extent they have actually occurred, as of 6 years after November 15, 1990, from the implementation of measures required under the applicable implementation plan, rules promulgated by the Administrator, or a permit under subchapter V of this chapter.

(D) Limits on creditability of reductions

Emission reductions from the following measures are not creditable toward the 15 percent reductions required under subparagraph (A):

(i) Any measure relating to motor vehicle exhaust or evaporative emissions promulgated by the Administrator by January 1, 1990.

(ii) Regulations concerning Reid Vapor Pressure promulgated by the Administrator by November 15, 1990, or required to be promulgated under section 7545(h) of this title [CAA § 211(h)].

(iii) Measures required under subsection (a)(2)(A) of this section (concerning corrections to implementation plans prescribed under guidance by the Administrator).

(iv) Measures required under subsection (a)(2)(B) of this section to be submitted immediately after November 15, 1990 (concerning corrections to motor vehicle inspection and maintenance programs).

(2) Reasonably available control technology

The State shall submit a revision to the applicable implementation plan to include provisions to require the implementation of reasonably available control technology under section 7502(c)(1) of this title [CAA § 172(c)(1)] with respect to each of the following:

(A) Each category of VOC sources in the area covered by a CTG document issued by the Administrator between November 15, 1990, and the date of attainment.

(B) All VOC sources in the area covered by any CTG issued before November 15, 1990.

(C) All other major stationary sources of VOCs that are located in the area.

Each revision described in subparagraph (A) shall be submitted within the period set forth by the Administrator in issuing the relevant CTG document. The revisions with respect to sources described in subparagraphs (B) and (C) shall be submitted by 2 years after November 15, 1990, and shall provide for the implementation of the required measures as expeditiously as practicable but no later than May 31, 1995.

(3) Gasoline vapor recovery

(A) General rule

Not later than 2 years after November 15, 1990, the State shall submit a revision to the applicable implementation plan to require all owners or operators of gasoline dispensing systems to install and operate, by the date prescribed under subparagraph (B), a system for gasoline vapor recovery of emissions from the fueling of motor vehicles. The Administrator shall issue guidance as appropriate as to the effectiveness of such system. This subparagraph shall apply only to facilities which sell more than 10,000 gallons of gasoline per month (50,000 gallons per month in the case of an independent small business marketer of gasoline as defined in section 7625-1[2] of this title).

(B) Effective date

The date required under subparagraph (A) shall be--

(i) 6 months after the adoption date, in the case of gasoline dispensing facilities for which construction commenced after November 15, 1990;

(ii) one year after the adoption date, in the case of gasoline dispensing facilities which dispense at least 100,000 gallons of gasoline per month, based on average monthly sales for the 2-year period before the adoption date; or

(iii) 2 years after the adoption date, in the case of all other gasoline dispensing facilities.

Any gasoline dispensing facility described under both clause (i) and clause (ii) shall meet the requirements of clause (i).

(C) Reference to terms

For purposes of this paragraph, any reference to the term "adoption date" shall be considered a reference to the date of adoption by the State of requirements for the installation and operation of a system for gasoline vapor recovery of emissions from the fueling of motor vehicles.

(4) Motor vehicle inspection and maintenance

For all Moderate Areas, the State shall submit, immediately after November 15, 1990, a revision to the applicable implementation plan that includes provisions necessary to provide for a vehicle inspection and maintenance program as described in subsection (a)(2)(B) of this section (without regard to whether or not the area was required by section 7502(b)(11)(B) of this title [CAA § 172(b)(11)(B)] (as in effect immediately before November 15, 1990) to have included a specific schedule for implementation of such a program).

(5) General offset requirement

For purposes of satisfying the emission offset requirements of this part, the ratio of total emission reductions of volatile organic compounds to total increase[3] emissions of such air pollutant shall be at least 1.15 to 1.

(c) Serious Areas

Except as otherwise specified in paragraph (4), each State in which all or part of a Serious Area is located shall, with respect to the Serious Area (or portion thereof, to the extent specified in this subsection), make the submissions described under subsection (b) of this section (relating to Moderate Areas), and shall also submit the revisions to the applicable implementation plan (including the plan items) described under this subsection. For any Serious Area, the terms "major source" and "major stationary source" include (in addition to the sources described in section 7602 of this title [CAA § 302) any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 50 tons per year of volatile organic compounds.

(1) Enhanced monitoring

In order to obtain more comprehensive and representative data on ozone air pollution, not later than 18 months after November 15, 1990, the Administrator shall promulgate rules, after notice and public comment, for enhanced monitoring of ozone, oxides of nitrogen, and volatile organic compounds. The rules shall, among other things, cover the location and maintenance of monitors. Immediately following the promulgation of rules by the Administrator relating to enhanced monitoring, the State shall commence such actions as may be necessary to adopt and implement a program based on such rules, to improve monitoring for ambient concentrations of ozone, oxides of nitrogen and volatile organic compounds and to improve monitoring of emissions of oxides of nitrogen and volatile organic compounds. Each State implementation plan for the area shall contain measures to improve the ambient monitoring of such air pollutants.

(2) Attainment and reasonable further progress demonstrations

Within 4 years after November 15, 1990, the State shall submit a revision to the applicable implementation plan that includes each of the following:

(A) Attainment demonstration

A demonstration that the plan, as revised, will provide for attainment of the ozone national ambient air quality standard by the applicable attainment date. This attainment demonstration must be based on photochemical grid modeling or any other analytical method determined by the Administrator, in the Administrator's discretion, to be at least as effective.

