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ORAL ARGUMENT SCHEDULED FOR OCTOBER 11, 2011

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

NO. 10-1358 (and consolidated cases)

PORTLAND CEMENT ASSOCIATION, *ET AL.*,

PETITIONERS,

V.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *ET AL.*,

RESPONDENTS.

ON PETITIONS FOR REVIEW OF FINAL AGENCY ACTION OF THE
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FINAL BRIEF FOR RESPONDENT UNITED STATES ENVIRONMENTAL PROTECTION AGENCY AND LISA JACKSON, ADMINISTRATOR

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AUGUST 19, 2011

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RESPONDENT'S CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

A. Parties and Amici

All parties appearing in this Court are accurately identified in the Briefs for Petitioners.

B. Ruling Under Review

References to the ruling at issue in this Court accurately appear in the Briefs for Petitioners.

C. Related Cases

This case was not previously before this Court or any other court. The related cases are accurately identified in the Briefs for Petitioners, with the exception of a new case, PCA v. EPA, Case No. 11-1206, involving issues raised by Petitioners that EPA has agreed to reconsider. This case is currently held in abeyance pursuant to this Court's Order of June 7, 2011. Petitioners have also filed and moved to consolidate petitions for judicial review of EPA's denial of reconsideration in PCA v. EPA, Case No. 11-1245.

Respectfully submitted,

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August 19, 2011

US EPA ARCHIVE DOCUMENT

TABLE OF CONTENTS

RESPONDENT'S CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES ……..i

TABLE OF AUTHORITIES ……....v

GLOSSARY ……....xi

JURISDICTION 1

STATEMENT OF ISSUES 1

STATUTES AND REGULATIONS 2

STATEMENT OF THE CASE 3

STATEMENT OF FACTS 4

I. STATUTORY BACKGROUND 4

II. REGULATORY BACKGROUND 6

A. Emission Limits in the Final NSPS 6

1. The PM Standard 8

2. The SO_2 Standard 9

3. The NO_x Standard 11

B. EPA's Assessment of "Modifications" and Kilns of Older Design 12

C. The Agency's Decision to Postpone Rulemaking Regarding the NSPS for GHGs 14

SUMMARY OF THE ARGUMENT 15

STANDARD OF REVIEW 17

ARGUMENT.....18

I. EPA ESTABLISHED AN APPROPRIATE STANDARD TO CONTROL PM FOR "NEWLY CONSTRUCTED" SOURCES 18

A. EPA Considered Costs And Non-Air And Energy Impacts, As Required By The CAA 19

B. EPA Demonstrated That Its PM Standard Is Achievable For "Newly Constructed" Sources 23

C. EPA's NSPS PM Limit Is Harmonious With The CAA 29

II. THE NSPS PM LIMIT FOR "MODIFIED" SOURCES IS SOUND AND SHOULD REMAIN IN PLACE WHILE EPA RECONSIDERS THIS NARROW ISSUE 30

III. EPA PROVIDED AMPLE NOTICE AND OPPORTUNITY TO COMMENT ON THE LIMIT AND METHODOLOGY FOR ITS PM STANDARD 33

IV. THE SO_2 AND NO_X STANDARDS AS APPLIED TO "MODIFIED" SOURCES ARE REASONABLE AND SUPPORTED BY AMPLE DATA IN THE RECORD 39

A. EPA Reasonably Set The NSPS SO_2 Limit For "Modified" Sources 39

B. The NO_x Standard For "Modified" Sources Is Sound 44

C. EPA's Rationale For Applying The Final NSPS To "Modified" Sources Is Well-Reasoned And Supported By The Record 48

V. EPA REASONABLY DECLINED TO INCLUDE A STANDARD FOR GREENHOUSE GASES IN THESE AMENDMENTS TO THE NSPS 52

US EPA ARCHIVE DOCUMENT

A. EPA Appropriately Deferred Its Decision On Whether To Regulate GHGs In The NSPS For Cement Plants 53

B. EPA Could Not Promulgate A Standard For GHGs Because It Did Not Propose A Standard For GHGs 58

C. The Court Should Not Establish A Schedule If The Matter Is Remanded To EPA 60

CONCLUSION 64

US EPA ARCHIVE DOCUMENT

TABLE OF AUTHORITIES

CASES

Am. Elec. Power Co., Inc. v. Connecticut,
No. 10-174, 2011 WL 2437011 (S. Ct. June 20, 2011) 55, 60, 63

Appalachian Power Co. v. EPA,
135 F.3d 791 (D.C. Cir. 1998) 17, 37

*ASARCO Inc. v. EPA,
578 F.2d 319 (D.C. Cir. 1978) 32, 46, 47

Bell Atl. Tel. Cos. v. FCC,
206 F.3d 1 (D.C. Cir. 2000) 53

Bluewater Network v. EPA,
372 F.3d 404 (D.C. Cir. 2004) 57, 58

Citizens to Preserve Overton Park, Inc. v. Volpe,
401 U.S. 402 (1971) 17

Environmental Defense Fund v. EPA,
852 F.2d 1316 (D.C. Cir. 1988) 62

Essex Chem. Corp. v. Ruckelshaus,
486 F.2d 427 (D.C. Cir. 1973) 50

Ethyl Corp. v. EPA,
541 F.2d 1 (D.C. Cir. 1976) (en banc) 17, 18

FCC v. Pottsville Broad. Co.,
309 U.S. 134 (1940) 61

Fed. Power Comm'n v. Idaho Power Co.,
344 U.S. 17 (1952) 60

* Authorites chiefly relied upon are marked with an asterisk.

US EPA ARCHIVE DOCUMENT

Fed. Power Comm'n v. Transcon. Gas Pipe Line Corp.,
423 U.S. 326 (1976) 61

Kennecott v. EPA,
780 F.2d 445 (4th Cir. 1985) 25, 27

*Lignite Energy Council v. EPA,
198 F.3d 930 (D.C. Cir. 1999) 19, 31, 40, 42, 50

Massachusetts v. EPA,
549 U.S. 497 (2007) 52, 55, 60, 62, 63

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.,
463 U.S. 29 (1983) 17, 60

*Nat'l Asphalt Paving Ass'n v. Train,
539 F.2d 775 (D.C. Cir. 1976) 18, 23, 26

Nat'l Coal. Against the Misuse of Pesticides v. Thomas,
809 F.2d 875 (D.C. Cir. 1987) 61

*Nat'l Lime Ass'n v. EPA,
627 F.2d 416 (D.C. Cir. 1980) 23, 24, 26, 50, 55

Nat'l Wildlife Fed'n v. EPA,
286 F.3d 554 (D.C. Cir. 2002) 35

Portland Cement Association v. Ruckelshaus,
486 F.2d 375 (D.C. Cir. 1973) 50, 54

PPG Indus., Inc. v. United States,
52 F.3d 363 (D.C. Cir. 1995) 61

*Sierra Club v. Costle,
657 F.2d 298 (D.C. Cir. 1981) 18, 31, 35, 49

Sierra Club v. EPA,
325 F.3d 374 (D.C. Cir. 2003) 57

US EPA ARCHIVE DOCUMENT

Small Refiner Lead Phase-Down Task Force v. EPA,
705 F.2d 506 (D.C. Cir. 1983) 17

Vermont Yankee Nuclear Power Corp. v. NRDC,
435 U.S. 519 (1978) 61

West Virginia v. EPA,
362 F.3d 861 (D.C. Cir. 2004) 58

STATUTES

42 U.S.C. §§ 7401-7671q 4

*42 U.S.C. § 7411 1

42 U.S.C. § 7411(a)(1) 3, 5, 19, 23

42 U.S.C. § 7411(a)(2) 4, 5

42 U.S.C. § 7411(a)(4) 6, 45

42 U.S.C. § 7411(b) 7

42 U.S.C. § 7411(b)(1)(A) 4

42 U.S.C. § 7411(b)(1)(B) 4

42 U.S.C. § 7411(b)(4) 5

42 U.S.C. § 7412(d)(1) 7

42 U.S.C. § 7412(d)(2) 19

42 U.S.C. § 7412(d)(3) 19

42 U.S.C. § 7479(3) 30

42 U.S.C. § 7521(a)(1) 55

US EPA ARCHIVE DOCUMENT

*42 U.S.C. § 7604(a) 60

*42 U.S.C. § 7604(a)(2).....63

42 U.S.C. § 7607(b)(1).....1

42 U.S.C. § 7607(d)(2)(A).....54

42 U.S.C. § 7607(d)(3).....58

42 U.S.C. § 7607(d)(8).....38

42 U.S.C. § 7607(d)(9)(A).....17

CODE OF FEDERAL REGULATIONS

40 C.F.R. § 60.2 6

*40 C.F.R. § 60.14(a), (b) 6, 45

40 C.F.R. § 60.15 4

40 C.F.R. § 60.15(b) 5

40 C.F.R. § 60.62(a)(1)(ii).....19

40 C.F.R. § 60.62(a)(3).....44

40 C.F.R. § 60.62(a)(4).....39

FEDERAL REGISTER

73 Fed. Reg. 34,072, 34,073 (June 16, 2008).....5

73 Fed. Reg. at 34,075 ..... 13, 31, 40, 49, 50, 51

73 Fed. Reg. at 34,076 ..... 8, 36

US EPA ARCHIVE DOCUMENT

73 Fed. Reg. at 34,077 ..... 8, 20, 21, 23, 24, 31, 37

73 Fed. Reg. at 34,078 ..... 8, 11, 22, 23, 28, 36

73 Fed. Reg. at 34,079 ..... 11, 12, 45, 48, 51

73 Fed. Reg. at 34,080 ..... 9, 10

73 Fed. Reg. at 34,081 ..... 10, 11, 41, 51

73 Fed. Reg. at 34,082 ..... 10, 36

73 Fed. Reg. at 34,083 ..... 34, 35, 36

73 Fed. Reg. at 34,084 ..... 14, 38, 59

73 Fed. Reg. 44,354, 44,491 (July 30, 2008).....56

74 Fed. Reg. 21,136, 21,141-42 (May 6, 2009).....37

75 Fed. Reg. 54,970 (Sept. 9, 2010) 1, 7

75 Fed. Reg. at 54,973 5

75 Fed. Reg. at 54,974 27

75 Fed. Reg. at 54,975 ..... 27, 38

75 Fed. Reg. at 54,976 27

75 Fed. Reg. at 54,988 ..... 9, 24, 25, 27, 35, 51

75 Fed. Reg. at 54,989 ..... 22, 28

75 Fed. Reg. at 54,994 ..... 6, 11, 12

75 Fed. Reg. at 54,995 ..... 9, 10, 11, 12, 14, 20, 21, 31, 40, 41, 42

75 Fed. Reg. at 54,996 ..... 12, 14, 15, 31, 40, 45, 46, 47, 53, 54, 57, 59, 63

US EPA ARCHIVE DOCUMENT

75 Fed. Reg. at 54,997 ..... 15, 53, 54, 57

75 Fed. Reg. at 55,011 47

75 Fed. Reg. at 55,012 ..... 12, 45

75 Fed. Reg. at 55,017 42

75 Fed. Reg. at 55,019 ..... 41, 44

75 Fed. Reg. at 55,020 44

75 Fed. Reg. at 55,022-23 ..... 23, 43

75 Fed. Reg. at 55,034 ..... 19, 33, 44

75 Fed. Reg. at 55,035 ..... 19, 33, 39, 44

75 Fed. Reg. at 55,052 19

76 Fed. Reg. 28,318 (May 17, 2011) 32

76 Fed. Reg. at 28,324 33

76 Fed. Reg. at 28,326 32

US EPA ARCHIVE DOCUMENT

US EPA ARCHIVE DOCUMENT

GLOSSARY

BACT	Best Available Control Technology
CAA	Clean Air Act
CEMS	Continuous Emission Monitoring System
EPA	United States Environmental Protection Agency
GHG(s)	Greenhouse Gas(es)
JA	Joint Appendix
MACT	Maximum Achievable Control Technology
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PCA	Portland Cement Association, Ash Grove Cement Co., CEMEX, Inc., Eagle Materials Inc., Holcim (US) Inc., Lafarge North America Inc., Lafarge Midwest, Inc., Lafarge Building Materials Inc., Lehigh Cement Co., Riverside Cement Company, and TXI Operations, LP.
PH/PC	Preheater/Precalciner
PM	Particulate Matter
RTC	EPA's Response to Public Comments
SNCR	Selective Non-Catalytic Reduction
SO_2	Sulfur Dioxide
UPL	Upper Prediction Limit

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JURISDICTION

The petitions filed by PCA[1] and Environmental Petitioners[2] challenge a regulation promulgated by the United States Environmental Protection Agency ("EPA" or the "Agency") under Section 111 of the Clean Air Act ("CAA"), 42 U.S.C. § 7411. The challenged regulation is entitled "New Source Performance Standards for Portland Cement Plants." 75 Fed. Reg. 54,970 (Sept. 9, 2010) (the "Final NSPS") (JA1098). The petitions are timely, and this Court has jurisdiction under 42 U.S.C. § 7607(b)(1).

STATEMENT OF ISSUES

1. Whether, in establishing new source performance standards for particulate matter emissions for the category of portland cement plants, EPA appropriately set a limit for new sources based on demonstrated performance levels of cement kilns considering emission variability, costs, and non-air and energy impacts.

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[1] "PCA" collectively refers to the Portland Cement Association, Ash Grove Cement Co., CEMEX, Inc., Eagle Materials Inc., Holcim (US) Inc., Lafarge North America Inc., Lafarge Midwest, Inc., Lafarge Building Materials Inc., Lehigh Cement Co., Riverside Cement Company, and TXI Operations, LP.

[2] "Environmental Petitioners" collectively refers to the Sierra Club, Natural Resources Defense Council, Desert Citizens Against Pollution, Downwinders At Risk, Huron Environmental Activist League, Friends of Hudson, and Montanans Against Toxic Burning.

2. Whether, in its proposed rulemaking, EPA provided sufficient notice of its final standard for particulate matter emissions, where EPA provided notice of the data and methodology it used to set the final standard and on which petitioners submitted detailed comments.

3. Whether applying the Final NSPS to "modified" cement kilns was reasonable, where EPA established that the best systems of emission reduction can be applied to any kiln type, both older kilns and modified kilns have been demonstrated to meet the promulgated emission limits, and sufficient controls exist for older kilns to avoid triggering the "modification" provision altogether.

4. Whether EPA acted reasonably in determining that, because of critical gaps in information about greenhouse gas emissions and controls, it was appropriate for the Agency to first obtain more information before engaging in rulemaking as to whether and how to establish new source performance standards for greenhouse gas emissions from portland cement plants.

STATUTES AND REGULATIONS

All pertinent statutes and regulations are provided in the Addendum hereto, except for those statutes and regulations previously reproduced in Addenda to the Briefs for Petitioners.

