ORAL ARGUMENT NOT YET SCHEDULED

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

No. 12-1100 (and consolidated cases)

WHITE STALLION ENERGY CENTER, LLC,
Petitioner,
v.
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent.

Petition for Review of Final Administrative Action of the
United States Environmental Protection Agency

PROOF OPENING BRIEF OF ENVIRONMENTAL PETITIONERS

James S. Pew
Neil Gormley
Earthjustice
1625 Massachusetts Ave., NW
Suite 702
Washington, DC 20036-2212
(202) 667-4500
jpew@earthjustice.org
ngormley@earthjustie.org
Counsel for Sierra Club

Sanjay Narayan
Sierra Club Environmental Law Program
85 Second Street, 2nd Floor
San Francisco, CA, 94105
(415) 977-5769
Sanjay.narayan@sierraclub.org
Counsel for Sierra Club

Ann Brewster Weeks
Darin Schroeder
Clean Air Task Force
18 Tremont St., Suite 530
Boston, MA 02139
(617) 624-0234
aweeks@catf.us
dschroeder@catf.us
Counsel for Conservation Law Foundation

Eric Schaeffer
Environmental Integrity Project
1 Thomas Circle, Suite 900
Washington, DC 20005
(202) 296-8800
eschaeffer@eip.org
Counsel for Chesapeake Climate Action Network and Environmental Integrity Project

Dated: October 23, 2012

ENVIRONMENTAL PETITIONERS' CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

In accordance with Circuit Rules 27(a)(4) and 28(a)(1), the Chesapeake Climate Action Network, Conservation Law Foundation, Environmental Integrity Project, and Sierra Club (collectively, "Environmental Petitioners") hereby certify as follows:

(A) Parties and Amici:

Petitioners:

12-1100	White Stallion Energy Center, LLC
12-1101	National Mining Association
12-1102	National Black Chamber of Commerce, Institute for Liberty
12-1147	Utility Air Regulatory Group
12-1170	Eco Power Solutions (USA) Corporation
12-1172	Midwest Ozone Group
12-1173	American Public Power Association
12-1174	Julander Energy Company
12-1175	Peabody Energy Corporation
12-1176	Desert Power Electric Cooperative
12-1177	Sunflower Electric Power Corporation

12-1178	Tri-State Generation and Transmission Association, Inc.
12-1180	Tenaska Trailblazer Partners, LLC
12-1181	ARIPPA
12-1182	West Virginia Chamber of Commerce, Inc., Georgia Association of Manufacturers, Inc., Indiana Chamber of Commerce, Inc., Indiana Coal Council, Inc., Kentucky Chamber of Commerce, Inc., North Carolina Chamber, Ohio Chamber of Commerce, Pennsylvania Coal Association, South Carolina Chamber of Commerce, The Virginia Chamber of Commerce, The Virginia Coal Association, Inc., West Virginia Coal Association, Inc., and Wisconsin Industrial Energy Group, Inc.
12-1183	United Mine Workers of America
12-1184	Power4Georgians, LLC
12-1185	State of Texas, Texas Commission on Environmental Quality, Texas Public Utility Commission, and Railroad Commission of Texas
12-1186	Kansas City Board of Public Utilities, Unified Government of Wyandotte County, Kansas City, Kansas,
12-1187	Oak Grove Management Company, LLC
12-1188	Gulf Coast Lignite Coalition
12-1189	Puerto Rico Electric Power Authority

12-1190	State of Arkansas, *ex rel.* Dustin McDaniel, Attorney General
12-1191	Chase Power Development, LLC
12-1192	FirstEnergy Generation Corp.
12-1193	Edgecombe Genco, LLC and Spruance Genco, LLC
12-1194	Chesapeake Climate Action Network, Conservation Law Foundation, Environmental Integrity Project, and Sierra Club
12-1195	Wolverine Power Supply Cooperative, Inc.
12-1196	States of Michigan, Alabama, Alaska, Arizona, Florida, Idaho, Indiana, Kansas, Mississippi, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, Commonwealth of Pennsylvania, South Carolina, Utah, Commonwealth of Virginia, West Virginia, and Wyoming, and Terry E. Branstad, Governor of the State of Iowa on behalf of the People of Iowa, and Jack Conway, Attorney General of Kentucky

Respondents:

United States Environmental Protection Agency

Intervenors:

American Academy of Pediatrics
American Lung Association

American Nurses Association
American Public Health Association
Calpine Corporation
Chase Power Development, LLC
Chesapeake Bay Foundation
Citizens for Pennsylvania's Future
City of Baltimore in the State of Maryland
City of Chicago in the State of Illinois
City of New York
Clean Air Council
Commonwealth of Massachusetts
Conservation Law Foundation
County of Erie in the State of New York
District of Columbia
Eco Power Solutions (USA) Corporation
Environment America
Environmental Defense Fund
Exelon Corporation
Gulf Coast Lignite Coalition
Institute for Liberty
Izaak Walton League of America
The Lignite Energy Council
NAACP
National Black Chamber of Commerce
National Grid Generation LLC
National Mining Association
National Resources Council of Maine
Natural Resources Defense Council
Oak Grove Management Company LLC
Ohio Environmental Council
Peabody Energy Corporation
Physicians for Social Responsibility
Public Service Enterprise Group, Inc.
Sierra Club
State of California
State of Connecticut
State of Delaware
State of Illinois
State of Iowa
State of Maine

State of Maryland
State of Minnesota
State of New Hampshire
State of New Mexico
State of New York
State of North Carolina
State of Oregon
State of Rhode Island
State of Vermont
Sunflower Electric Power Corporation
Utility Air Regulatory Group
Waterkeeper Alliance

Movant-Intervenors

Oak Grove Management Company, LLC
Utility Air Regulatory Group

Amici:

Chamber of Commerce of the United States of America

Institute for Policy Integrity at New York University School of Law

Circuit Rule 26.1 Disclosures for Proposed Intervenor:

See Environmental Petitioners' Rule 26.1 Disclosure Statement.