(B) Reasonable further progress demonstration

A demonstration that the plan, as revised, will result in VOC emissions reductions from the baseline emissions described in subsection (b)(1)(B) of this section equal to the following amount averaged over each consecutive 3-year period beginning 6 years after November 15, 1990, until the attainment date:

(i) at least 3 percent of baseline emissions each year; or

(ii) an amount less than 3 percent of such baseline emissions each year, if the State demonstrates to the satisfaction of the Administrator that the plan reflecting such lesser amount includes all measures that can feasibly be implemented in the area, in light of technological achievability.

To lessen the 3 percent requirement under clause (ii), a State must demonstrate to the satisfaction of the Administrator that the plan for the area includes the measures that are achieved in practice by sources in the same source category in nonattainment areas of the next higher classification. Any determination to lessen the 3 percent requirement shall be reviewed at each milestone under subsection (g) of this section and revised to reflect such new measures (if any) achieved in practice by sources in the same category in any State, allowing a reasonable time to implement such measures. The emission reductions described in this subparagraph shall be calculated in accordance with subsection (b)(1)(C) and (D) of this section (concerning creditability of reductions). The reductions creditable for the period beginning 6 years after November 15, 1990, shall include reductions that occurred before such period, computed in accordance with subsection (b)(1) of this section, that exceed the 15-percent amount of reductions required under subsection (b)(1)(A) of this section.

(C) NO_x control

The revision may contain, in lieu of the demonstration required under subparagraph (B), a demonstration to the satisfaction of the Administrator that the applicable implementation plan, as revised, provides for reductions of emissions of VOC's and oxides of nitrogen (calculated according to the creditability provisions of subsection (b)(1)(C) and (D) of this section), that would result in a reduction in ozone concentrations at least equivalent to that which would result from the amount of VOC emission reductions required under subparagraph (B). Within 1 year after November 15, 1990, the Administrator shall issue guidance concerning the conditions under which NO_x control may be substituted for VOC control or may be combined with VOC control

in order to maximize the reduction in ozone air pollution. In accord with such guidance, a lesser percentage of VOCs may be accepted as an adequate demonstration for purposes of this subsection.

(3) Enhanced vehicle inspection and maintenance program

(A) Requirement for submission

Within 2 years after November 15, 1990, the State shall submit a revision to the applicable implementation plan to provide for an enhanced program to reduce hydrocarbon emissions and NO_x emissions from in-use motor vehicles registered in each urbanized area (in the nonattainment area), as defined by the Bureau of the Census, with a 1980 population of 200,000 or more.

(B) Effective date of State programs; guidance

The State program required under subparagraph (A) shall take effect no later than 2 years from November 15, 1990, and shall comply in all respects with guidance published in the Federal Register (and from time to time revised) by the Administrator for enhanced vehicle inspection and maintenance programs. Such guidance shall include--

(i) a performance standard achievable by a program combining emission testing, including on-road emission testing, with inspection to detect tampering with emission control devices and misfueling for all light-duty vehicles and all light-duty trucks subject to standards under section 7521 of this title [CAA § 202]; and

(ii) program administration features necessary to reasonably assure that adequate management resources, tools, and practices are in place to attain and maintain the performance standard.

Compliance with the performance standard under clause (i) shall be determined using a method to be established by the Administrator.

(C) State program

The State program required under subparagraph (A) shall include, at a minimum, each of the following elements--

(i) Computerized emission analyzers, including on-road testing devices.

(ii) No waivers for vehicles and parts covered by the emission control performance warranty as provided for in section 7541(b) of this title [CAA § 207(b)] unless a warranty remedy has been denied in writing, or for tampering-related repairs.

(iii) In view of the air quality purpose of the program, if, for any vehicle, waivers are permitted for emissions-related repairs not covered by warranty, an expenditure to qualify for the waiver of an amount of $450 or more for such repairs (adjusted annually as determined by the Administrator on the basis of the Consumer Price Index in the same manner as provided in subchapter V of this chapter).

(iv) Enforcement through denial of vehicle registration (except for any program in operation before November 15, 1990, whose enforcement mechanism is demonstrated to the Administrator to be more effective than the applicable vehicle registration program in assuring that noncomplying vehicles are not operated on public roads).

(v) Annual emission testing and necessary adjustment, repair, and maintenance, unless the State demonstrates to the satisfaction of the Administrator that a biennial inspection, in combination with other features of the program which exceed the requirements of this chapter, will result in emission reductions which equal or exceed the reductions which can be obtained through such annual inspections.

(vi) Operation of the program on a centralized basis, unless the State demonstrates to the satisfaction of the Administrator that a decentralized program will be equally effective. An electronically connected testing system, a licensing system, or other measures (or any combination thereof) may be considered, in accordance with criteria established by the Administrator, as equally effective for such purposes.

(vii) Inspection of emission control diagnostic systems and the maintenance or repair of malfunctions or system deterioration identified by or affecting such diagnostics systems.

Each State shall biennially prepare a report to the Administrator which assesses the emission reductions achieved by the program required under this paragraph based on data collected during inspection and repair of vehicles. The methods used to assess the emission reductions shall be those established by the Administrator.