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STATEMENT OF THE CASE

These consolidated petitions for review challenge certain aspects of the Final NSPS, which EPA promulgated pursuant to its authority under CAA Section 111 to regulate the emissions of particulate matter ("PM"), sulfur dioxide ("SO_2"), and nitrogen oxides ("NO_x") from constructed, modified, and reconstructed sources within the category of portland cement manufacturing plants. EPA establishes new source performance standards ("NSPS") for a category of sources by identifying control methods that are "adequately demonstrated" for use in the category, choosing the "best" system of emission reduction by balancing several factors (including costs), and setting an "achievable" emission limit for each air pollutant based on the "best" system. 42 U.S.C. § 7411(a)(1).

Petitioners challenge the Final NSPS with respect to four different air pollutants. For the PM, SO_2, and NO_x emission limits, PCA claims that EPA failed to consider the requisite statutory factors, provided inadequate notice in its proposed rulemaking, and selected unachievable standards for newly constructed and modified sources. For the fourth air pollutant, greenhouse gases ("GHGs"), Environmental Petitioners and State Intervenors[3] contend that EPA acted arbitrarily by declining to include standards for GHG emissions in the Final NSPS.

[3] "State Intervenors" collectively refers to the States of California, Oregon, and Washington, who have all intervened in this action.

These arguments, however, are without merit. The Final NSPS is a reasonable and logical outgrowth of its proposal, based on consideration of all statutory factors, and amply justified by the evidence in the record. Moreover, the Agency properly decided not to include a standard for GHGs in the Final NSPS, given critical gaps in existing information about GHG emissions and controls. As such, the petitions for review should all be denied.

STATEMENT OF FACTS

I. STATUTORY BACKGROUND

The CAA, 42 U.S.C. §§ 7401-7671q, creates a comprehensive and detailed program for control of air pollution through a system of shared federal and state responsibility. Under Section 111 of the CAA, EPA must establish a list of stationary source categories that the Administrator has determined "cause[], or contribute[] significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." Id. § 7411(b)(1)(A). For each category, EPA must set federal "standards of performance" for constructed, modified, and reconstructed sources. Id. §§ 7411(a)(2), (b)(1)(B); 40 C.F.R. § 60.15 (pertaining to reconstruction of a source). The standards are referred to as "new source performance standards," or "NSPS."

A "standard of performance" is:

> a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the

US EPA ARCHIVE DOCUMENT

> application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the [EPA] Administrator determines has been adequately demonstrated.

42 U.S.C. § 7411(a)(1). This standard is commonly referred to as the "best demonstrated technology" standard, or "BDT." See Proposed Rule, "Standards of Performance for Portland Cement Plants," 73 Fed. Reg. 34,072, 34,073 (June 16, 2008) (the "Proposed NSPS") (JA537).

"The primary purpose of the NSPS is to attain and maintain ambient air quality by ensuring that the best demonstrated emission control technologies are installed as the industrial infrastructure is modernized." 75 Fed. Reg. at 54,973 (JA1101). Accordingly, NSPS promulgated under Section 111 apply to all new sources within a category across the United States. 42 U.S.C. § 7411(b)(4). The CAA defines the term "new source" to include any stationary source for which "construction or modification" of the source is commenced after the publication of proposed regulations prescribing the particular NSPS applicable to that source. Id. § 7411(a)(2). NSPS also apply to the "reconstruction" of a source, which generally involves large capital investments to replace components of an existing facility. 40 C.F.R. § 60.15(b).

Of relevance here are "constructed" and "modified" new sources. "Construction" of a source means "fabrication, erection, or installation of an

US EPA ARCHIVE DOCUMENT

affected facility." Id. § 60.2. "Modification" of a source is defined as "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted."[4] 42 U.S.C. § 7411(a)(4). An increase in emissions of air pollutants, for purposes of a modification, is determined by hourly emissions. See 40 C.F.R. §§ 60.14(a), (b). Therefore, an existing source may be physically or operationally changed in numerous ways, but if its hourly emissions of any air pollutant do not increase, it is not "modified" within the meaning of the NSPS. Id.; 42 U.S.C. § 7411(a)(4). Accordingly, a facility owner may make changes to an existing source and yet avoid triggering the NSPS by applying sufficient controls that prevent an increase in a source's hourly emissions of any air pollutant.

II. REGULATORY BACKGROUND

A. Emission Limits in the Final NSPS

In September 2010, EPA amended the NSPS for portland cement plants and, in particular, cement kilns and clinker coolers. See 75 Fed. Reg. at 54,994 (JA1122). The Final NSPS challenged here amended the emission standard for

[4] For clarity, throughout this brief, the term "newly constructed" sources will be used to refer to the category of new sources that are newly fabricated, erected, or installed. The term "modified" sources will pertain to the category of new sources that are physically or operationally changed in a way that increases the source's emission of air pollutants. "New sources" will collectively refer to constructed, modified, and reconstructed sources.

US EPA ARCHIVE DOCUMENT

PM, making it more stringent. Id. It also added emission standards for two additional air pollutants, SO_2 and NO_x. Id.

As an initial matter, EPA's amendments to the NSPS were published along with its amendments to the National Emissions Standards for Hazardous Air Pollutants ("NESHAP") for portland cement plants, reflecting EPA's simultaneous and overlapping evaluation of both rulemakings. Id. at 54,970 (JA1098). Unlike the NSPS, which regulate categories of sources causing or contributing significantly to air pollution, the NESHAP regulate hazardous air pollutants from stationary sources. 42 U.S.C. §§ 7411(b), 7412(d)(1). Pursuant to the revised NESHAP for portland cement plants, EPA established emission limits for several hazardous air pollutants, including total hydrocarbons (a surrogate for organic hazardous air pollutants other than dioxin/furan), mercury, PM (a surrogate for hazardous air pollutant metals other than mercury), and hydrochloric acid. 75 Fed. Reg. at 54,970 (JA1098).

For the NSPS, to determine what constitutes the best system of emission reduction for controlling each of the relevant air pollutants, EPA considered a variety of control methods. For each air pollutant, EPA chose the method that could be used most effectively by a broad range of new sources, including a variety of cement kiln types and designs, that EPA anticipated would exist within the portland cement category. Next, EPA set the NSPS based upon the emission

US EPA ARCHIVE DOCUMENT

performance that has been demonstrated by that method, giving due consideration to the statutory factors, including costs, non-air impacts, and energy requirements.

1. The PM Standard

With respect to PM, EPA examined fabric filters and electrostatic precipitators as control technologies. 73 Fed. Reg. at 34,076-78 (JA540-42). Of these control systems, EPA noted that "well-operated and maintained fabric filters are the best technology for control of PM emissions at portland cement kilns." Id. at 34,076 (JA540). EPA then evaluated the performance of fabric filters using both membrane bags and standard bags, and found that, although more expensive, membrane bags have "superior performance" to standard bags. Id. at 34,076-77 (JA540-41). EPA therefore chose fabric filters with membrane bags as the best system for controlling PM and proposed a PM standard of 0.086 lb/ton of clinker.[5] Id. at 34,077 (JA541).

After proposal, EPA received additional data from PCA and various of its member companies showing that kilns equipped with fabric filters with membrane bags are achieving lower PM emissions than originally proposed. See Standards of Performance for Portland Cement Plants Response to Public Comments (Aug. 6, 2010) (EPA-HQ-OAR-2007-0877-0112) ("NSPS RTC"), at 33 (JA1016). After reanalyzing its PM data, EPA found that both new and older kilns are achieving

[5] Unless otherwise noted, references to "lb/ton" pertain to pound per ton of clinker.

US EPA ARCHIVE DOCUMENT

PM emissions as low as 0.007 to 0.01 lb/ton based on multiple, averaged observations. Id.; Development of the MACT Floors for the Final NESHAP for Portland Cement (Aug. 6, 2010) (EPA-HQ-2002-0051-3403) ("Final Floor Memo"), at 16, 40-41 (JA930, 954-55). These results were measured as stack tests, where emissions are measured over three hours, and each kiln had numerous stack tests. 75 Fed. Reg. at 54,988 (JA1116). EPA converted the average values to 30-day averages using a statistical formula that accounted for variability over a 30-day averaging period. Id. The PM standard in the Final NSPS is set at a 30-day average of 0.01 lb/ton for kilns and clinker coolers. Id. at 54,995 (JA1123).

In addition, EPA set a PM limit of 0.01 lb/ton for new sources under the NESHAP for portland cement plants. Id. EPA determined that new kilns and clinker coolers meeting the 0.01 lb/ton limit under the NESHAP will also be using fabric filters and membrane bags, so it was technically justified and cost-effective to establish the same PM limit in the NSPS. Id.

2. The SO_2 Standard

To determine the standard for SO_2, EPA examined the efficacy of wet scrubbers and lime injection as applied to cement kilns and determined that both constitute the best system of emission reduction for controlling SO_2 emissions. 73 Fed. Reg. at 34,080 (JA544); 75 Fed. Reg. at 54,995 (JA1123). SO_2 emissions in a cement kiln largely stem from sulfur in raw materials and can be significant. 73

US EPA ARCHIVE DOCUMENT

Fed. Reg. at 34,080 (JA544). Accordingly, EPA analyzed emission data from numerous kilns using raw materials with low, moderate, and high sulfur content. See RTI Summary of Cement Kiln Wet Scrubber and Lime Injection Design and Performance Data (May 29, 2008) (EPA-HQ-OAR-2007-0877-0022) ("RTI Design and Performance Data"), at 1 (JA510).

The Final NSPS set an emission limit of 0.4 lb/ton for SO_2. 75 Fed. Reg. at 54,995 (JA1123). At proposal, EPA acknowledged that it had considered, but did not propose, a 0.4 lb/ton SO_2 limit based on the average of recent determinations of best available control technology ("BACT") for cement kilns under a different CAA program. 73 Fed. Reg. at 34,081 (JA545). Ultimately, EPA opted to propose a higher emission limit of 1.33 lb/ton only because, at that time, EPA estimated the costs of meeting an emission level of 0.4 lb/ton at $6,000 per ton of SO_2 removal, which the Agency did not regard as cost-effective. Id. at 34,081-82 (JA545-46). By the time of promulgation, however, EPA had revised its cost analysis for lime injection, concluding that the costs of meeting a 0.4 lb/ton limit range between $470 and $1,430 per ton of SO_2 removal—lower than originally estimated and considered by EPA to be cost-effective. 75 Fed. Reg. at 54,995 (JA1123).

For cement plants that have especially high levels of sulfur in their raw materials, EPA reviewed emission data from five cement plants showing that wet

US EPA ARCHIVE DOCUMENT

scrubbers can achieve a 90% to 95% reduction in SO_2 emissions. See RTI Design and Performance Data at 2-3 (JA511-12). Lime injection showed similar promise in controlling SO_2 emissions in cement plants in which raw materials with moderate sulfur are used, achieving emission reductions averaging 70% to 75%, with the possibility of reduction as high as 90%. Id. at 3-4 (JA512-13). Accordingly, EPA's Proposed NSPS and Final NSPS also included a 90% SO_2 reduction alternative to the 0.4 lb/ton emission limit, to account for those situations in which the sulfur content of the raw materials is very high. 73 Fed. Reg. at 34,081 (JA545); 75 Fed. Reg. at 54,995 (JA1123).

3. The NO_x Standard

With respect to NO_x, EPA considered numerous controls, including burner design, staged combustion in the calciner, selective noncatalytic reduction ("SNCR"), and selective catalytic reduction. 73 Fed. Reg. at 34,078 (JA542). As the exclusive add-on control used to reduce NO_x emissions from kilns operating in the United States, EPA determined that SNCR was the "best demonstrated technology" when considering costs, non-air impacts, energy requirements, and emissions of other chemicals. Id. at 34,078-79 (JA542-43).

EPA proposed a NO_x limit of 1.5 lb/ton based on the performance of SNCR and adopted this standard in the Final NSPS. 75 Fed. Reg. at 54,994 (JA1122). In doing so, EPA rejected a more stringent control level of 0.5 lb/ton based on the

US EPA ARCHIVE DOCUMENT

performance of selective catalytic reduction because EPA was not confident that this technology could be effective at all locations where new kilns are installed. Id. at 54,994-95 (JA1122-23). Test results showed that SNCR reduced NO_x emissions between 20% and 80%, but EPA conservatively determined that a 50% NO_x emission reduction rate is a reasonable level of performance of SNCR over the long term. 73 Fed. Reg. at 34,079 (JA543); 75 Fed. Reg. at 55,012 (JA1140). EPA therefore concluded that *new* preheater/precalciner ("PH/PC") kilns presently achieving NO_x levels of 2.0 to 3.0 lb/ton can meet the 1.5 lb/ton limit. 75 Fed. Reg. at 54,996 (JA1124). For *older* kiln types with uncontrolled emission levels as high as 8.0 lb/ton, however, EPA reasoned that numerous controls are available to prevent an *increase* in hourly NO_x emissions. Id. A cement plant owner unable to meet the 1.5 lb/ton limit can thus apply sufficient NO_x controls, but still avoid triggering the NSPS "modification" provision altogether. Id.

B. EPA's Assessment of "Modifications" and Kilns of Older Design

During the comment period, EPA received comments expressing concern about the ability of older kiln types and modified kilns to meet the same limits as new kilns. EPA reaffirmed that it "intends that the revised rule apply to new, modified or reconstructed kilns *that are PH/PC kilns*," but not to "older wet or dry kilns undergoing minor modifications, *unless* they are substantially modified to the extent [that the modification increases hourly emissions]." NSPS RTC at 13-14

US EPA ARCHIVE DOCUMENT

(emphasis added) (JA996-97). PH/PC kilns have been available in the cement plant industry since 1970 and have been the exclusive design for kilns built since 2000. Id.; EPA Alternative Control Techniques Document Update – NO_x Emissions from New Cement Kilns (Nov. 2007) (EPA-HQ-OAR-2007-0877-0034) ("Alternative Control Techniques Document"), at 3 (JA474). EPA found that substantial modifications[6] to kilns of older design (i.e., long wet and long dry process kilns) are extremely rare; in fact, EPA only found two in the last 20 years. See NSPS RTC at 13 (JA996); 73 Fed. Reg. at 34,075 (JA539). Given costs and efficiency issues, such kilns are simply demolished and replaced with new PH/PC kilns rather than substantially modified. Id. Even in the two instances in which older kilns were substantially modified, they were reconfigured to include a preheater and precalciner. Id. EPA thus concluded that PH/PC kilns are the predominant design and used them as the model in its analysis.

Still, where available, EPA took into account data from non-PH/PC kilns and less extensively modified kilns. See, e.g., NSPS RTC at 14 (JA997); Final Floor Memo at 40 (JA954). Such data indicated that some of these kilns are able to achieve the promulgated limits. Id. Indeed, the control technologies available for newly constructed and modified sources are the same and, for each NSPS limit,

[6] In this context, EPA was referring to changes to a kiln that were tantamount to the "reconstruction" of a source rather than to the "modification" of a source. However, whether the cement plants in question incurred the necessary capital expenditures for these changes to qualify as a "reconstruction" is not in the record.