(4) Clean-fuel vehicle programs

(A) Except to the extent that substitute provisions have been approved by the Administrator under subparagraph (B), the State shall submit to the Administrator, within 42 months of November 15, 1990, a revision to the applicable implementation plan for each area described under part C of subchapter II of this chapter to include such measures as may be necessary to ensure the effectiveness of the applicable provisions of the clean-fuel vehicle program prescribed under part C of subchapter II of this chapter, including all measures necessary to make the use of clean alternative fuels in clean-fuel vehicles (as defined in part C of subchapter II of this chapter) economic from the standpoint of vehicle owners. Such a revision shall also be submitted for each area that opts into the clean fuel-vehicle program as provided in part C of subchapter II of this chapter.

(B) The Administrator shall approve, as a substitute for all or a portion of the clean-fuel vehicle program prescribed under part C of subchapter II of this chapter, any revision to the relevant applicable implementation plan that in the Administrator's judgment will achieve long-term reductions in ozone-producing and toxic air emissions equal to those achieved under part C of subchapter II of this chapter, or the percentage thereof attributable to the portion of the clean-fuel vehicle program for which the revision is to substitute. The Administrator may approve such revision only if it consists exclusively of provisions other than those required under this chapter for the area. Any State seeking approval of such revision must submit the revision to the Administrator within 24 months of November 15, 1990. The Administrator shall approve or

disapprove any such revision within 30 months of November 15, 1990. The Administrator shall publish the revision submitted by a State in the Federal Register upon receipt. Such notice shall constitute a notice of proposed rulemaking on whether or not to approve such revision and shall be deemed to comply with the requirements concerning notices of proposed rulemaking contained in sections 553 through 557 of Title 5 (related to notice and comment). Where the Administrator approves such revision for any area, the State need not submit the revision required by subparagraph (A) for the area with respect to the portions of the Federal clean-fuel vehicle program for which the Administrator has approved the revision as a substitute.

(C) If the Administrator determines, under section 7509 of this title [CAA § 179], that the State has failed to submit any portion of the program required under subparagraph (A), then, in addition to any sanctions available under section 7509 of this title [CAA § 179], the State may not receive credit, in any demonstration of attainment or reasonable further progress for the area, for any emission reductions from implementation of the corresponding aspects of the Federal clean-fuel vehicle requirements established in part C of subchapter II of this chapter.

(5) Transportation control

(A) [4] Beginning 6 years after November 15, 1990, and each third year thereafter, the State shall submit a demonstration as to whether current aggregate vehicle mileage, aggregate vehicle emissions, congestion levels, and other relevant parameters are consistent with those used for the area's demonstration of attainment. Where such parameters and emissions levels exceed the levels projected for purposes of the area's attainment demonstration, the State shall within 18 months develop and submit a revision of the applicable implementation plan that includes a transportation control measures program consisting of measures from, but not limited to, section 7408(f) of this title [CAA § 108(f)] that will reduce emissions to levels that are consistent with emission levels projected in such demonstration. In considering such measures, the State should ensure adequate access to downtown, other commercial, and residential areas and should avoid measures that increase or relocate emissions and congestion rather than reduce them. Such revision shall be developed in accordance with guidance issued by the Administrator pursuant to section 7408(e) of this title [CAA § 108(e)] and with the requirements of section 7504(b) of this title [CAA § 174(b)] and shall include implementation and funding schedules that achieve expeditious emissions reductions in accordance with implementation plan projections.

(6) De minimis rule

The new source review provisions under this part shall ensure that increased emissions of volatile organic compounds resulting from any physical change in, or change in the method of operation of, a stationary source located in the area shall not be considered de minimis for purposes of determining the applicability of the permit requirements established by this chapter unless the increase in net emissions of such air pollutant from such source does not exceed 25 tons when aggregated with all other net increases in emissions from the source over any period of 5 consecutive calendar years which includes the calendar year in which such increase occurred.

(7) Special rule for modifications of sources emitting less than 100 tons

In the case of any major stationary source of volatile organic compounds located in the area (other than a source which emits or has the potential to emit 100 tons or more of volatile organic compounds per year), whenever any change (as described in section 7411(a)(4) of this title [CAA § 111(a)(4)]) at that source results in any increase (other than a de minimis increase) in emissions of volatile organic compounds from any discrete operation, unit, or other pollutant emitting activity at the source, such increase shall be considered a modification for purposes of section 7502(c)(5) of this title and section 7503(a) of this title [CAA § 172(c)(5) and 173(a)], except that such increase shall not be considered a modification for such purposes if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of volatile organic compounds concerned from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1. If the owner or operator does not make such election, such change shall be considered a modification for such purposes, but in applying section 7503(a)(2) of this title [CAA § 173(a)(2)] in the case of any such modification, the best available control technology (BACT), as defined in section 7479 of this title [CAA § 169], shall be substituted for the lowest achievable emission rate (LAER). The Administrator shall establish and publish policies and procedures for implementing the provisions of this paragraph.

(8) Special rule for modifications of sources emitting 100 tons or more

In the case of any major stationary source of volatile organic compounds located in the area which emits or has the potential to emit 100 tons or more of volatile organic compounds per year, whenever any change (as described in section 7411(a)(4) of this title [CAA § 111(a)(4)]) at that source results in any increase (other than a de minimis increase) in emissions of volatile organic compounds from any discrete operation, unit, or other pollutant emitting activity at the source, such increase shall be considered a modification for purposes of section 7502(c)(5) of this title and section 7503(a) of this title [CAA § 172(c)(5) and 173(a)], except that if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of volatile organic compounds from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1, the requirements of section 7503(a)(2) of this title [CAA § 173(a)(2)] (concerning the lowest achievable emission rate (LAER)) shall not apply.