US EPA ARCHIVE DOCUMENT

EPA found that there are modified kilns and kilns of older design that are able to meet the limit. See, e.g., NSPS RTC at 14 (JA997); 75 Fed. Reg. at 54,995-96 (JA1123-24). In practice, however, EPA did not believe that older wet or dry kilns would have to comply with the revised NSPS limits because they could be modified in such a way that hourly emissions of NSPS pollutants would not increase. Id. In other words, industry trends and business savvy led EPA to reasonably conclude that an owner of an older kiln would not substantially modify the kiln unless the owner was prepared to install the necessary controls to comply with the emission limits. Id. Numerous controls are available so that an owner can apply enough emission controls to prevent a "modification"—an hourly increase in NSPS pollutant emissions—and thus avoid becoming subject to the revised NSPS limits. Id.

C. The Agency's Decision to Postpone Rulemaking Regarding the NSPS for GHGs

EPA did not propose a standard for GHG emissions from portland cement plants in the Proposed NSPS. 73 Fed. Reg. at 34,084 (JA548). At the time of EPA's June 2008 proposal, EPA noted the existence of "issues related to the regulation of GHGs under the CAA," believing it was best to evaluate such issues through an advance notice of proposed rulemaking that had been announced by the EPA Administrator a few months earlier in March 2008. Id.

US EPA ARCHIVE DOCUMENT

EPA subsequently resolved these issues and established a framework for addressing GHG issues under the CAA. In 2010, EPA took several final actions related to GHG regulation under the CAA,[7] but recognized that it could not include a standard for GHGs in the Final NSPS. 75 Fed. Reg. at 54,996 (JA1124). EPA explained that, since it had never proposed a GHG standard for inclusion in the cement NSPS, it could not finalize such a standard. Id. Second, EPA identified numerous types of pertinent information that it was lacking, such as information on GHG emissions from cement plants and site-specific factors that affect the performance of GHG controls. Id. at 54,997 (JA1125). Without such information, EPA stated that it could not propose or finalize an appropriate GHG standard. Id. at 54,996-97 (JA1124-25).

EPA added that "[t]his is not the end of the matter." Id. at 54,996 (JA1124). "Without prejudging the outcome of a future regulatory process," EPA noted that its "preliminary evaluation" suggested that "it may be appropriate for the Agency to set a standard of performance for GHGs." Id. at 54,996-97 (JA1124-25).

SUMMARY OF THE ARGUMENT

EPA's Final NSPS is reasonable, based on consideration of all statutory factors, and supported by the record. To establish PM, SO_2, and NO_x standards for cement kilns (and a PM standard for clinker coolers), EPA carefully evaluated

[7] These actions are all presently subject to numerous petitions for review in this Court. See Case Nos. 10-1092 and 10-1073.

US EPA ARCHIVE DOCUMENT

emissions control potential from various kinds of technology, as well as the technology's projected costs and likely non-air environmental impact and energy implications. Although EPA ultimately chose the same PM limit for both its NSPS and NESHAP for new sources, EPA undertook the inquiry mandated by Section 111 and based the NSPS for PM on its reasoned analysis of demonstrated performance levels, costs, non-air impacts, and energy requirements. Its resulting NSPS for PM is reasonable and a logical outgrowth of EPA's proposed standards and is therefore proper.

So, too, are all the promulgated limits for modified sources. EPA rationally applied the Final NSPS equally to newly constructed and modified sources, as both may use the same control technologies and both can comply with the final emission limits at reasonable cost and with negligible non-air environmental and energy impacts. At a minimum, facility owners have the option to apply available emission controls to older kilns to prevent ever triggering the NSPS provisions. EPA's inclusion of modified sources in the Final NSPS is thus appropriate.

Further, this Court must reject Environmental Petitioners' assertion that EPA was required to include a standard for GHGs in the Final NSPS. EPA determined that, because it lacked pertinent information on GHG emissions and relevant GHG controls at the time it was finalizing the NSPS, the Agency should defer rulemaking on a standard until it receives additional information that would place

US EPA ARCHIVE DOCUMENT

it in a significantly better position to determine whether and how to develop an appropriate standard for GHGs. EPA rightly concluded that, under these circumstances, the goals of the CAA would be best met by declining to include a standard in this Final NSPS.

STANDARD OF REVIEW

Where EPA has promulgated rules within the scope of discretion afforded by the statute, those rules must be upheld unless they are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 42 U.S.C. § 7607(d)(9)(A). The "arbitrary or capricious" standard is a narrow, deferential standard under which the reviewing court may not substitute its judgment for that of the agency. Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 42 (1983). The central issues under this standard are whether the decision "was based on a consideration of the relevant factors and whether there has been a clear error of judgment." Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 416 (1971); Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 520-21 (D.C. Cir. 1983). This deferential standard presumes the validity of agency action. Ethyl Corp. v. EPA, 541 F.2d 1, 34 (D.C. Cir. 1976) (en banc).

Deference to EPA's technical judgment is particularly appropriate in the context of regulations issued under the CAA, see Appalachian Power Co. v. EPA, 135 F.3d 791, 801-02 (D.C. Cir. 1998); and specifically the NSPS program, which

US EPA ARCHIVE DOCUMENT

presents "highly technical areas, where . . . [the Court's] readiness to review evidentiary support for decisions must be correspondingly restrained." Nat'l Asphalt Paving Ass'n v. Train, 539 F.2d 775, 786 (D.C. Cir. 1976) (citing Ethyl Corp., 541 F.2d at 66-67). The question for this Court is whether, given a complex record, "EPA has plotted a reasonable course through the evidentiary thicket and stated a logical rationale for the route it chose." Sierra Club v. Costle, 657 F.2d 298, 360 (D.C. Cir. 1981).

ARGUMENT

I. EPA ESTABLISHED AN APPROPRIATE STANDARD TO CONTROL PM FOR "NEWLY CONSTRUCTED" SOURCES

PCA's attack on EPA's NSPS limit for PM boils down to one mistaken assumption: that since EPA adopted the same new source NESHAP PM limit as its NSPS PM limit, it must not have considered the requisite NSPS statutory factors. But this assumption is erroneous and unsupported by the administrative record in this case. EPA's PM limit for its new source NESHAP and NSPS may be the same, but, as required by the statute, EPA analyzed costs, non-air impacts, energy demands, and achievability in setting its NSPS PM limit for newly constructed sources. Because EPA's action was entirely consistent with the statute, PCA's challenges to EPA's NSPS PM limit for newly constructed sources should be rejected.

US EPA ARCHIVE DOCUMENT

A. EPA Considered Costs And Non-Air And Energy Impacts, As Required By The CAA.

In the Final NSPS, EPA set a PM limit of 0.01 lb/ton of clinker for kilns and clinker coolers—the same as the NESHAP PM limit for new sources. 75 Fed. Reg. at 55,034-35, 55,052 (to be codified as 40 C.F.R. § 60.62(a)(1)(ii)) (JA1162-63, 1180). PCA contends that "[b]y simply adopting the PM 'floor' limit from the NESHAP rule, EPA established a PM NSPS that excluded any consideration of the cost or other non-air impacts that Section 111(a)(1) requires." PCA Br. 22. PCA *assumes* this to be the case because EPA *must* consider costs, non-air and energy impacts in setting NSPS, 42 U.S.C. § 7411(a)(1), but is *prohibited* from doing so in determining the minimum stringency of the NESHAP (the so-called "MACT floor"), id. §§ 7412(d)(2), (d)(3). See PCA Br. 22. PCA's assumption, however, is logically flawed: there is no reason why a standard that constitutes the maximum achievable control technology ("MACT") within a category and thus is acceptable as the NESHAP for that category, cannot *also* be acceptable in light of its costs and non-air and energy impacts and thus an appropriate NSPS as well. The record, moreover, contradicts PCA's argument that EPA failed to consider these factors as required by statute.

EPA *did* consider costs, non-air and energy impacts as required by Section 111(a)(1) of the CAA, and its consideration of these factors was entirely proper. Lignite Energy Council v. EPA, 198 F.3d 930, 933 (D.C. Cir. 1999) (EPA has "a

US EPA ARCHIVE DOCUMENT

great degree of discretion in balancing" Section 111 factors, and its "choice will be sustained unless the environmental or economic costs of using the technology are exorbitant."). EPA noted its cost analysis from the proposed rule, in which it determined the cost of installing and operating PM controls using fabric filters with membrane bags—the same technology that EPA assessed as the basis for the final standard. See 75 Fed. Reg. at 54,995 (JA1123); 73 Fed. Reg. at 34,077 (JA541). Per kiln, EPA estimated this standard would result in capital costs of $1.3 million and annualized costs of $176,000 per year; EPA further estimated costs per ton of PM control of $3,969. Id.; Summary of Environmental and Cost Impacts of Proposed Revisions to Portland Cement New Source Performance Standards (May 29, 2008) (EPA-HQ-OAR-2007-0877-0008) ("Proposed Impacts Summary"), at 13-14 (JA523-24). EPA determined that these costs were reasonable and consistent with the costs and cost-effectiveness of PM controls for other stationary source categories that EPA had previously found to be reasonable. 73 Fed. Reg. at 34,077 (JA541). EPA further noted that the technology would be deemed equally or more cost-effective under the final standard because greater emission reductions would be achieved at the same cost, reflecting EPA's analyses between proposal and final rule showing improved performance for PM (see Statement of Facts, II.A.1 at 8-9, above). See 75 Fed. Reg. at 54,995 (JA1123); see also NSPS RTC at

US EPA ARCHIVE DOCUMENT

34 (JA1017) (explaining that costs for fabric filters with membrane bags needed to comply with NSPS would not be any more costly than estimated at proposal).

In addition, EPA reasonably concluded that costs for PM controls under the NSPS could be attributable to the NESHAP, in which case there would be essentially no additional cost under the NSPS. In the preamble to the Final NSPS, EPA explained that it was setting a PM NESHAP of 0.01 lb/ton for new sources with a 30-day averaging period. 75 Fed. Reg. at 54,995 (JA1123). EPA further concluded that, to meet this NESHAP PM limit, new kilns will use fabric filters with membrane bags, which is the same control technology that formed the basis of the Proposed NSPS PM limit. Id.; 73 Fed. Reg. at 34,077 (JA541). Given that new kilns will install these PM controls to meet the 0.01 lb/ton PM NESHAP, EPA reasonably and necessarily determined that setting the same PM limit under the NSPS would result in no additional cost. 75 Fed. Reg. at 54,995 (JA1123). EPA specifically addressed this issue in responding to comments, reasoning that:

> Because new kilns will be subject to PM limits that were developed as part of developing the MACT floor limits under the NESHAP for portland cement manufacturing, costs incurred to comply with the final PM limits are attributable to the NESHAP rather than the NSPS.

NSPS RTC at 34 (JA1017); see also id. at 48 ("EPA does not believe there are any costs under the NSPS for meeting the PM standard, since new kilns will be required to meet the same standard under the NESHAP.") (JA1031). EPA

US EPA ARCHIVE DOCUMENT

therefore did, in fact, consider costs and found that, under Section 111(a)(1), those costs are reasonable, and are in any case not attributable to the NSPS.

The same is true for clinker coolers, for which, like new kilns, fabric filters are the best demonstrated technology for controlling PM emissions. 73 Fed. Reg. at 34,078 (JA542); 75 Fed. Reg. at 54,989 (JA1117). New facilities are already installing fabric filters on clinker coolers, which filters are capable of achieving the same level of PM control as at new kilns. 73 Fed. Reg. at 34,078 (JA542); 75 Fed. Reg. at 54,989 (JA1117). Also, under the NESHAP, new clinker coolers must already meet a standard of 0.01 lb/ton of clinker with a 30-day averaging period. So, as with kilns, costs under the NSPS for clinker coolers are either "very low," or nonexistent because costs are attributable to the NESHAP. 73 Fed. Reg. at 34,078 (JA542); Summary of Environmental and Cost Impacts of Final Revisions to Portland Cement New Source Performance Standards (Aug. 6, 2010) (EPA-HQ-OAR-2007-0877-0113) ("Final Impacts Summary"), at 5 (JA1039).

Aside from costs, EPA also considered "nonair quality health and environmental impact and energy requirements" of its NSPS PM limit, as mandated by Section 111(a)(1). For both kilns and clinker coolers, EPA determined that non-air impacts and adverse energy impacts resulting from the PM standard will be non-existent or, at most, minimal (especially given that collected PM is recycled back to the kiln as raw material). See Final Impacts Summary at 8,

US EPA ARCHIVE DOCUMENT

13-14 (JA1042, 1047-48); see also 73 Fed. Reg. at 34,077-78 (JA541-42); 75 Fed. Reg. at 55,022-23 (analyzing impacts under both NESHAP and NSPS) (JA1150-51). These determinations are unchallenged in the administrative record.

B. EPA Demonstrated That Its PM Standard Is Achievable For "Newly Constructed" Sources.

PCA also contends that the NSPS limit for PM is unlawful because EPA failed to demonstrate that it is achievable for newly constructed sources. In particular, PCA states that "EPA set the NESHAP 'floor' for new source PM limits based on tests at a single kiln in Lucerne Valley, California[,]" which is insufficient to show achievability of the NSPS PM limit. PCA Br. 23. Again, its argument hinges on certain findings that EPA made as part of its NESHAP rulemaking, which, according to PCA, necessarily conflict with EPA's statutory obligations under Section 111. See id. Again, PCA's argument is unfounded.

An emission limit in the NSPS must be "achievable" for the industry as a whole. 42 U.S.C. § 7411(a)(1); Nat'l Lime Ass'n v. EPA, 627 F.2d 416, 431-32 (D.C. Cir. 1980). "[A]n 'achievable standard' is one 'within the realm of the adequately demonstrated system's efficiency' and which, while not at a level that is purely theoretical or experimental, need not necessarily be routinely achieved within the industry prior to its adoption." Nat'l Asphalt, 539 F.2d at 786. Although EPA is under no obligation to "perform repeated tests on every plant operating within its regulatory jurisdiction," in formulating the NSPS, EPA should

US EPA ARCHIVE DOCUMENT

consider "the range of variable factors found relevant to the standards' achievability." Nat'l Lime Ass'n, 627 F.2d at 433-34.

Here, EPA adequately demonstrated the achievability of its NSPS limit for PM. Data initially considered by EPA at proposal supported a PM emission level of 0.086 lb/ton daily average for new kilns using fabric filters with membrane bags, a value transferred largely from cement kilns which burn hazardous waste. 73 Fed. Reg. at 34,077 (JA541). During the comment period, PCA submitted additional data showing that both new and older cement kilns alike (none of which burned hazardous waste) achieved lower PM emissions than the proposed standard. See PCA Comments on NSPS (Sept. 30, 2008) (EPA-HQ-OAR-2007-0877-0064), at 9-10 (JA629-30); NSPS RTC at 33 (JA1016); 75 Fed. Reg. at 54,988 (JA1116). EPA later requested, received, and analyzed additional test information on these kilns and appropriately modified its PM data. NSPS RTC at 33 (JA1016); 75 Fed. Reg. at 54,988 (JA1116); see also National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry Response to Comments Received on Proposed Rule Published on May 6, 2009 (Aug. 6, 2010) (EPA-HQ-OAR-2002-0051-3464)[8] ("NESHAP RTC"), at 152-55 (JA974-77)

[8] EPA has incorporated the docket for the NESHAP rulemaking into the docket for the NSPS rulemaking. See Memo to Docket (Aug. 6, 2010) (EPA-HQ-OAR-2007-0877-0096) (JA914).