(9) Contingency provisions

In addition to the contingency provisions required under section 7502(c)(9) of this title [CAA § 172(c)(9)], the plan revision shall provide for the implementation of specific measures to be undertaken if the area fails to meet any applicable milestone. Such measures shall be included in the plan revision as contingency measures to take effect without further action by the State or the Administrator upon a failure by the State to meet the applicable milestone.

(10) General offset requirement

For purposes of satisfying the emission offset requirements of this part, the ratio of total emission reductions of volatile organic compounds to total increase emissions of such air pollutant shall be at least 1.2 to 1.

Any reference to "attainment date" in subsection (b) of this section, which is incorporated by reference into this subsection, shall refer to the attainment date for serious areas.

(d) Severe Areas

Each State in which all or part of a Severe Area is located shall, with respect to the Severe Area, make the submissions described under subsection (c) of this section (relating to Serious Areas), and shall also submit the revisions to the applicable implementation plan (including the plan items) described under this subsection. For any Severe Area, the terms "major source" and "major stationary source" include (in addition to the sources described in section 7602 of this title [CAA § 302]) any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 25 tons per year of volatile organic compounds.

(1) Vehicle miles traveled

(A) Within 2 years after November 15, 1990, the State shall submit a revision that identifies and adopts specific enforceable transportation control strategies and transportation control measures to offset any growth in emissions from growth in vehicle miles traveled or numbers of vehicle trips in such area and to attain reduction in motor vehicle emissions as necessary, in combination with other emission reduction requirements of this subpart, to comply with the requirements of subsection[5] (b)(2)(B) and (c)(2)(B) of this section (pertaining to periodic emissions reduction requirements). The State shall consider measures specified in section 7408(f) of this title [CAA § 108(f)], and choose from among and implement such measures as necessary to demonstrate attainment with the national ambient air quality standards; in considering such measures, the State should ensure adequate access to downtown, other commercial, and residential areas and should avoid measures that increase or relocate emissions and congestion rather than reduce them.

(B) The State may also, in its discretion, submit a revision at any time requiring employers in such area to implement programs to reduce work-related vehicle trips and miles travelled by employees. Such revision shall be developed in accordance with guidance issued by the Administrator pursuant to section 7408(f) of this title [CAA § 108(f)] and may require that employers in such area increase average passenger occupancy per vehicle in commuting trips between home and the workplace during peak travel periods. The guidance of the Administrator may specify average vehicle occupancy rates which vary for locations within a nonattainment area (suburban, center city, business district) or among nonattainment areas reflecting existing occupancy rates and the availability of high occupancy modes. Any State required to submit a revision under this subparagraph (as in effect before December 23, 1995) containing provisions requiring employers to reduce work-related vehicle trips and miles travelled by employees may, in accordance with State law, remove such provisions from the implementation plan, or withdraw its submission, if the State notifies the Administrator, in writing, that the State has undertaken, or will undertake, one or more alternative methods that will achieve emission reductions equivalent to those to be achieved by the removed or withdrawn provisions.

(2) Offset requirement

For purposes of satisfying the offset requirements pursuant to this part, the ratio of total emission reductions of VOCs to total increased emissions of such air pollutant shall be at least 1.3 to 1, except that if the State plan requires all existing major sources in the nonattainment area to use best available control technology (as defined in section 7479(3) of this title [CAA § 169(3)]) for the control of volatile organic compounds, the ratio shall be at least 1.2 to 1.

(3) Enforcement under section 7511d [CAA § 185]

By December 31, 2000, the State shall submit a plan revision which includes the provisions required under section 7511d of this title [CAA § 185].

Any reference to the term "attainment date" in subsection (b) or (c) of this section, which is incorporated by reference into this subsection (d), shall refer to the attainment date for Severe Areas.

(e) Extreme Areas

Each State in which all or part of an Extreme Area is located shall, with respect to the Extreme Area, make the submissions described under subsection (d) of this section (relating to Severe Areas), and shall also submit the revisions to the applicable implementation plan (including the plan items) described under this subsection. The provisions of clause (ii) of subsection (c)(2)(B) of this section (relating to reductions of less than 3 percent), the provisions of paragaphs[6] (6), (7) and (8) of subsection (c) of this section (relating to de minimus[7] rule and modification of sources), and the provisions of clause (ii) of subsection (b)(1)(A) of this section (relating to reductions of less than 15 percent) shall not apply in the case of an Extreme Area. For any Extreme Area, the terms "major source" and "major stationary source" includes[8] (in addition to the sources described in section 7602 of this title [CAA § 302]) any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 10 tons per year of volatile organic compounds.

(1) Offset requirement

For purposes of satisfying the offset requirements pursuant to this part, the ratio of total emission reductions of VOCs to total increased emissions of such air pollutant shall be at least 1.5 to 1, except that if the State plan requires all existing major sources in the nonattainment area to use best available control technology (as defined in section 7479(3) of this title [CAA § 169(3)]) for the control of volatile organic compounds, the ratio shall be at least 1.2 to 1.