US EPA ARCHIVE DOCUMENT

(summarizing PM performance data submitted to EPA and EPA's analysis of and utilization of those data).

From the emission data for the 45 kilns that EPA ultimately analyzed, it identified the best-performing kilns. Id. Located in Union Bridge, Maryland; Evansville, Pennsylvania; Whitehall, Pennsylvania; Sugar Creek, Missouri; and Lucerne Valley, California, the kilns tested at these cement plants consisted of both long process kilns and PH/PC kilns, aged between nine and 46 years old. See Final Floor Memo at 40 (JA954); Industrial Sector Integrated Solutions Model (Dec. 23, 2008) (EPA-HQ-OAR-2002-0051-2007), Appendix B at 11-17 (Table 10) (showing age and design of kilns) (JA683-89). The Lucerne Valley kiln was the single best-performing kiln, whose PM emissions, over 12 stack tests, averaged 0.0069 lb/ton of clinker. See Final Floor Memo at 40-42 (JA954-56). Using an upper prediction limit ("UPL") statistical equation to assess the kiln's operating variability over a 30-day averaging period, EPA adjusted this average to 0.01 lb/ton of clinker over 30 days, which was set as the NSPS for PM. Id.; 75 Fed. Reg. at 54,988 (JA1116). It is, of course, permissible to establish long-term limits based on shorter term measurements using statistical means to account for the different performance over the longer term. See Kennecott v. EPA, 780 F.2d 445, 450 (4th Cir. 1985) (upholding technology-based standards where long-term limits were derived from short-term data by application of statistical procedures).

US EPA ARCHIVE DOCUMENT

PCA maintains that the performance of the Lucerne Valley kiln is not representative of the industry as a whole. PCA Br. 23. It does not explain why the kiln was unrepresentative, however, nor did it make any such claim during either the NSPS or NESHAP rulemakings. The kiln, a precalciner, is 29 years old and achieved the promulgated PM limit even *without* using membrane bags. See Industrial Sector Integrated Solutions Model, Appendix B at 17 (Table 10) (JA689) (showing age and design of Lucerne Valley kiln). PCA also ignores that, in total, half of the six best-performing kilns achieved average PM emissions of *less* than 0.01 lb/ton of clinker, one of which is a 46-year-old preheater kiln that was physically modified, and another of which is a 36-year-old preheater kiln. See PCA Br. 8 (explaining differences between preheater and precalciner kilns); Final Floor Memo at 40-41 (based on 9, 15, and 12 stack tests respectively) (JA954-55); Industrial Sector Integrated Solutions Model, Appendix B at 11-17 (Table 10) (JA683-89). Therefore, the promulgated PM limit is achievable—not just by one kiln in Lucerne Valley—but by other kilns of varying ages and different types as well. See Nat'l Asphalt, 539 F.2d at 786-87 (upholding NSPS for PM as achievable based on tests showing that four out of six plants averaged emission levels below final standard); Nat'l Lime Ass'n, 627 F.2d at 433 n.46 ("An achievable standard need not be one already routinely achieved in the industry" but

US EPA ARCHIVE DOCUMENT

"must be capable of being met under most adverse conditions which can reasonably be expected to recur. . .").

PCA also argues that because EPA used stack test data—and not continuous emission monitoring system ("CEMS") data—and a statistical calculation to establish the final PM standard, EPA cannot demonstrate that the 0.01 lb/ton PM limit on a 30-day rolling average is achievable.[9] See PCA Br. 32. Yet, EPA simply converted the concentrations obtained from the averaged three-hour stack tests into 30-day average values using well-established statistical principles. 75 Fed. Reg. at 54,988 (JA1116); id. at 54,974-76 (explaining UPL equation used by EPA) (JA1102-04); Kennecott, 780 F.2d at 450 (noting that an agency's data selection and choice of statistical methods are entitled to "great deference"). As explained in EPA's brief in Case No. 10-1359, filed simultaneously with this brief, this equation assesses both short-term variability (test-to-test, including analytic), as well as long-term variability resulting from operation of emission control technology, and so assesses the types of variability relevant here. See 75 Fed. Reg. at 54,974 (JA1102) ("Variability in cement kilns' performance has a number of causes" and, specifically in the case of PM, is chiefly due to variations in control devices and imprecision in test methods and laboratory analysis). As noted above,

[9] Stack tests measure emissions from the exhaust gases in the stack for three-hour periods, while a CEMS measures emissions continuously. 75 Fed. Reg. at 54,988 (JA1116).

US EPA ARCHIVE DOCUMENT

three kilns of varying ages and types—not just the single best performer—have average PM emissions, based on multiple observations, at or below 0.01 lb/ton of clinker, the PM limit in the Final NSPS, confirming the standard's achievability.

From all of these data, EPA rationally concluded that new kilns of all types, varying ages, and operating under a variety of conditions can achieve a 0.01 lb/ton PM limit using fabric filters with membrane bags. As EPA explained, "[e]ven though the final limits were derived under the MACT floor analysis, they also reflect best demonstrated technology" and, hence, the level of emission control that EPA reasonably concluded may be achieved by the industry as a whole.[10] NSPS RTC at 31 (JA1014).

Likewise, EPA determined that the same best system of emission reduction for kilns applies equally to clinker coolers and that clinker coolers may achieve the same level of PM control as a kiln using fabric filters with membrane bags. 73 Fed. Reg. at 34,078 (JA542); 75 Fed. Reg. at 54,989 (JA1117). Tests on three clinker coolers associated with PH/PC kilns built in the last ten years support EPA's determination, which show PM emissions comparable to those from kilns with fabric filters and membrane bags. 73 Fed. Reg. at 34,078 (JA542).

[10] PCA also maintains that the NESHAP new source limit for PM is invalid and, therefore, so too is the corresponding NSPS limit for PM. See PCA Br. 28. The reasonableness of EPA's action in setting its NESHAP PM limit for new sources is discussed in great detail in its brief filed in Case No. 10-1359. In any event, as noted above, EPA provided an independent justification for the NSPS.

US EPA ARCHIVE DOCUMENT

C. EPA's NSPS PM Limit Is Harmonious With The CAA.

PCA also argues that EPA's NSPS PM limit will propagate errors throughout the CAA's interrelated regulations because "[b]y merely adopting the new source NESHAP limit as the NSPS for PM, EPA has made its NESHAP limit—derived from the single lowest emitting source—the baseline emission limit for all BACT determinations at portland cement plants." PCA Br. 27. This, according to PCA, circumvents EPA regulations and "imposes a significant burden" on the portland cement industry. Id.

This argument makes little sense. While EPA is always mindful of the interrelationship of different EPA regulatory programs and their effects, NSPS RTC at 14 (JA997), this is an insufficient rationale for setting a different PM limit under the NSPS and indeed bears essentially no relation to the statutory criteria in CAA Section 111(a)(1). Neither the CAA nor any of its regulations prevents EPA from setting the same PM limit under both the NESHAP and NSPS, even if it effectively makes the NESHAP floor the baseline for BACT determinations under the New Source Review program, as PCA purports, see PCA Br. 7-8. In fact, the PM limits have been the same under both standards since 1999, yet PCA fails to identify *any* resulting errors in administering the CAA in the 12 years that have passed since then. Even if EPA had set a different emission limit for PM under the NSPS, new sources also subject to the NESHAP would still have to comply with

US EPA ARCHIVE DOCUMENT

the more stringent PM limit. Also, the CAA contemplates that the NESHAP standard may be relevant in determining BACT pursuant to the New Source Review program in some instances. See 42 U.S.C. § 7479(3).

In addition, PCA's argument erroneously presumes that EPA simply acceded to the NSPS PM limit being the same as the NESHAP, without any independent analysis of the statutory factors mandated by Section 111(a)(1) of the CAA. But, as just explained, EPA reasonably set the NSPS limit for PM emissions based on its analysis of actual emissions achieved by well-operated kilns equipped with the best demonstrated technology, giving due consideration to costs, a host of non-air and energy impacts, and achievability for the industry as a whole. That EPA also found this limit to be appropriate for the NESHAP for new sources is of no consequence. PCA's argument on this point thus fails to show that EPA's NSPS PM limit is either arbitrary or capricious.

II. THE NSPS PM LIMIT FOR "MODIFIED" SOURCES IS SOUND AND SHOULD REMAIN IN PLACE WHILE EPA RECONSIDERS THIS NARROW ISSUE

PCA raises a number of arguments concerning the NSPS PM limit for modified sources. See PCA Br. 24-27. Contrary to those arguments, however, EPA did not "flatly ignore[]" PCA's comments about costs for modified sources, id. at 26; all the data EPA analyzed simply did not indicate that this would be a major concern, NSPS RTC at 13-14 (JA996-97).

US EPA ARCHIVE DOCUMENT

At promulgation, EPA set identical PM standards for newly constructed and modified sources primarily based on its belief that modifications to older kilns that would trigger NSPS were, and would continue to be, extremely rare. 73 Fed. Reg. at 34,075 (JA539); NSPS RTC at 13 (JA996). EPA had only identified two instances of substantial modifications to older kilns in the last 20 years, and in both cases the kilns were reconfigured to include a preheater and precalciner found in new kilns. Id. More often, older kilns were demolished and replaced with new PH/PC kilns of the sort that have been available since 1970. Id.; see also Alternative Control Techniques Document at 3 (JA474). For these reasons, EPA decided to base its evaluation of costs, non-air impacts, and energy requirements on a model PH/PC kiln. 73 Fed. Reg. at 34,077 (JA541); see also Sierra Club v. Costle, 657 F.2d at 335-36 (in adopting NSPS, EPA did not make clear error of judgment in adopting assumption about behavior and preferences of electric utilities).

Even when less extensive modifications to older kilns did occur, EPA concluded that the same control technologies for PM emissions for newly constructed sources—fabric filters with membrane bags—could similarly be applied to older kiln types and achieve the same control levels as a new kiln. 75 Fed. Reg. at 54,995-96 (JA1123-24); see also Lignite, 198 F.3d at 933 (affirming EPA's issuance of uniform standards for all utility boilers because effectiveness of

US EPA ARCHIVE DOCUMENT

control technology was less dependent upon boiler design or fuel type). Indeed, three of the six best-performing kilns are of older design, two of which are nearing 50 years old, and two of which achieved average PM emissions of less than 0.01 lb/ton. See Final Floor Memo at 40 (JA954); Industrial Sector Integrated Solutions Model, Appendix B at 11-17 (Table 10) (JA683-89).

From all of this, EPA concluded that it should include modified sources in the Final NSPS for PM and set their emission limit at the same level as that applicable to newly constructed sources. Nevertheless, EPA has already agreed to reconsider the NSPS for PM for modified sources, finding that PCA's arguments warrant reconsideration. See 76 Fed. Reg. 28,318, 28,326 (May 17, 2011) (JA1316).

In the interim, the NSPS PM limit for modified sources should remain in place. First, PCA should not be raising its challenge here, since the action of which it complains is EPA's failure to stay the PM standard for modified sources. See id. at 28,326 (JA1316). PCA should pursue its challenge in the separate action it has filed addressing EPA's actions in response to its reconsideration petition. In any case, PCA's assertions of harm from the PM limit for modified sources are vague and unsupported, especially where it has the power to avoid triggering the NSPS modification provision in the first place. See ASARCO, Inc. v. EPA, 578 F.2d 319, 328-29 (D.C. Cir. 1978) (stating that "the operator of an existing facility

US EPA ARCHIVE DOCUMENT

can make any alterations he wishes in the facility without becoming subject to the NSPS as long as the level of emissions from the altered facility does not increase").

III. EPA PROVIDED AMPLE NOTICE AND OPPORTUNITY TO COMMENT ON THE LIMIT AND METHODOLOGY FOR ITS PM STANDARD

As discussed above, in the Final NSPS, EPA set a PM limit of 0.01 lb/ton of clinker for new sources, averaged over 30 days and measured with a CEMS. 75 Fed. Reg. at 55,034-35 (JA1162-63). As this differs from the 0.086 lb/ton PM standard initially proposed by EPA, PCA contends that EPA failed to provide notice of either this limit or its methodology in the notice of proposed rulemaking, and similarly that the final PM limit is not a logical outgrowth of EPA's proposal. See PCA Br. 29-33. PCA raises these same arguments in its brief in Case No. 10-1359 with respect to EPA's NESHAP rulemaking; as shown below, as well as in EPA's brief filed in Case No. 10-1359, the Court should reject PCA's arguments.

As an initial matter, PCA is again challenging an action related to the denial of its petition to reconsider and should only be able to pursue that challenge in its petition challenging that denial. See 76 Fed. Reg. at 28,324 (JA1314).

Should the Court hear this issue now, PCA argues that it had no notice EPA would adopt a 0.01 lb/ton limit for the PM NSPS, repeatedly maintaining that EPA expressly stated at proposal that the PM limits for the NESHAP and NSPS would *not* be the same. See PCA Br. 30-32; see also id. at 10 n.4, 25 n.9. This is

US EPA ARCHIVE DOCUMENT

incorrect. PCA's argument on this point is based entirely on isolated comments in the proposed rulemaking alluding to the fact that the NSPS would be regulating other pollutants besides PM, whereas in the past the NSPS had only covered PM:

> In § 63.1356 of subpart LLL, we exempt any source subject to that subpart from applicable standards under the NSPS . . . That language was appropriate because the NSPS only regulated PM, and the PM limits in the NSPS and NESHAP were identical. This is no longer the case.

73 Fed. Reg. at 34,083 (JA547). Read in context, EPA was only indicating that it was "no longer the case" that "the NSPS only regulated PM." Indeed, Section E of the preamble, where this discussion is found, dealt with changes that EPA was proposing to language in the portland cement NESHAP. Specifically, the portland cement NESHAP had language exempting a source subject to that NESHAP from applicable standards under the portland cement NSPS. Id. Such an exemption was appropriate to avoid redundancy because the NSPS had previously only regulated PM. In light of EPA's proposed changes to the NSPS adding SO_2 and NO_x standards, however, that was "no longer the case." Id.

Even if read another way, no reasonable interpretation of these statements could lead to PCA's conclusion that EPA vowed that the NESHAP and NSPS limits for PM would never be the same. At most, EPA was only stating that, at the time of proposal, the PM limits for the NESHAP and NSPS were not identical.

US EPA ARCHIVE DOCUMENT

Such language does not speak to EPA's future intentions and certainly cannot be deemed as committing EPA to adopt two different limits for PM.