(2) Modifications

Any change (as described in section 7411(a)(4) of this title [CAA § 111(a)(4)]) at a major stationary source which results in any increase in emissions from any discrete operation, unit, or other pollutant emitting activity at the source shall be considered a modification for purposes of section 7502(c)(5) of this title and section 7503(a) of this title [CAA § 172(c)(5) and 173(a)], except that for purposes of complying with the offset requirement pursuant to section 7503(a)(1) of this title [CAA § 173(a)], any such increase shall not be considered a modification if the

owner or operator of the source elects to offset the increase by a greater reduction in emissions of the air pollutant concerned from other discrete operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1. The offset requirements of this part shall not be applicable in Extreme Areas to a modification of an existing source if such modification consists of installation of equipment required to comply with the applicable implementation plan, permit, or this chapter.

(3) Use of clean fuels or advanced control technology

For Extreme Areas, a plan revision shall be submitted within 3 years after November 15, 1990, to require, effective 8 years after November 15, 1990, that each new, modified, and existing electric utility and industrial and commercial boiler which emits more than 25 tons per year of oxides of nitrogen--

(A) burn as its primary fuel natural gas, methanol, or ethanol (or a comparably low polluting fuel), or

(B) use advanced control technology (such as catalytic control technology or other comparably effective control methods) for reduction of emissions of oxides of nitrogen.

For purposes of this subsection, the term “primary fuel” means the fuel which is used 90 percent or more of the operating time. This paragraph shall not apply during any natural gas supply emergency (as defined in title III of the Natural Gas Policy Act of 1978 [15 U.S.C.A. § 3361 et seq.]).

(4) Traffic control measures during heavy traffic hours

For Extreme Areas, each implementation plan revision under this subsection may contain provisions establishing traffic control measures applicable during heavy traffic hours to reduce the use of high polluting vehicles or heavy-duty vehicles, notwithstanding any other provision of law.

(5) New technologies

The Administrator may, in accordance with section 7410 of this title [CAA § 110], approve provisions of an implementation plan for an Extreme Area which anticipate development of new control techniques or improvement of existing control technologies, and an attainment demonstration based on such provisions, if the State demonstrates to the satisfaction of the Administrator that--

(A) such provisions are not necessary to achieve the incremental emission reductions required during the first 10 years after November 15, 1990; and

(B) the State has submitted enforceable commitments to develop and adopt contingency measures to be implemented as set forth herein if the anticipated technologies do not achieve planned reductions.

Such contingency measures shall be submitted to the Administrator no later than 3 years before proposed implementation of the plan provisions and approved or disapproved by the Administrator in accordance with section 7410 of this title [CAA § 110]. The contingency measures shall be adequate to produce emission reductions sufficient, in conjunction with other approved plan provisions, to achieve the periodic emission reductions required by subsection (b)(1) or (c)(2) of this section and attainment by the applicable dates. If the Administrator determines that an Extreme Area has failed to achieve an emission reduction requirement set forth in subsection (b)(1) or (c)(2) of this section, and that such failure is due in whole or part to an inability to fully implement provisions approved pursuant to this subsection, the Administrator shall require the State to implement the contingency measures to the extent necessary to assure compliance with subsections (b)(1) and (c)(2) of this section.

Any reference to the term “attainment date” in subsection (b), (c), or (d) of this section which is incorporated by reference into this subsection, shall refer to the attainment date for Extreme Areas.

(f) NO_x requirements

(1) The plan provisions required under this subpart for major stationary sources of volatile organic compounds shall also apply to major stationary sources (as defined in section 7602 of this title and subsections (c), (d), and (e) of this section) of oxides of nitrogen. This subsection shall not apply in the case of oxides of nitrogen for those sources for which the Administrator determines (when the Administrator approves a plan or plan revision) that net air quality benefits are greater in the absence of reductions of oxides of nitrogen from the sources concerned. This subsection shall also not apply in the case of oxides of nitrogen for--

(A) nonattainment areas not within an ozone transport region under section 7511c of this title [CAA § 184], if the Administrator determines (when the Administrator approves a plan or plan revision) that additional reductions of oxides of nitrogen would not contribute to attainment of the national ambient air quality standard for ozone in the area, or

(B) nonattainment areas within such an ozone transport region if the Administrator determines (when the Administrator approves a plan or plan revision) that additional reductions of oxides of nitrogen would not produce net ozone air quality benefits in such region.

The Administrator shall, in the Administrator's determinations, consider the study required under section 7511f of this title [CAA § 185B].

(2)(A) If the Administrator determines that excess reductions in emissions of NO_x would be achieved under paragraph (1), the Administrator may limit the application of paragraph (1) to the extent necessary to avoid achieving such excess reductions.

(B) For purposes of this paragraph, excess reductions in emissions of NO_x are emission reductions for which the Administrator determines that net air quality benefits are greater in the absence of such reductions. Alternatively, for purposes of this paragraph, excess reductions in emissions of NO_x are, for--

(i) nonattainment areas not within an ozone transport region under section 7511c of this title [CAA § 184], emission reductions that the Administrator determines would not contribute to attainment of the national ambient air quality standard for ozone in the area, or

(ii) nonattainment areas within such ozone transport region, emission reductions that the Administrator determines would not produce net ozone air quality benefits in such region.

(3) At any time after the final report under section 7511f of this title [CAA § 185B] is submitted to Congress, a person may petition the Administrator for a determination under paragraph (1) or (2) with respect to any nonattainment area or any ozone transport region under section 7511c of this title [CAA § 184]. The Administrator shall grant or deny such petition within 6 months after its filing with the Administrator.

(g) Milestones

(1) Reductions in emissions

6 years after November 15, 1990, and at intervals of every 3 years thereafter, the State shall determine whether each nonattainment area (other than an area classified as Marginal or Moderate) has achieved a reduction in emissions during the preceding intervals equivalent to the total emission reductions required to be achieved by the end of such interval pursuant to subsection (b)(1) of this section and the corresponding requirements of subsections (c)(2)(B) and (C), (d), and (e) of this section. Such reduction shall be referred to in this section as an applicable milestone.

(2) Compliance demonstration

For each nonattainment area referred to in paragraph (1), not later than 90 days after the date on which an applicable milestone occurs (not including an attainment date on which a milestone occurs in cases where the standard has been attained), each State in which all or part of such area is located shall submit to the Administrator a demonstration that the milestone has been met. A demonstration under this paragraph shall be submitted in such form and manner, and shall contain such information and analysis, as the Administrator shall require, by rule. The Administrator shall determine whether or not a State's demonstration is adequate within 90 days after the Administrator's receipt of a demonstration which contains the information and analysis required by the Administrator.

(3) Serious and Severe Areas; State election

If a State fails to submit a demonstration under paragraph (2) for any Serious or Severe Area within the required period or if the Administrator determines that the area has not met any applicable milestone, the State shall elect, within 90 days after such failure or determination--

(A) to have the area reclassified to the next higher classification,

(B) to implement specific additional measures adequate, as determined by the Administrator, to meet the next milestone as provided in the applicable contingency plan, or

(C) to adopt an economic incentive program as described in paragraph (4).

If the State makes an election under subparagraph (B), the Administrator shall, within 90 days after the election, review such plan and shall, if the Administrator finds the contingency plan inadequate, require further measures necessary to meet such milestone. Once the State makes an election, it shall be deemed accepted by the Administrator as meeting the election requirement. If the State fails to make an election required under this paragraph within the required 90-day period or within 6 months thereafter, the area shall be reclassified to the next higher classification by operation of law at the expiration of such 6-month period. Within 12 months after the date required for the State to make an election, the State shall submit a revision of the applicable implementation plan for the area that meets the requirements of this paragraph. The Administrator shall review such plan revision and approve or disapprove the revision within 9 months after the date of its submission.

(4) Economic incentive program

(A) An economic incentive program under this paragraph shall be consistent with rules published by the Administrator and sufficient, in combination with other elements of the State plan, to achieve the next milestone. The State program may include a nondiscriminatory system, consistent with applicable law regarding interstate commerce, of State established emissions fees or a system of marketable permits, or a system of State fees on sale or manufacture of products the use of which contributes to ozone formation, or any combination of the foregoing or other similar measures. The program may also include incentives and requirements to reduce vehicle emissions and vehicle miles traveled in the area, including any of the transportation control measures identified in section 7408(f) of this title [CAA § 108(f)].

(B) Within 2 years after November 15, 1990, the Administrator shall publish rules for the programs to be adopted pursuant to subparagraph (A). Such rules shall include model plan provisions which may be adopted for reducing emissions from permitted stationary sources, area sources, and mobile sources. The guidelines shall require that any revenues generated by the plan provisions adopted pursuant to subparagraph (A) shall be used by the State for any of the following:

(i) Providing incentives for achieving emission reductions.

(ii) Providing assistance for the development of innovative technologies for the control of ozone air pollution and for the development of lower-polluting solvents and surface coatings. Such assistance shall not provide for the payment of more than 75 percent of either the costs of any project to develop such a technology or the costs of development of a lower-polluting solvent or surface coating.

(iii) Funding the administrative costs of State programs under this chapter. Not more than 50 percent of such revenues may be used for purposes of this clause.

(5) Extreme Areas

If a State fails to submit a demonstration under paragraph (2) for any Extreme Area within the required period, or if the Administrator determines that the area has not met any applicable

milestone, the State shall, within 9 months after such failure or determination, submit a plan revision to implement an economic incentive program which meets the requirements of paragraph (4). The Administrator shall review such plan revision and approve or disapprove the revision within 9 months after the date of its submission.

(h) Rural transport areas

(1) Notwithstanding any other provision of section 7511 of this title [CAA § 181] or this section, a State containing an ozone nonattainment area that does not include, and is not adjacent to, any part of a Metropolitan Statistical Area or, where one exists, a Consolidated Metropolitan Statistical Area (as defined by the United States Bureau of the Census), which area is treated by the Administrator, in the Administrator's discretion, as a rural transport area within the meaning of paragraph (2), shall be treated by operation of law as satisfying the requirements of this section if it makes the submissions required under subsection (a) of this section (relating to marginal areas).

(2) The Administrator may treat an ozone nonattainment area as a rural transport area if the Administrator finds that sources of VOC (and, where the Administrator determines relevant, NO_x) emissions within the area do not make a significant contribution to the ozone concentrations measured in the area or in other areas.

(i) Reclassified areas

Each State containing an ozone nonattainment area reclassified under section 7511(b)(2) of this title [CAA § 181(b)(2)] shall meet such requirements of subsections (b) through (d) of this section as may be applicable to the area as reclassified, according to the schedules prescribed in connection with such requirements, except that the Administrator may adjust any applicable deadlines (other than attainment dates) to the extent such adjustment is necessary or appropriate to assure consistency among the required submissions.