In fact, at proposal EPA explicitly recognized that different PM standards could result in less stringent limits for new sources under the NESHAP than the NSPS. 73 Fed. Reg. at 34,083 (JA547). Accordingly, EPA stated that it would "consider whether or not [it] should address the PM standard in the NESHAP as part of the ongoing reconsideration." Id. PCA cannot therefore legitimately claim that "EPA performed a surprise about-face" after EPA adopted the same limit for both PM standards. PCA Br. 30. Nor can PCA plausibly assert that it lacked notice that EPA might adopt a different PM standard than the one proposed, where PCA itself suggested a different PM limit than proposed *and* submitted the additional data supporting a different PM limit than proposed.[11] PCA Comments on NSPS at 5, 9-10 (JA625, 629-30); Sierra Club v. Costle, 657 F.2d at 352-53 (notice provisions of the CAA "do not require EPA to select a final rule from among the precise proposals under consideration during the comment period";

[11] It should also be noted that the difference between the proposed standard (0.086 lb/ton of clinker based on three-hour tests) and the final standard (0.01 lb/ton of clinker based on 30-day averages) is not as drastic as PCA makes it appear to be. Although the numerical value of the final standard is lower, it is averaged over a longer period of time (30 days versus three hours), which provides "more opportunity to average out individual results." 75 Fed. Reg. at 54,988 (JA1116); Nat'l Wildlife Fed'n v. EPA, 286 F.3d 554, 573 (D.C. Cir. 2002) (explaining how longer averaging periods dampen variability in pollution control performance).

US EPA ARCHIVE DOCUMENT

incremental changes are permissible if the final rule is a logical outgrowth of the proposal).

Additionally, EPA provided ample notice of its final standard requiring sources to monitor for PM compliance with CEMS. EPA proposed that kilns demonstrate compliance with the NSPS PM limit by conducting stack tests every five years. 73 Fed. Reg. at 34,082 (JA546). EPA *also* proposed to provide an option for sources to install a PM CEMS as a means of monitoring compliance. Id. at 34,082-83 (JA546-47). PCA commented on this very issue, "agree[ing] that PM CEMS should be an option" but not a requirement. PCA Comments on NSPS at 21 (JA641). PCA also knew perfectly well that, like the proposed CEMS requirement for the NO_x and SO_2 standards, any CEMS-based standard for PM would also be averaged over 30 days. EPA stated as much at proposal. See 73 Fed. Reg. at 34,078 ("Most of the emission limits and test data are 30 day averages based on data from continuous emissions monitors.") (JA542); id. at 34,076 ("we are basing compliance with the proposed NO_x and SO_2 emission limits on a 30 day rolling average") (JA540). Further, in commenting on EPA's proposal for CEMS for the SO_2 and NO_x standards, PCA fully understood that these CEMS standards would be calculated on a 30-day rolling average. See PCA Comments on NSPS, Exhibit A at 1 (identifying SO_2 and NO_x standards as based on a "30-day rolling average") (JA646). PCA even remarked that EPA needed to clarify its SO_2

US EPA ARCHIVE DOCUMENT

percentage reduction alternative standard to "indicate that it is to be calculated on a 30-day basis." Id. at 17 (JA637). Thus, the use of CEMS was an issue in the rulemaking, PCA had an opportunity to comment on it, and did so, and the Final NSPS was a logical outgrowth of the proposal. Appalachian Power Co. v. EPA, 135 F.3d 791, 816 (D.C. Cir. 1998) (finding that rule was logical outgrowth of proposal, where commenters "clearly understood" that "technologies were under consideration, as the agency received comments on them from several sources").[12]

In its proposal for the PM NSPS, EPA did not specifically propose using the Upper Prediction Limit, or "UPL," to convert the daily values from stack tests to 30-day averages, since its initial proposal was not based on 30-day averages. However, EPA *did* indicate that it was using a statistical procedure very similar to the UPL to account for variability in its proposed PM standard. 73 Fed. Reg. at 34,077 (JA541). EPA also proposed using the UPL statistical equation to calculate variability for all the standards in the parallel NESHAP rulemaking, explaining in great detail how the UPL is used to convert individual values into long term values such as 30-day values. 74 Fed. Reg. 21,136, 21,141-42 (May 6, 2009) (JA772-73). PCA was fully aware of this UPL equation and commented on it during the NESHAP comment period, see PCA Comments on NESHAP (Sept. 4, 2009)

[12] As noted in EPA's brief in Case No. 10-1359, PCA and member companies likewise commented in the NESHAP rulemaking that a CEMS-based PM standard should be a 30-day average.

US EPA ARCHIVE DOCUMENT

(EPA-HQ-OAR-2002-0051-2922.2), Appendix 1 at 1-3 – 1-10 (JA879-86); in fact, EPA made changes to the equation based on PCA's criticisms, 75 Fed. Reg. at 54,975 (JA1103). Thus, any alleged failure by EPA to provide adequate notice on this issue is harmless: even if PCA had commented on the UPL in the NSPS rulemaking, EPA would have still set the resulting PM NSPS because EPA effectively already considered the same points in the NESHAP rulemaking. See 42 U.S.C. § 7607(d)(8) ("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."). It is also important to note that in the Proposed NSPS, EPA had advised that it might amend its monitoring requirements to conform to those in the NESHAP, vowing to "ensure that [its] rulemaking recognizes that where monitoring is required, methods and reporting requirements should be consistent in the NSPS and NESHAP where the pollutants and emission sources have similar characteristics." 73 Fed. Reg. at 34,084 (JA548). Under these circumstances, PCA had adequate notice and opportunity to comment on the final PM NSPS, and its arguments should be rejected.

US EPA ARCHIVE DOCUMENT

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IV. THE SO_2, AND NO_x STANDARDS AS APPLIED TO "MODIFIED" SOURCES ARE REASONABLE AND SUPPORTED BY AMPLE DATA IN THE RECORD

PCA next argues that EPA's treatment of "modifications" in the Final NSPS for SO_2 and NO_x is arbitrary, so the whole rule should be vacated. PCA Br. 33. But EPA's SO_2 and NO_x limits as applied to modified sources, *as well as* to newly constructed and reconstructed sources, are well-founded and supported by the record. As shown below, EPA's evaluation was thorough, examining modified kilns and kilns of older designs, and EPA reasonably determined that they can comply with the SO_2 and NO_x standards. Because PCA has not shown that EPA's analysis of "modifications" for the SO_2 and NO_x standards was unreasonable, the Final NSPS should be upheld in its entirety.

A. EPA Reasonably Set The NSPS SO_2 Limit For "Modified" Sources.

The Final NSPS establishes a limit of 0.4 lb/ton of clinker for SO_2 emissions from kilns (30-day average) or, alternatively, allows a source to demonstrate that a pollution control device reduces SO_2 emissions by 90% over SO_2 concentrations at the pollution control device's inlet. 75 Fed. Reg. at 55,035 (to be codified as 40 C.F.R. § 60.62(a)(4)) (JA1163). PCA takes issue with this limit, but *only* as it applies to modified sources. PCA Br. 33-37. It claims that EPA is unable to prove that its SO_2 limit may be met by modified kilns because EPA failed to analyze kilns of older design. Id. at 36, 41. To the extent data was available, EPA's

analysis for SO_2 *did* include kilns of older design. See 73 Fed. Reg. at 34,075 (JA539); RTI Design and Performance Data at 3 (discussing wet kilns at Holcim plant in Dundee, Michigan) (JA512), 6 (Table 1) (referencing preheater kilns at Cemex Brooksville plants in Florida) (JA515). Irrespective of the type of kiln involved (older or new design), however, EPA's NSPS reflect a SO_2 limit that can be met with control technologies that can be applied to *any* kiln type and that can achieve the same control level a new kiln can achieve. 75 Fed. Reg. at 54,995-96 (JA1123-24); NSPS RTC at 14 (JA997); see also Lignite, 198 F.3d at 933 (EPA appropriately set uniform standards for all utility boilers where control technology was effective on range of boiler designs and fuel types). Both wet scrubbers and lime injection can be applied at the end of the production process and, hence, are not constrained by kiln design. See RTI Design and Performance Data at 3 (explaining that, with lime injection, lime may be injected into a duct downstream of the preheater) (JA512); Methods for Reducing SO_2 Emissions (EPA-HQ-OAR-2007-0877-0015), at 9 (describing wet scrubbers as "tailpipe" technology that handles gases from the preheater and the kiln bypass system) (JA322). Thus, as EPA correctly concluded, there is no issue regarding the ability of a modified kiln to meet the promulgated SO_2 emission standard. 75 Fed. Reg. at 54,995-96 (JA1123-24); NSPS RTC at 14 (JA997).

US EPA ARCHIVE DOCUMENT

Neither is there any issue with the overall achievability of EPA's SO_2 limits in kilns—no matter how high the uncontrolled emission rate. Indeed, EPA found, and data in the record supports EPA's conclusion, that kilns using low sulfur raw materials likely can meet the 0.4 lb/ton limit *with no additional controls at all*. 75 Fed. Reg. at 54,995 (JA1123); RTI Design and Performance Data at 1 (JA510); NSPS RTC at 30 (JA1013). For kilns with moderate levels of sulfur in their raw materials, EPA reasonably concluded that lime injection will limit SO_2 emissions to 0.4 lb/ton—a figure based on an average of recent BACT determinations for cement kilns. 73 Fed. Reg. at 34,081 (JA545); 75 Fed. Reg. at 54,995 (JA1123). And despite PCA's assertions, see PCA Br. 36, EPA was well aware that cement plants using raw materials with high sulfur content and, as a result, having a higher rate of uncontrolled emissions may have difficulty in meeting the 0.4 lb/ton SO_2 limit. EPA's Final NSPS tackles this issue effectively by incorporating the 90%-reduction alternative compliance method mentioned above. 73 Fed. Reg. at 34,081 (JA545); NSPS RTC at 29, 30 (JA1012, 1013). In fact, the record shows that kilns with wet scrubbers have consistently achieved SO_2 reductions of at least 90%. 75 Fed. Reg. at 54,995, 55,019 (JA1123, 1147); RTI Design and Performance Data at 2-3 (JA511-12).

PCA also makes the fallback argument that, even if modified kilns can achieve the SO_2 limit with control technologies, installing these devices is

US EPA ARCHIVE DOCUMENT

economically unjustified, infeasible, or impossible. PCA Br. 36-37. EPA thoroughly considered these issues, however, and made a reasoned determination that the SO_2 standard was consistent with Section 111. See Lignite, 198 F.3d at 933 (EPA has maximum discretion in balancing cost and non-cost factors under Section 111 and its decision "will be sustained unless the environmental or economic costs of using the technology are exorbitant").

First, EPA found that wet scrubbers are cost-effective, 75 Fed. Reg. at 55,017 (JA1145); costs for lime injection, between $470 to $1,430 per ton of SO_2 control, are reasonable, id. at 54,995 (JA1123); and costs for the SO_2 CEMS are minimal, id.; Final Impacts Summary at 12 (JA1046).[13]

PCA claims that EPA did not study costs pertaining to older kilns. See PCA Br. 41. This is simply untrue. The data on costs for wet scrubbers was limited, but industry estimates did not show a significant difference between costs for PH/PC kilns and older kilns. See Andover Technology Partners Memo Re: Wet Scrubber Cost Algorithms (Feb. 26, 2010) (EPA-HQ-OAR-2002-0051-3391), at 3-4

[13] Moreover, as a result of EPA's hydrochloric acid NESHAP, EPA estimated that most new and existing kilns will need to install wet scrubbers or lime injection in any event in order to meet the hydrochloric acid limit in the NESHAP. NSPS RTC at 45-46, 48 (JA1028-29, 1031); Final Impacts Summary at 9 (JA1043). Consequently, costs for these control technologies are mainly attributable to the NESHAP. NSPS RTC at 45-46, 48 (JA1028-29, 1031); 75 Fed. Reg. at 54,995 (JA1123). PCA contends that EPA's rationale in this regard is faulty because EPA's NESHAP for hydrochloric acid should be vacated. See PCA Br. 28 n.12. The validity of EPA's NESHAP is the subject of Case No. 10-1359, is demonstrated in EPA's brief in that case, and will not be addressed here.

US EPA ARCHIVE DOCUMENT

(discussing cost estimating equation EPA developed to assess wet scrubber costs for all kiln types) (JA908-09). Similarly, independent of kiln type, the data in the record show that the costs of the lime injection process are fairly low. See Andover Technology Partners Memo Re: Costs and Performance of Controls – revised from comments (March 10, 2009) (EPA-HQ-OAR-2002-0051-3392) ("Andover Technology Partners Memo"), at 28-29 (JA727-28). Moreover, no one submitted any information to EPA during the comment period suggesting that EPA's cost analysis for SO_2 controls that are applicable to any kiln type would be different for kilns of older design. EPA's resulting determination regarding costs is therefore reasonable based on the data before it, and must be upheld.

Second, EPA analyzed various non-air and energy impacts associated with the NSPS for SO_2 and, although water usage and energy demands will likely increase as a result of the NSPS, overall the impacts attributable to the NSPS are expected to be negligible. 75 Fed. Reg. at 55,022-23 (JA1150-51); Final Impacts Summary at 12-14 (noting that secondary impacts for SO_2 are attributed to the NESHAP) (JA1046-48); see also NESHAP RTC at 149-50 (assessing water use impacts from use of wet scrubbers) (JA971-72). Furthermore, although PCA states concern over the lack of utilities or water needed to support wet scrubbers in some locations, see PCA Br. 36, EPA explained that a host of other options for reducing SO_2 emissions, such as dry lime injection and using low sulfur raw materials, are

US EPA ARCHIVE DOCUMENT

available and can be utilized if utilities and water resources are deemed insufficient for a particular kiln. See NSPS RTC at 47 (JA1030); 75 Fed. Reg. at 55,019 (JA1147); see also NESHAP RTC at 138, 148 (JA967, 970).[14] EPA anticipated that these options would be no more expensive than a wet scrubber. NESHAP RTC at 138, 148 (JA967, 970).

B. The NO_x Standard For "Modified" Sources Is Sound.

EPA's Final NSPS limits NO_x emissions from cement kilns to 1.5 lb/ton of clinker. 75 Fed. Reg. at 55,034-35 (to be codified as 40 C.F.R. § 60.62(a)(3)) (JA1162-63). Just as it challenges the SO_2 limit, PCA contends that EPA failed to establish that the NO_x limit is achievable for modified kilns. See PCA Br. 35. But, like the SO_2 limit, EPA's conclusion that the Final NSPS NO_x limit can be met by modified kilns at reasonable cost and with acceptable non-air and energy impacts, finds ample support in the record and must be upheld.

Contrary to PCA's assertion, see PCA Br. 35, EPA did not overlook the high rate of uncontrolled emissions in kilns of older design. EPA explicitly

[14] EPA also reiterated that it was not mandating the use of wet scrubbers in its NSPS. 75 Fed. Reg. at 55,019-20 (JA1147-48). Thus, if a cement plant is located in an area with limited land or resources that may preclude use of a wet scrubber, other alternatives are available and may be used to meet the emission limits. Id. Of the various options available for controlling SO_2, EPA identified "dry lime injection, injection of sodium compounds, selective mining, injection of a finely divided lime slurry, use of lower sulfur fuels, and careful screening of purchased raw materials." Id.

US EPA ARCHIVE DOCUMENT

acknowledged that "older kiln designs can have much higher NO_x levels, ranging from 2.0 to 8.0 lb/ton clinker," thus requiring as much as 80% emission reduction to meet the promulgated standard.[15] 75 Fed. Reg. at 54,996 (JA1124). At the same time, EPA also explained that "cement kilns may adopt measures so that their hourly emissions of the NSPS pollutants do not increase, so that such kilns are not 'modified.'" NSPS RTC at 48 (JA1031); see also 75 Fed. Reg. at 54,996 (JA1124). In other words, a kiln may be physically or operationally changed in a variety of ways, but as long as its hourly emissions of air pollutants do not increase, it will not be considered "modified" under the NSPS. 40 C.F.R. § 60.14(a); 42 U.S.C. § 7411(a)(4). An existing source could therefore opt to add just enough NO_x control that its hourly emissions of NO_x would not increase, and thus altogether avoid being subject to the NO_x standard for modified sources. EPA cited myriad available controls that could be used to prevent an increase in hourly NO_x emissions: "in addition to SNCR, . . . conversion to indirect firing, mid-kiln fuel injection, mid-kiln air injection, and substitution of steel slag for some

[15] Even for kilns at the higher end of this range—i.e., with emissions of 8.0 lb/ton—SNCR's performance for NO_x emission reduction ranges from 20% to 80%. 73 Fed. Reg. at 34,079 (JA543). Data submitted by the Portland Cement Association shows that these reduction rates, and even higher, are achieved in practice. 75 Fed. Reg. at 55,012 (Table 10—SNCR NO_x Removal Efficiency) (JA1140). EPA conservatively determined that a 50% NO_x emission reduction rate is a reasonable level of performance of SNCR over the long term. 73 Fed. Reg. at 34,079 (JA543); 75 Fed. Reg. at 55,012 (JA1140); Final Impacts Summary at 6-7 (JA1040-41).

US EPA ARCHIVE DOCUMENT

limestone." 75 Fed. Reg. at 54,996 (JA1124). "Given these available controls," EPA logically believed "it would be extremely unlikely that a source that determines the 1.5 lb/ton limit is not achievable would be unable to apply some type of NO_x control that would avoid triggering the modification . . . provisions."[16] NSPS RTC at 14 (JA997).

EPA's reasoning mirrors this Court's in ASARCO, Inc. v. EPA, 578 F.2d 319 (D.C. Cir. 1978). In ASARCO, the Court found that EPA's NSPS regulations incorporating the "bubble concept" were incompatible with the CAA. Id. at 326-29. Basically, EPA's bubble concept defined a stationary source as a combination of facilities, such that an entire plant could avoid the NSPS as long as any changes in the plant did not result in an overall increase in its net emissions. Id. at 322. EPA had implemented the bubble concept mainly because it sought to provide modified facilities with more flexibility, due to the costs in bringing such existing facilities into compliance with the NSPS. Id. at 328. The Court, in language pertinent here, found that the NSPS already provided existing facilities with ample flexibility:

[16] PCA maintains that "these statements reflect EPA's guess, not the result of an analysis." PCA Br. 41-42. EPA's data, however, support its conclusion. See, e.g., Andover Technology Partners Memo at 3-12, 16-19, 34-36 (discussing availability of numerous technologies for controlling NO_x emissions from varying types of cement kilns) (JA702-11, 715-18, 733-35).

US EPA ARCHIVE DOCUMENT

> Under provisions of the regulations that are not challenged in this litigation, the operator of an existing facility can make any alterations he wishes in the facility without becoming subject to the NSPS as long as the level of emissions from the altered facility does not increase. Thus the level of emissions before alterations take place, rather than the strict NSPS, effectively defines the standard that an altered facility must meet. The record does not indicate why more flexibility than this is necessary or even appropriate.

Id. at 328-29; see also 75 Fed. Reg. at 54,996 (noting that EPA was following the line of reasoning set forth by the Court in ASARCO) (JA1124).

The record also reveals that EPA did in fact analyze kilns of older design and showed that some have demonstrated the ability to meet the 1.5 lb/ton limit for NO_x, and in some cases below 1.0 lb/ton, by employing SNCR control.[17] 75 Fed. Reg. at 54,996 (JA1124); NSPS RTC at 14 (JA997). Non-PH/PC kilns at the Cemex plant in Florida and in Europe achieved NO_x emissions either at or below the promulgated standard. See Alternative Control Techniques Document at 58, 70-71, 73 (Table 8-8, SNCR Summary) (JA484, 487-88, 490). Even some PH/PC kilns nearing 20 years old, such as the one at the Ash Grove, Seattle plant, do not utilize recent pollution control strategies and yet still met the 1.5 lb/ton NO_x limit with SNCR. Id. at 7 (Table 2-3, SNCR Summary) (JA478), 55-56 (JA481-82).

[17] Indeed, at the TXI Riverside plant in California, long dry kilns of older design have demonstrated the ability to meet the 1.5 lb/ton of NO_x emissions without any add-on control. 75 Fed. Reg. at 55,011 (Table 9—Cement Kiln NO_x Emissions Data) (JA1139).

US EPA ARCHIVE DOCUMENT

Therefore, it is not EPA's "guess," PCA Br. 41-42, but rather its reasoned analysis, supported by actual data, that some modified kilns *can* meet the 1.5 lb/ton limit for NO_x.

As to the other Section 111 factors, for SNCR, EPA concluded that all non-air and energy impacts of NO_x control are negligible. 73 Fed. Reg. at 34,079 (JA543); Final Impacts Summary at 10 (JA1044). EPA also concluded that SNCR control is cost-effective and compares favorably with NO_x control costs under other environmental programs. 73 Fed. Reg. at 34,079 (JA543); Final Impacts Summary at 11 (JA1045). PCA mounts no challenge to these conclusions, and the NO_x limit in the Final NSPS must therefore be upheld.

C. EPA's Rationale For Applying The Final NSPS To "Modified" Sources Is Well-Reasoned And Supported By The Record.

Finally, PCA argues generally that EPA erroneously applied the NSPS for all pollutants to modified kilns, as opposed to limiting them more generally to new kilns. PCA Br. 37-38. EPA's rationale for extending the Final NSPS to modified sources is sound. EPA intended "that the revised rule apply to new, modified or reconstructed kilns that are PH/PC kilns," but not "to older wet or dry kilns undergoing minor modifications, *unless* they are substantially modified to the extent [that the modification increases hourly emissions]." NSPS RTC at 13-14 (emphasis added) (JA996-97). While PCA largely takes these statements out of

US EPA ARCHIVE DOCUMENT

context in arguing that this justification is faulty, see PCA Br. 37-38, EPA made a reasoned decision to include modified sources in the Final NSPS.

First, while PCA faults EPA for not focusing more on modifications to older kilns, EPA only encountered two instances in the last 20 years in which kilns of older design had been substantially modified rather than simply demolished and replaced. NSPS RTC at 13 (JA996); 73 Fed. Reg. at 34,075 (JA539). Simply stated, the existence of two isolated instances does not warrant EPA setting wholly separate standards for modifications of older sources.[18] Neither does it mean that EPA somehow impermissibly "ignored" modifications in its Final NSPS, as PCA contends. PCA Br. 40. To determine whether a modified source can meet a promulgated standard, EPA may appropriately consider which sources are likely to be modified and the manner in which they are likely to be modified. "[S]ection 111 'looks toward what may fairly be projected for the regulated future, rather than

[18] PCA faults EPA for failing to look at "potential modifications" or "evaluate existing kilns undergoing modifications in other scenarios." PCA Br. 39. All the data EPA reviewed suggested that wet and long dry kilns are either being replaced with PH/PC kilns or are substantially modified to include a preheater and precalciner. See Technical Support Document for Portland Cement New Source Performance Standard Review (May 2008) (EPA-HQ-OAR-2007-0877-0049), at 1 (JA494); 73 Fed. Reg. at 34,075 (JA539). Because EPA did not encounter an instance in the last 20 years in which a kiln was substantially modified *without* a preheater and precalciner, EPA reasonably predicted that future modifications would also be of this type and appropriately used a PH/PC kiln as the model kiln in its NSPS evaluation. Sierra Club v. Costle, 657 F.2d at 335-36 (in adopting NSPS, EPA did not make clear error of judgment in adopting assumption about behavior and preferences of electric utilities).

US EPA ARCHIVE DOCUMENT

the state of the art at present.'" Lignite, 198 F.3d at 934 (citation omitted). Thus, if industry trends undeniably show that substantial modifications to older kilns are extremely rare and, even when they do occur, they utilize modern design, then EPA may take those facts into account in setting an appropriate standard. See Nat'l Lime Ass'n, 627 F.2d at 434 n.52 (noting that it is permissible "to generalize from a sample of one when one is the only available sample, *or when that one is shown to be representative of the regulated industry along relevant parameters*.") (citing Essex Chem. Corp. v. Ruckelshaus, 486 F.2d 427, 438 (D.C. Cir. 1973) (emphasis added)).

Second, given how infrequent modifications triggering NSPS occurred in the last 20 years, EPA's ability to analyze those kilns in large numbers was limited. But, critically, data on modified kilns *was* found; EPA thoroughly considered that data and reasonably determined that modified sources, too, can comply with the Final NSPS. 73 Fed. Reg. at 34,075 (JA539); Essex Chem., 486 F.2d at 438 (finding adequate support for EPA's conclusion that standard was achievable based on test results at *only* active plant in U.S. equipped with control technology). Under these circumstances, EPA's analysis of modified sources cannot be faulted.[19]

[19] PCA cites Portland Cement Association v. Ruckelshaus, 486 F.2d 375 (D.C. Cir. 1973), in arguing that EPA has not demonstrated the "degree of error" in predicting that these two modified sources are representative of other types of

US EPA ARCHIVE DOCUMENT

Third, the Final NSPS incorporates a great deal of flexibility to ensure that kilns of older design can in one way or another comply with the Final NSPS. Indeed, if an older kiln undergoes a modification, EPA sensibly concluded that the owner would either install the necessary controls to comply with the revised limits or install just enough controls to avoid triggering the NSPS modification provision in the first place.[20] NSPS RTC at 14 (JA997). The former option—installation of necessary controls—was successfully utilized by plant owners in the two instances of substantial modifications of which EPA is aware. Id. at 13 (JA996); 73 Fed. Reg. at 34,075 (JA539). Moreover, as discussed above, EPA determined, and the data show, that the control technologies for PM and SO_2 can be effectively applied to kilns of older design. For NO_x, the data similarly show that plant owners with kilns of older design may meet the emission limit by using the same controls used for newly constructed sources, or they may avoid the modification provision

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kilns. PCA Br. 39 n.16. Its reliance on this case misses the point, however, because the emission limits in the Final NSPS are all based on more than a single test—unlike in Portland Cement—and all adequately account for sources' variability in performance. 75 Fed. Reg. at 54,988 (PM) (JA1116); 73 Fed. Reg. at 34,081 (SO_2) (JA545); 73 Fed. Reg. at 34,079 (NO_x) (JA543).

[20] It is for this reason that EPA reasoned that it is unlikely that "an owner or operator would modify a kiln in such a way as to cause it to … trigger [New Source Review]." NSPS RTC at 14 (JA997). In response to comments that EPA's NSPS would affect the New Source Review program, EPA explained that if a facility opts to modify a kiln, it would have to either install the necessary controls to comply with the CAA or to limit its modification in such a way that it is not subject to a New Source Review or the revised NSPS limits. Id. There is nothing faulty with this reasoning.

US EPA ARCHIVE DOCUMENT

altogether by installing just enough controls to avoid increasing a source's hourly NO_x emissions.

Fourth, even assuming, arguendo, that PCA's arguments on this issue have some merit—and they do not—*at most*, PCA's arguments would apply to the NSPS for modified sources. PCA has provided no persuasive basis for the Court to remand or vacate the NSPS for newly constructed sources or reconstructed sources for any of the pollutants, and no basis at all for SO_2 and NO_x.

Having failed to demonstrate that EPA's PM limits for newly constructed and modified sources, and its SO_2, and NO_x standards for modified sources are arbitrary or capricious, PCA's petitions for review of the Final NSPS should be denied.

V. EPA REASONABLY DECLINED TO INCLUDE A STANDARD FOR GREENHOUSE GASES IN THESE AMENDMENTS TO THE NSPS

Environmental Petitioners challenge the Final NSPS, not for what it includes, but because of what it reasonably omits: a standard for greenhouse gas ("GHG") emissions from new cement kilns. Judicial review of decisions of this nature is both "extremely limited" and "highly deferential," and, given this narrow review, Environmental Petitioners cannot show that EPA's decision was improper. Massachusetts v. EPA, 549 U.S. 497, 527-28 (2007). EPA made a reasoned decision not to set a standard for GHG emissions in the Final NSPS because EPA did not have adequate information at the time; even if it had, EPA could not have

US EPA ARCHIVE DOCUMENT

included a standard in the Final NSPS without first proposing it. Having provided satisfactory reasons for its decision, EPA's determination not to adopt a GHG standard must be upheld.

A. EPA Appropriately Deferred Its Decision On Whether To Regulate GHGs In The NSPS For Cement Plants.

EPA did not include a standard for GHGs in the Final NSPS because it lacked the relevant data to propose—let alone promulgate—a standard. In particular, EPA noted that, to support a well-informed proposal on standards for GHGs, it required additional information on (1) GHG emissions from cement kilns, (2) site-specific factors that affect performance of controls for GHGs, (3) where these controls are currently applied, (4) costs of these controls, and (5) overall facility energy management practices. 75 Fed. Reg. at 54,996-97 (JA1124-25). Without this information, EPA explained that it would be unable to propose or adopt a reasonable standard of performance—much less determine that standard's achievability and costs.[21] Id. at 54,996 (JA1124).

[21] Environmental Petitioners' efforts to attack EPA's deferral under Chevron Step II, see Enviro. Br. 20-21, 32-33, are premature in that they are directed at a decision that EPA has not yet made. See Bell Atl. Tel. Cos. v. FCC, 206 F.3d 1, 9 (D.C. Cir. 2000) ("a decision 'is valid only as a determination of policy or judgment which the agency alone is authorized to make and which it has not made, a judicial judgment cannot be made to do service'") (citation omitted). EPA explicitly deferred making a final decision as to whether or not it is "appropriate" to regulate GHGs emitted by Portland cement kilns under the CAA. See 75 Fed. Reg. at 54,996-97 (noting that "[b]ased upon this *preliminary* evaluation," it "*may*"

US EPA ARCHIVE DOCUMENT

Environmental Petitioners nevertheless claim that EPA had enough data to propose a standard for GHGs and, in any event, Section 111 does not require EPA to have the information EPA claims it needs to propose a standard. Enviro. Br. 35-37. The real gist of Environmental Petitioners' argument is that EPA should have proposed a GHG standard first, and then obtained information supporting that standard later. But the CAA demands more.