(j) Multi-State ozone nonattainment areas

(1) Coordination among States

Each State in which there is located a portion of a single ozone nonattainment area which covers more than one State (hereinafter in this section referred to as a “multi-State ozone nonattainment area”) shall--

(A) take all reasonable steps to coordinate, substantively and procedurally, the revisions and implementation of State implementation plans applicable to the nonattainment area concerned; and

(B) use photochemical grid modeling or any other analytical method determined by the Administrator, in his discretion, to be at least as effective.

The Administrator may not approve any revision of a State implementation plan submitted under this part for a State in which part of a multi-State ozone nonattainment area is located if the plan revision for that State fails to comply with the requirements of this subsection.

(2) Failure to demonstrate attainment

If any State in which there is located a portion of a multi-State ozone nonattainment area fails to provide a demonstration of attainment of the national ambient air quality standard for ozone in that portion within the required period, the State may petition the Administrator to make a finding that the State would have been able to make such demonstration but for the failure of one or more other States in which other portions of the area are located to commit to the implementation of all measures required under this section (relating to plan submissions and requirements for ozone nonattainment areas). If the Administrator makes such finding, the provisions of section 7509 of this title [CAA § 179] (relating to sanctions) shall not apply, by reason of the failure to make such demonstration, in the portion of the multi-State ozone nonattainment area within the State submitting such petition.

CAA §§ 307(b) & (d), 42 U.S.C. §§ 7607(b) & (d), Administrative proceeedings and judicial review

(b) Judicial review

(1) A petition for review of action of the Administrator in promulgating any national primary or secondary ambient air quality standard, . . . or any other nationally applicable regulations promulgated, or final action taken, by the Administrator under this chapter may be filed only in the United States Court of Appeals for the District of Columbia. . . . Any petition for review under this subsection shall be filed within sixty days from the date notice of such promulgation, approval, or action appears in the Federal Register, except that if such petition is based solely on grounds arising after such sixtieth day, then any petition for review under this subsection shall be filed within sixty days after such grounds arise. The filing of a petition for reconsideration by the Administrator of any otherwise final rule or action shall not affect the finality of such rule or action for purposes of judicial review nor extend the time within which a petition for judicial review of such rule or action under this section may be filed, and shall not postpone the effectiveness of such rule or action.

(2) Action of the Administrator with respect to which review could have been obtained under paragraph (1) shall not be subject to judicial review in civil or criminal proceedings for enforcement. Where a final decision by the Administrator defers performance of any nondiscretionary statutory action to a later time, any person may challenge the deferral pursuant to paragraph (1).

* * *

(d) Rulemaking

(1) This subsection applies to--

(A) the promulgation or revision of any national ambient air quality standard under section 7409 of this title [CAA § 109],

* * *

The provisions of section 553 through 557 and section 706 of Title 5 shall not, except as expressly provided in this subsection, apply to actions to which this subsection applies. This subsection shall not apply in the case of any rule or circumstance referred to in subparagraphs (A) or (B) of subsection 553(b) of Title 5.

(2) Not later than the date of proposal of any action to which this subsection applies, the Administrator shall establish a rulemaking docket for such action (hereinafter in this subsection referred to as a "rule"). Whenever a rule applies only within a particular State, a second (identical) docket shall be simultaneously established in the appropriate regional office of the Environmental Protection Agency.

(3) In the case of any rule to which this subsection applies, notice of proposed rulemaking shall be published in the Federal Register, as provided under section 553(b) of Title 5, shall be

accompanied by a statement of its basis and purpose and shall specify the period available for public comment (hereinafter referred to as the "comment period"). The notice of proposed rulemaking shall also state the docket number, the location or locations of the docket, and the times it will be open to public inspection. The statement of basis and purpose shall include a summary of--

(A) the factual data on which the proposed rule is based;

(B) the methodology used in obtaining the data and in analyzing the data; and

(C) the major legal interpretations and policy considerations underlying the proposed rule.

The statement shall also set forth or summarize and provide a reference to any pertinent findings, recommendations, and comments by the Scientific Review Committee established under section 7409(d) of this title [CAA § 109(d)] and the National Academy of Sciences, and, if the proposal differs in any important respect from any of these recommendations, an explanation of the reasons for such differences. All data, information, and documents referred to in this paragraph on which the proposed rule relies shall be included in the docket on the date of publication of the proposed rule.

(4)(A) The rulemaking docket required under paragraph (2) shall be open for inspection by the public at reasonable times specified in the notice of proposed rulemaking. Any person may copy documents contained in the docket. The Administrator shall provide copying facilities which may be used at the expense of the person seeking copies, but the Administrator may waive or reduce such expenses in such instances as the public interest requires. Any person may request copies by mail if the person pays the expenses, including personnel costs to do the copying.

(B)(i) Promptly upon receipt by the agency, all written comments and documentary information on the proposed rule received from any person for inclusion in the docket during the comment period shall be placed in the docket. The transcript of public hearings, if any, on the proposed rule shall also be included in the docket promptly upon receipt from the person who transcribed such hearings. All documents which become available after the proposed rule has been published and which the Administrator determines are of central relevance to the rulemaking shall be placed in the docket as soon as possible after their availability.

(ii) The drafts of proposed rules submitted by the Administrator to the Office of Management and Budget for any interagency review process prior to proposal of any such rule, all documents accompanying such drafts, and all written comments thereon by other agencies and all written responses to such written comments by the Administrator shall be placed in the docket no later than the date of proposal of the rule. The drafts of the final rule submitted for such review process prior to promulgation and all such written comments thereon, all documents accompanying such drafts, and written responses thereto shall be placed in the docket no later than the date of promulgation.