First, EPA satisfactorily explained why it was declining to propose a standard for GHGs. EPA specifically identified at least five types of information that it lacked and stated that, without it, EPA could not propose a standard. 75 Fed. Reg. at 54,996-97 (JA1124-25). Proposing a baseless standard in hopes that sufficient data will later emerge or be submitted in response to comments—the avenue that Environmental Petitioners suggest, Enviro. Br. 35—is not prudent. Nor would it promote the purposes of the CAA's notice requirement. See 42 U.S.C. § 7607(d)(2)(A) (a proposed rulemaking shall include a summary of "the factual data on which the proposed rule is based"); Portland Cement, 486 F.2d at 394 ("In order that rule-making proceedings to determine standards be conducted in orderly fashion, information should generally be disclosed as to the basis of a proposed rule at the time of issuance."). Under these circumstances, it simply

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be appropriate for EPA to set a standard for GHGs) (emphasis added) (JA1124-25).

US EPA ARCHIVE DOCUMENT

made the most sense for EPA to postpone developing a proposal for GHG emissions until the Agency requests and receives more data.[22]

Second, Environmental Petitioners' contention that "neither section 111 nor EPA's regulations require the agency to have site specific information on controls and costs, or energy management system information" to promulgate NSPS, misses the point. Enviro. Br. 35. In setting the NSPS, EPA is required by statute to "first, identify[] and verify[] as relevant or irrelevant *specific variable conditions* that may contribute substantially to the amount of emissions, or otherwise affect the efficiency of the emissions control systems considered." Nat'l Lime Ass'n, 627 F.2d at 433 (emphasis added). "And second, where test results are relied upon," EPA must use "test results in a manner which provides some assurance of

[22] Environmental Petitioners' citation to Massachusetts v. EPA on this point is unavailing. Enviro. Br. 36. That case dealt with EPA's denial of a petition for rulemaking to determine whether or not GHGs are air pollutants that endanger public health or welfare and whether emissions of GHGs from new motor vehicles cause or contribute to that endangerment—a situation readily distinguishable from the case here. 549 U.S. at 510-11. The Massachusetts Court was *not* speaking to the content of any regulation; rather, it held only that, under 42 U.S.C. § 7521(a)(1), EPA must either make an endangerment finding with respect to GHGs *or* provide a reasoned explanation for not doing so. Id. at 532-33. Notably, neither of EPA's two reasons for denying the petition for rulemaking in that case included the lack of relevant data. Id. at 511. Thus, the Court did not, as Environmental Petitioners purport, conclude that a need for more information is not a reasoned justification for determining whether regulating GHGs is appropriate. As the Supreme Court recently noted, EPA may decline to regulate GHGs under the CAA, as long as its refusal to act is not "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." Am. Elec. Power Co., Inc. v. Connecticut, -- S. Ct. -- , No. 10-174, 2011 WL 2437011, *11 (S. Ct. June 20, 2011).

US EPA ARCHIVE DOCUMENT

the achievability of the standard for the industry as a whole, *given the range of variable factors* found relevant to the standards' achievability." Id. (emphasis added). These variable conditions and factors that EPA must consider involve precisely the site-specific data that EPA recognized was absent from the record. Indeed, much of the data touted by Environmental Petitioners in the record is highly generalized information that is unsuitable for rulemaking. See Enviro. Br. 37-38. For example, the advance notice of proposed rulemaking referred to in the Final NSPS and cited by Environmental Petitioners broadly noted the existence of "*numerous* efficiency measures generally accepted by *much* of the U.S. industry" that "*may* directly reduce GHG emissions by cement plants, or they *may* indirectly reduce GHG emissions at sources of power generation . . ." 73 Fed. Reg. 44,354, 44,491 (July 30, 2008) (emphasis added). Another study relied on by Environmental Petitioners, over ten years old, identifies various energy-efficient measures for the cement industry—but only on the aggregate level. See Lawrence Berkeley National Laboratory, Energy Efficient and Carbon Dioxide Emissions Reduction Opportunities in the U.S. Cement Industry (Sept. 1999) (EPA-HQ-OAR-2007-0877-0065 at Exhibit H), at 3, 34 (JA332, 363).[23] Rather than broad statements about potential strategies for reducing GHG emissions, to develop the

[23] Also, Environmental Petitioners and State Intervenors point to two EPA publications as proof that EPA had adequate information on GHG emissions. Enviro. Br. 38 n.16; State Br. 14. Both of these publications post-date the Final NSPS and thus should not be considered as part of the record before the Agency.

US EPA ARCHIVE DOCUMENT

NSPS, EPA needs to know *specifically* how new cement plants have employed these strategies, to what extent they have achieved defined GHG emission reductions, at what particular costs, and with what adverse impacts. Such information was, and remains, lacking in the record before the Agency.

Third, EPA resolved that "[t]his is not the end of the matter," stating that although it deferred proposing a standard, "the Agency is working towards a proposal for GHG standards from Portland cement facilities" and "will be sending out information requests to fill these information gaps." 75 Fed. Reg. at 54,996-97 (JA1124-25). In Sierra Club v. EPA, the Court found that EPA's "temporary rejection of regulations" under the CAA was reasonable because, at the time, EPA did not know what "technological fixes" industry would use to comply with other recent regulations, or the benefits and costs of further controls. 325 F.3d 374, 380 (D.C. Cir. 2003). Therefore, EPA was reasonable in deferring longer-term standards until it could more appropriately assess achievability on a longer term basis. Id. Similarly, the Court in Bluewater Network v. EPA upheld EPA's decision not to base its CAA emission standards on the most advanced control technologies "without complete information and study," recognizing that to do so could "potentially handicap[] their future (and greater) success." 372 F.3d 404, 411-12 (D.C. Cir. 2004). The Bluewater court also found it relevant that EPA had

US EPA ARCHIVE DOCUMENT

committed to incorporating the new controls into stricter emissions standards in a later rulemaking. Id. at 412.

Just like in Sierra Club and Bluewater Network, EPA in this case made a reasoned determination that, because of specific information gaps regarding controls for GHGs in the cement industry, it is best to defer proposing the NSPS for GHGs. Such a determination can hardly be arbitrary or capricious.

B. EPA Could Not Promulgate A Standard For GHGs Because It Did Not Propose A Standard For GHGs.

A fundamental tenet of administrative law is that an agency may not promulgate a final rule before first providing the public with adequate notice and an opportunity to comment. Pursuant to Section 307 of the CAA, an agency's "notice of proposed rulemaking" must be published in the Federal Register and include, inter alia, "a statement of its basis and purpose and shall specify the period available for public comment . . . . ." 42 U.S.C. § 7607(d)(3). A final rule that does not abide by the strictures of the CAA's notice-and-comment requirements may be unlawful. See, e.g., West Virginia v. EPA, 362 F.3d 861, 868-69 (D.C. Cir. 2004).

EPA—fully cognizant of the requirements of Section 307 of the Act—did not include a standard of performance for GHGs in the Final NSPS. In the proposed rulemaking, EPA unequivocally stated that it was "not at this time proposing performance standards for greenhouse gases (GHG) from cement kilns."

US EPA ARCHIVE DOCUMENT

73 Fed. Reg. at 34,084 (JA548). Neither did EPA provide the public with notice of any data, analysis, or other information on which such a standard could have been based. As EPA explained, "[p]romulgating such a standard without providing opportunity to comment on it would not be a logical outgrowth of the proposal and would, accordingly, violate the norms of notice and comment rulemaking." 75 Fed. Reg. at 54,996 (JA1124).

Environmental Petitioners seemingly concede this, fully "accept[ing] that EPA could not issue final [GHG] standards without proposing them." Enviro. Br. 34. At the same time, they argue that EPA's action is arbitrary and capricious because EPA could have proposed standards before or in conjunction with the Final NSPS. See Enviro. Br. 20-21, 34; see also State Br. 13 ("EPA cannot continue to avoid setting legally required standards of performance by never proposing them in the first place."). But the thrust of their argument appears to be one of unreasonable delay, proclaiming that EPA should have proposed GHG standards for the portland cement plants sooner. See Enviro. Br. 34; id. at 4, 39 (characterizing EPA's "delay" as "extraordinary"). If so, Environmental Petitioners brought their claim in the wrong court since, under the CAA, district courts have exclusive jurisdiction to decide claims for agency action unreasonably

US EPA ARCHIVE DOCUMENT

delayed.[24] See 42 U.S.C. § 7604(a); Am. Elec. Power Co., Inc. v. Connecticut, -- S. Ct. -- , No. 10-174, 2011 WL 2437011, *9-10 (S. Ct. June 20, 2011).

"EPA no doubt has significant latitude as to the manner, timing, content, and coordination of its regulations with those of other agencies." Massachusetts v. EPA, 549 U.S. at 533. EPA thus need only provide a reasonable explanation for its decision that is supported by the record, which it did here. Motor Vehicle Mfrs. Ass'n, 463 U.S. at 42-43. The fact that EPA could have taken a different course is beside the point, as there will always be another option that EPA could have chosen. Having no record upon which to propose a standard for GHGs, and having proffered no standard for GHGs in the proposed rulemaking, EPA appropriately did not include limits for GHGs in the Final NSPS.

C. The Court Should Not Establish A Schedule If The Matter Is Remanded To EPA.

Neither Environmental Petitioners nor State Intervenors have provided a sufficient ground for the Court to remand the Final NSPS back to the Agency. If the Court decides otherwise, however, the Court should reject Environmental Petitioners' request to establish a schedule for EPA to act. The Supreme Court has long held that "the function of the reviewing court ends when an error of law is laid bare." Fed. Power Comm'n v. Idaho Power Co., 344 U.S. 17, 20 (1952). At

[24] The same is true to the extent that Environmental Petitioners assert that EPA failed to perform a mandatory duty with respect to GHG regulation. See 42 U.S.C. § 7604(a).

US EPA ARCHIVE DOCUMENT

that point, the Court's inquiry is complete, and "the matter once more goes to the [agency] for reconsideration." Id.; see PPG Indus., Inc. v. United States, 52 F.3d 363, 365 (D.C. Cir. 1995) (when court determines that agency has made an error of law, "the court's inquiry is at an end: the case must be remanded to the agency for further action consistent with the corrected legal standards."); FCC v. Pottsville Broad. Co., 309 U.S. 134, 145 (1940) ("The Court of Appeals laid bare [the] error, and, in compelling obedience to its correction, exhausted the only power which Congress gave it.").

Although the Court is vested with equity powers and may set deadlines on remand in exceptional cases, it does not ordinarily do so and should not do so here. In Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519 (1978), the Supreme Court observed that, "[a]t least in the absence of substantial justification for doing otherwise, a reviewing court may not . . . dictat[e] to the agency the methods, procedures, and time dimension of the needed inquiry. . . ." Id. at 544-45 (quoting Fed. Power Comm'n v. Transcon. Gas Pipe Line Corp., 423 U.S. 326, 333 (1976)); cf. Nat'l Coal. Against the Misuse of Pesticides v. Thomas, 809 F.2d 875, 884 (D.C. Cir. 1987) ("Under these unusual circumstances, we remand the case

US EPA ARCHIVE DOCUMENT

with specific instructions for the agency to address the issues discussed in this opinion . . . within thirty days from the date hereof[.]").[25]

Environmental Petitioners have not established any substantial justification to support the exceptional relief they seek. Instead, Environmental Petitioners simply assert that their requested remedy is justified because the cement standards that should have been revised back in 1993 were not revised until 2010, and because EPA has not announced a definitive schedule for proposing standards for GHGs. Enviro. Br. 39-43. These facts are immaterial. Neither Environmental Petitioners nor the Court has any basis for making a reasoned judgment on how long EPA would require to complete a rulemaking on such a complex issue. See Massachusetts v. EPA, 549 U.S. at 527 ("[A]n agency has broad discretion to choose how best to marshal its limited resources and personnel to carry out its delegated responsibilities."). Neither have Environmental Petitioners suggested that EPA would inappropriately delay a response to a remand order from this Court absent a schedule. Further, despite the implications of Environmental Petitioners' arguments, EPA has not been twiddling its thumbs on the issue of GHG emissions

[25] Environmental Petitioners cite Environmental Defense Fund v. EPA, 852 F.2d 1316 (D.C. Cir. 1988), as support that this Court has established deadlines for EPA when it has failed to indicate when it will act. Enviro. Br. 42. In that case, the impetus for the Court's order setting a schedule was that EPA had completely withdrawn the proposed regulation at issue and had violated a prior court order based on EPA's own proposed schedule. Envtl. Def. Fund, 852 F.2d at 1330-31. No such exceptional circumstances are present here.

US EPA ARCHIVE DOCUMENT

under the CAA. Last year, EPA implemented three separate CAA regulations governing GHG emissions. See 75 Fed. Reg. at 54,996 (JA1124); Am. Elec. Power, 2011 WL 2437011, at *4-5 (describing various GHGs efforts EPA has undertaken since Massachusetts v. EPA). Also, as State Intervenors point out, EPA has recently agreed to propose CAA standards for GHG emissions from electric utility steam generating units and petroleum refineries. State Br. 15. All of this suggests that EPA is presently focused on this issue and can initiate rulemaking without a court-ordered timetable. Finally, the citizens' suit provision of the CAA provides a remedy if Environmental Petitioners should later conclude (and a district court agrees) that EPA is unreasonably delaying further action. See 42 U.S.C. § 7604(a)(2); Am. Elec. Power, 2011 WL 2437011, at *9-10. Therefore, the request that this Court impose a schedule for action in the event it remands this matter to the Agency should be denied.

Because EPA's treatment of GHGs in the Final NSPS was reasonable, the Court should reject Environmental Petitioners' arguments, as well as State Intervenors', and deny their petition for review.

US EPA ARCHIVE DOCUMENT

CONCLUSION

For all of the above reasons, the petitions for review should be denied.

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE WITH WORD LIMITS

Pursuant to Federal Rule of Appellate Procedure 37(a)(7)(C) and the Court's April 18, 2011, Order establishing the word limits for the briefs filed in this case, I certify that the foregoing Brief for Respondent EPA contains 15,795 words, exclusive of front matter and certificates, as counted by the "word count" feature of my Microsoft Office Word software.

/s/ T. Monique Peoples
T. Monique Peoples

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CERTIFICATE OF SERVICE

I hereby certify that all counsel of record who have consented to electronic service are being served with a copy of the foregoing Final Brief for Respondent EPA and Statutory and Regulatory Addendum via the Court's CM/ECF system on this 19th day of August, 2011.

/s/ T. Monique Peoples
T. Monique Peoples

US EPA ARCHIVE DOCUMENT

US EPA ARCHIVE DOCUMENT

STATUTORY AND REGULATORY

ADDENDUM

TABLE OF CONTENTS

STATUTE

42 U.S.C. § 7604 ..... ADD-1

CODE OF FEDERAL REGULATIONS

40 C.F.R. § 60.14 ..... ADD-4

US EPA ARCHIVE DOCUMENT

95–95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95–95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95–95 [this chapter], see section 406(b) of Pub. L. 95–95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

§ 7604. Citizen suits

(a) Authority to bring civil action; jurisdiction

Except as provided in subsection (b) of this section, any person may commence a civil action on his own behalf—

(1) against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the Eleventh Amendment to the Constitution) who is alleged to have violated (if there is evidence that the alleged violation has been repeated) or to be in violation of (A) an emission standard or limitation under this chapter or (B) an order issued by the Administrator or a State with respect to such a standard or limitation,

(2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator, or

(3) against any person who proposes to construct or constructs any new or modified major emitting facility without a permit required under part C of subchapter I of this chapter (relating to significant deterioration of air quality) or part D of subchapter I of this chapter (relating to nonattainment) or who is alleged to have violated (if there is evidence that the alleged violation has been repeated) or to be in violation of any condition of such permit.

The district courts shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce such an emission standard or limitation, or such an order, or to order the Administrator to perform such act or duty, as the case may be, and to apply any appropriate civil penalties (except for actions under paragraph (2)). The district courts of the United States shall have jurisdiction to compel (consistent with paragraph (2) of this subsection) agency action unreasonably delayed, except that an action to compel agency action referred to in section 7607(b) of this title which is unreasonably delayed may only be filed in a United States District Court within the circuit in which such action would be reviewable under section 7607(b) of this title. In any such action for unreasonable delay, notice to the entities referred to in subsection (b)(1)(A) of this section shall be provided 180 days before commencing such action.

(b) Notice

No action may be commenced—

(1) under subsection (a)(1) of this section—

(A) prior to 60 days after the plaintiff has given notice of the violation (i) to the Administrator, (ii) to the State in which the violation occurs, and (iii) to any alleged violator of the standard, limitation, or order, or

(B) if the Administrator or State has commenced and is diligently prosecuting a civil action in a court of the United States or a State to require compliance with the standard, limitation, or order, but in any such action in a court of the United States any person may intervene as a matter of right.[1]

(2) under subsection (a)(2) of this section prior to 60 days after the plaintiff has given notice of such action to the Administrator,

except that such action may be brought immediately after such notification in the case of an action under this section respecting a violation of section 7412(i)(3)(A) or (f)(4) of this title or an order issued by the Administrator pursuant to section 7413(a) of this title. Notice under this subsection shall be given in such manner as the Administrator shall prescribe by regulation.

(c) Venue; intervention by Administrator; service of complaint; consent judgment

(1) Any action respecting a violation by a stationary source of an emission standard or limitation or an order respecting such standard or limitation may be brought only in the judicial district in which such source is located.

(2) In any action under this section, the Administrator, if not a party, may intervene as a matter of right at any time in the proceeding. A judgment in an action under this section to which the United States is not a party shall not, however, have any binding effect upon the United States.

(3) Whenever any action is brought under this section the plaintiff shall serve a copy of the complaint on the Attorney General of the United States and on the Administrator. No consent judgment shall be entered in an action brought under this section in which the United States is not a party prior to 45 days following the receipt of a copy of the proposed consent judgment by the Attorney General and the Administrator during which time the Government may submit its comments on the proposed consent judgment to the court and parties or may intervene as a matter of right.

(d) Award of costs; security

The court, in issuing any final order in any action brought pursuant to subsection (a) of this section, may award costs of litigation (including reasonable attorney and expert witness fees) to any party, whenever the court determines such award is appropriate. The court may, if a temporary restraining order or preliminary injunction is sought, require the filing of a bond or equivalent security in accordance with the Federal Rules of Civil Procedure.

(e) Nonrestriction of other rights

Nothing in this section shall restrict any right which any person (or class of persons) may have

[1] So in original. The period probably should be ", or".

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US EPA ARCHIVE DOCUMENT

under any statute or common law to seek enforcement of any emission standard or limitation or to seek any other relief (including relief against the Administrator or a State agency). Nothing in this section or in any other law of the United States shall be construed to prohibit, exclude, or restrict any State, local, or interstate authority from—

(1) bringing any enforcement action or obtaining any judicial remedy or sanction in any State or local court, or

(2) bringing any administrative enforcement action or obtaining any administrative remedy or sanction in any State or local administrative agency, department or instrumentality,

against the United States, any department, agency, or instrumentality thereof, or any officer, agent, or employee thereof under State or local law respecting control and abatement of air pollution. For provisions requiring compliance by the United States, departments, agencies, instrumentalities, officers, agents, and employees in the same manner as nongovernmental entities, see section 7418 of this title.

(f) "Emission standard or limitation under this chapter" defined

For purposes of this section, the term "emission standard or limitation under this chapter" means—

(1) a schedule or timetable of compliance, emission limitation, standard of performance or emission standard,

(2) a control or prohibition respecting a motor vehicle fuel or fuel additive, or[2]

(3) any condition or requirement of a permit under part C of subchapter I of this chapter (relating to significant deterioration of air quality) or part D of subchapter I of this chapter (relating to nonattainment),,[3] section 7419 of this title (relating to primary nonferrous smelter orders), any condition or requirement under an applicable implementation plan relating to transportation control measures, air quality maintenance plans, vehicle inspection and maintenance programs or vapor recovery requirements, section 7545(e) and (f) of this title (relating to fuels and fuel additives), section 7491 of this title (relating to visibility protection), any condition or requirement under subchapter VI of this chapter (relating to ozone protection), or any requirement under section 7411 or 7412 of this title (without regard to whether such requirement is expressed as an emission standard or otherwise);[4] or

(4) any other standard, limitation, or schedule established under any permit issued pursuant to subchapter V of this chapter or under any applicable State implementation plan approved by the Administrator, any permit term or condition, and any requirement to obtain a permit as a condition of operations.[5]

which is in effect under this chapter (including a requirement applicable by reason of section 7418 of this title) or under an applicable implementation plan.

(g) Penalty fund

(1) Penalties received under subsection (a) of this section shall be deposited in a special fund in the United States Treasury for licensing and other services. Amounts in such fund are authorized to be appropriated and shall remain available until expended, for use by the Administrator to finance air compliance and enforcement activities. The Administrator shall annually report to the Congress about the sums deposited into the fund, the sources thereof, and the actual and proposed uses thereof.

(2) Notwithstanding paragraph (1) the court in any action under this subsection[6] to apply civil penalties shall have discretion to order that such civil penalties, in lieu of being deposited in the fund referred to in paragraph (1), be used in beneficial mitigation projects which are consistent with this chapter and enhance the public health or the environment. The court shall obtain the view of the Administrator in exercising such discretion and selecting any such projects. The amount of any such payment in any such action shall not exceed $100,000.

(July 14, 1955, ch. 360, title III, § 304, as added Pub. L. 91–604, § 12(a), Dec. 31, 1970, 84 Stat. 1706; amended Pub. L. 95–95, title III, § 303(a)–(c), Aug. 7, 1977, 91 Stat. 771, 772; Pub. L. 95–190, § 14(a) (77), (78), Nov. 16, 1977, 91 Stat. 1404; Pub. L. 101–549, title III, § 302(f), title VII, § 707(a)–(g), Nov. 15, 1990, 104 Stat. 2574, 2682, 2683.)

REFERENCES IN TEXT

The Federal Rules of Civil Procedure, referred to in subsec. (d), are set out in the Appendix to Title 28, Judiciary and Judicial Procedure.

CODIFICATION

Section was formerly classified to section 1857h–2 of this title.

PRIOR PROVISIONS

A prior section 304 of act July 14, 1955, was renumbered section 311 by Pub. L. 91–604 and is classified to section 7611 of this title.

AMENDMENTS

1990—Subsec. (a). Pub. L. 101–549, § 707(a), (f), in closing provisions, inserted before period at end ", and to apply any appropriate civil penalties (except for actions under paragraph (2))" and inserted sentences at end giving courts jurisdiction to compel agency action unreasonably delayed and requiring 180 days notice prior to commencement of action.

Subsec. (a)(1), (3). Pub. L. 101–549, § 707(g), inserted "to have violated (if there is evidence that the alleged violation has been repeated) or" before "to be in violation".

Subsec. (b). Pub. L. 101–549, § 302(f), substituted "section 7412(i)(3)(A) or (f)(4)" for "section 7412(c)(1)(B)" in closing provisions.

Subsec. (c)(2). Pub. L. 101–549, § 707(c), amended par. (2) generally. Prior to amendment, par. (2) read as follows: "In such action under this section, the Administrator, if not a party, may intervene as a matter of right."

Subsec. (c)(3). Pub. L. 101–549, § 707(d), added subsec. (c)(3).

Subsec. (f)(3). Pub. L. 101–549, § 707(e), struck out "any condition or requirement of section 7413(d) of this title

[2] So in original. The word "or" probably should not appear.

[3] So in original.

[4] So in original. The semicolon probably should be a comma.

[5] So in original. The period probably should be a comma.

[6] So in original. Probably should be "this section".

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US EPA ARCHIVE DOCUMENT

(relating to certain enforcement orders)" before ", section 7419 of this title", substituted "subchapter VI of this chapter" for "part B of subchapter I of this chapter", and substituted "; or" for period at end.

Subsec. (f)(4). Pub. L. 101–549, § 707(e), which directed that par. (4) be added at end of subsec. (f), was executed by adding par. (4) after par. (3), to reflect the probable intent of Congress.

Subsec. (g). Pub. L. 101–549, § 707(b), added subsec. (g).

1977—Subsec. (a)(3). Pub. L. 95–190, § 14(a)(77), inserted "or modified" after "new".

Pub. L. 95–95, § 303(a), added subsec. (a)(3).

Subsec. (e). Pub. L. 95–95, § 303(c), inserted provisions which prohibited any construction of this section or any other law of the United States which would prohibit, exclude, or restrict any State, local, or interstate authority from bringing any enforcement action or obtaining any judicial remedy or sanction in any State or local court against the United States or bringing any administrative enforcement action or obtaining any administrative remedy or sanction against the United States in any State or local administrative agency, department, or instrumentality under State or local law.

Subsec. (f)(3). Pub. L. 95–190, § 14(a)(78), inserted ", or" after "(relating to ozone protection)", substituted "any condition or requirement under an" for "requirements under an", and struck out "or" before "section 7491".

Pub. L. 95–95, § 303(b), added par. (3).

EFFECTIVE DATE OF 1990 AMENDMENT

Section 707(g) of Pub. L. 101–549 provided that: "The amendment made by this subsection [amending this section] shall take effect with respect to actions brought after the date 2 years after the enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990]."

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95–95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95–95, set out as a note under section 7401 of this title.

TERMINATION OF REPORTING REQUIREMENTS

For termination, effective May 15, 2000, of reporting provisions in subsec. (g)(1) of this section, see section 3003 of Pub. L. 104–66, as amended, set out as a note under section 1113 of Title 31, Money and Finance, and the 6th item on page 165 of House Document No. 103–7.

PENDING ACTIONS AND PROCEEDINGS

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub. L. 95–95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub. L. 95–95, see section 406(a) of Pub. L. 95–95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95–95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95–95 [this chapter], see section 406(b) of Pub. L. 95–95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

§ 7605. Representation in litigation

(a) Attorney General; attorneys appointed by Administrator

The Administrator shall request the Attorney General to appear and represent him in any civil action instituted under this chapter to which the Administrator is a party. Unless the Attorney General notifies the Administrator that he will appear in such action, within a reasonable time, attorneys appointed by the Administrator shall appear and represent him.

(b) Memorandum of understanding regarding legal representation

In the event the Attorney General agrees to appear and represent the Administrator in any such action, such representation shall be conducted in accordance with, and shall include participation by, attorneys appointed by the Administrator to the extent authorized by, the memorandum of understanding between the Department of Justice and the Environmental Protection Agency, dated June 13, 1977, respecting representation of the agency by the department in civil litigation.

(July 14, 1955, ch. 360, title III, § 305, as added Pub. L. 91–604, § 12(a), Dec. 31, 1970, 84 Stat. 1707; amended Pub. L. 95–95, title III, § 304(a), Aug. 7, 1977, 91 Stat. 772.)

CODIFICATION

Section was formerly classified to section 1857h–3 of this title.

PRIOR PROVISIONS

A prior section 305 of act July 14, 1955, as added Nov. 21, 1967, Pub. L. 90–148, § 2, 81 Stat. 505, was renumbered section 312 by Pub. L. 91–604 and is classified to section 7612 of this title.

Another prior section 305 of act July 14, 1955, ch. 360, title III, formerly § 12, as added Dec. 17, 1963, Pub. L. 88–206, § 1, 77 Stat. 401, was renumbered section 305 by Pub. L. 89–272, renumbered section 308 by Pub. L. 90–148, and renumbered section 315 by Pub. L. 91–604, and is classified to section 7615 of this title.

AMENDMENTS

1977—Pub. L. 95–95 designated existing provisions as subsec. (a) and added subsec. (b).

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95–95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95–95, set out as a note under section 7401 of this title.

PENDING ACTIONS AND PROCEEDINGS

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub. L. 95–95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub. L. 95–95, see section 406(a) of Pub. L. 95–95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or

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Effective:[See Text Amendments]

Code of Federal Regulations Currentness
Title 40. Protection of Environment
Chapter I. Environmental Protection Agency (Refs & Annos)
Subchapter C. Air Programs
Part 60. Standards of Performance for New Stationary Sources (Refs & Annos)
Subpart A. General Provisions
§ 60.14 Modification.

(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors," EPA Publication No. AP–42, or other emission factors determined by the Administrator to be superior to AP–42 emission factors, in cases where utilization of emission factors demonstrates that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in Appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

(e) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be

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routine for a source category, subject to the provisions of paragraph (c) of this section and § 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by § 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.

(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.

(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(j)(1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.

(2) This exemption shall not apply to any new unit that:

(i) Is designated as a replacement for an existing unit;

(ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limita-

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tion compliance date under section 405 of the Clean Air Act; and

(iii) Is located at a different site than the existing unit.

(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A temporary clean coal control technology demonstration project, for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

[40 FR 58419, Dec. 16, 1975, amended at 43 FR 34347, Aug. 3, 1978; 45 FR 5617, Jan. 23, 1980; 57 FR 32339, July 21, 1992; 65 FR 61750, Oct. 17, 2000]

SOURCE: 36 FR 24877, Dec. 23, 1971; 50 FR 36834, Sept. 9, 1985; 52 FR 37874, Oct. 9, 1987; 53 FR 2675, Jan. 29, 1988; 57 FR 32338, July 21, 1992; 58 FR 40591, July 29, 1993; 60 FR 65384, Dec. 19, 1995; 62 FR 8328, Feb. 24, 1997; 62 FR 48379, Sept. 15, 1997; 64 FR 7463, Feb. 12, 1999; 65 FR 78275, Dec. 14, 2000; 72 FR 59204, Oct. 19, 2007, unless otherwise noted.

AUTHORITY: 42 U.S.C. 7401 et seq.

40 C. F. R. § 60.14, 40 CFR § 60.14

Current through July 7, 2011; 76 FR 39794

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