(5) In promulgating a rule to which this subsection applies (i) the Administrator shall allow any person to submit written comments, data, or documentary information; (ii) the Administrator shall give interested persons an opportunity for the oral presentation of data, views, or arguments, in addition to an opportunity to make written submissions; (iii) a transcript shall be

kept of any oral presentation; and (iv) the Administrator shall keep the record of such proceeding open for thirty days after completion of the proceeding to provide an opportunity for submission of rebuttal and supplementary information.

(6)(A) The promulgated rule shall be accompanied by (i) a statement of basis and purpose like that referred to in paragraph (3) with respect to a proposed rule and (ii) an explanation of the reasons for any major changes in the promulgated rule from the proposed rule.

(B) The promulgated rule shall also be accompanied by a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations during the comment period.

(C) The promulgated rule may not be based (in part or whole) on any information or data which has not been placed in the docket as of the date of such promulgation.

(7)(A) The record for judicial review shall consist exclusively of the material referred to in paragraph (3), clause (i) of paragraph (4)(B), and subparagraphs (A) and (B) of paragraph (6).

(B) Only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. If the person raising an objection 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, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed. If the Administrator refuses to convene such a proceeding, such person may seek review of such refusal in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section). Such reconsideration shall not postpone the effectiveness of the rule. The effectiveness of the rule may be stayed during such reconsideration, however, by the Administrator or the court for a period not to exceed three months.

(8) The sole forum for challenging procedural determinations made by the Administrator under this subsection shall be in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section) at the time of the substantive review of the rule. No interlocutory appeals shall be permitted with respect to such procedural determinations. In reviewing alleged procedural errors, the court may invalidate the rule only if 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.

(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 paragraph (7)(B) has been met, and (iii) the condition of the last sentence of paragraph (8) is met.

(10) Each statutory deadline for promulgation of rules to which this subsection applies which requires promulgation less than six months after date of proposal may be extended to not more than six months after date of proposal by the Administrator upon a determination that such extension is necessary to afford the public, and the agency, adequate opportunity to carry out the purposes of this subsection.

(11) The requirements of this subsection shall take effect with respect to any rule the proposal of which occurs after ninety days after August 7, 1977.

CAA § 319(b), 42 U.S.C. § 7619(b), Air quality monitoring

* * *

(b) Air quality monitoring data influenced by exceptional events

(1) Definition of exceptional event

In this section:

(A) In general

The term "exceptional event" means an event that--

(i) affects air quality;

(ii) is not reasonably controllable or preventable;

(iii) is an event caused by human activity that is unlikely to recur at a particular location or a natural event; and

(iv) is determined by the Administrator through the process established in the regulations promulgated under paragraph (2) to be an exceptional event.

(B) Exclusions

In this subsection, the term "exceptional event" does not include--

(i) stagnation of air masses or meteorological inversions;

(ii) a meteorological event involving high temperatures or lack of precipitation; or

(iii) air pollution relating to source noncompliance.

(2) Regulations

(A) Proposed regulations

Not later than March 1, 2006, after consultation with Federal land managers and State air pollution control agencies, the Administrator shall publish in the Federal Register proposed regulations governing the review and handling of air quality monitoring data influenced by exceptional events.

(B) Final regulations

Not later than 1 year after the date on which the Administrator publishes proposed regulations under subparagraph (A), and after providing an opportunity for interested persons to make oral presentations of views, data, and arguments regarding the proposed regulations, the

Administrator shall promulgate final regulations governing the review and handling or air quality monitoring data influenced by an exceptional event that are consistent with paragraph (3).

(3) Principles and requirements

(A) Principles

In promulgating regulations under this section, the Administrator shall follow--

(i) the principle that protection of public health is the highest priority;

(ii) the principle that timely information should be provided to the public in any case in which the air quality is unhealthy;

(iii) the principle that all ambient air quality data should be included in a timely manner, an appropriate Federal air quality database that is accessible to the public;

(iv) the principle that each State must take necessary measures to safeguard public health regardless of the source of the air pollution; and

(v) the principle that air quality data should be carefully screened to ensure that events not likely to recur are represented accurately in all monitoring data and analyses.

(B) Requirements

Regulations promulgated under this section shall, at a minimum, provide that--

(i) the occurrence of an exceptional event must be demonstrated by reliable, accurate data that is promptly produced and provided by Federal, State, or local government agencies;

(ii) a clear causal relationship must exist between the measured exceedances of a national ambient air quality standard and the exceptional event to demonstrate that the exceptional event caused a specific air pollution concentration at a particular air quality monitoring location;

(iii) there is a public process for determining whether an event is exceptional; and

(iv) there are criteria and procedures for the Governor of a State to petition the Administrator to exclude air quality monitoring data that is directly due to exceptional events from use in determinations by the Administrator with respect to exceedances or violations of the national ambient air quality standards.

(4) Interim provision

Until the effective date of a regulation promulgated under paragraph (2), the following guidance issued by the Administrator shall continue to apply:

(A) Guidance on the identification and use of air quality data affected by exceptional events (July 1986).

(B) Areas affected by PM-10 natural events, May 30, 1996.

(C) Appendices I, K, and N to part 50 of title 40, Code of Federal Regulations.