(B) Ruling Under Review

The present cases seek review of the final rule promulgated by EPA titled "National Emission Standards for Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units," published at 77 Fed.

Reg. 9304 (Feb. 16, 2012) ("Mercury and Air Toxics Standards" or "MATS Rule").

(C) Related Cases

Petitioners are aware of two related cases pending before this court. First, the Court severed White Stallion Energy Center, LLC v. EPA (dealing with certain issues related to EPA's air toxics standards applicable to newly constructed electricity generating units), from this Case No. 12-1100 and assigned it new Case No. 12-1272, by Order dated June 28, 2012 (Doc. No. 1381112) assigning it new. Case No. 12-1272. Second, the Court severed claims related to the Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units, into a new case UARG v. EPA, Case No. 12-1166, by Order dated August 24, 2012 (Doc. No. 1391295).

PETITIONERS' RULE 26.1 DISCLOSURE STATEMENT

Pursuant to Fed. R. App. P. 26.1 and D.C. Circuit Rule 26.1, Petitioners make the following disclosures.

Conservation Law Foundation. Conservation Law Foundation is a not-for-profit corporation organized under the laws of the Commonwealth of Massachusetts that uses law, science, policy, and the business market to find pragmatic, innovative solutions to New England's toughest environmental problems. Conservation Law Foundation has no parent corporations, and no publicly held company has a 10% or greater ownership interest in Conservation Law Foundation.

Chesapeake Climate Action Network. Chesapeake Climate Action Network is a nonprofit corporation organized and existing under the laws of the State of Maryland founded to transition its region towards clean energy solutions to climate change, specifically in Maryland, Virginia, and Washington, D.C. Chesapeake Climate Action Network has no parent corporations, and no publicly held company has a 10% or greater ownership interest in Chesapeake Climate Action Network.

Environmental Integrity Project. Environmental Integrity Project is a national nonprofit corporation organized and existing under the laws of the District of Columbia that advocates for more effective enforcement of environmental laws. Environmental Integrity Project has no parent corporations and no publicly held

company has a 10% or greater ownership interest in Environmental Integrity Project.

Sierra Club. Sierra Club is a national nonprofit corporation organized and existing under the laws of the State of California that is dedicated to the protection and enjoyment of the environment. Sierra Club has no parent corporations and no publicly held company has a 10% or greater ownership interest in Sierra Club.

TABLE OF CONTENTS

TABLE OF AUTHORITIES iii

GLOSSARY OF ACRONYMS AND ABBREVIATIONS vi

JURISDICTIONAL STATEMENT 1

STATUTES AND REGULATIONS 1

ISSUES FOR REVIEW 1

BACKGROUND 2

I. The Utility Mercury and Air Toxics Standards 2

A. Numerical Rates, Averaging Periods, and Stringency 3

B. EPA's Floor Analysis 6

C. The Averaging Alternative 8

D. The Rule's Monitoring Provisions for Non-Mercury Metallic Toxics 11

SUMMARY OF ARGUMENT 12

STANDING 14

ARGUMENT 15

I. EPA's Averaging Alternative is Unlawful 15

A. The Averaging Alternative Violates §112(d)(3) 15

1. The Averaging Alternative Relaxes the Stringency of Limits That EPA Set At the Statutory Floor 15

2. EPA Has Not Demonstrated That the Averaging Alternative Comports with §112's Floor Requirements 17

B. The Averaging Alternative Violates §112(d)(2)'s "Beyond-the-Floor" Requirements 21

II. EPA's Monitoring Alternatives for Non-Mercury Metals Are Unlawful 22

A. The Parametric Monitoring Alternative Fails to Provide Reasonable Assurance of Compliance 22

B. Stack Testing Conducted Quarterly or Every Three Years Fails to Provide Reasonable Assurance of Compliance 25

CONCLUSION 26

CERTIFICATE REGARDING WORD LIMIT 29

CERTIFICATE OF SERVICE 30

STATUTORY AND REGULATORY ADDENDUM

DECLARATIONS

TABLE OF AUTHORITIES

CASES **PAGE(S)**

Atchison, T. & S.F. Ry. Co. v. Wichita Bd. of Trade,
412 U.S. 800 (1973).....22

* *Cement Kiln Recycling Coalition v. EPA*,
255 F.3d 855 (D.C. Cir. 2001).....17

Clean Air Implementation Project v. EPA,
150 F.3d 1200 (1998).....24

Davis County Solid Waste Mgmt. v. EPA,
108 F.3d 1454 (D.C. Cir. 1997).....27

Environmental Defense Fund v. Administrator, EPA,
898 F.2d 183 (D.C. Cir. 1990).....27

Jicarilla Apache Nation v. U.S. DOI,
613 F.3d 1112 (D.C. Cir. 2010).....22

K Mart Corp. v. Cartier, Inc.,
486 U.S. 281 (1988).....27

Mossville Envtl. Action Now v. E.P.A.,
370 F.3d 1232 (D.C. Cir. 2004).....17

* *Nat'l Lime v. EPA*,
233 F.3d 625 (D.C. Cir. 2000).....15

North Carolina v. FERC,
730 F.2d 790 (D.C. Cir. 1984).....26

Northeast Maryland Waste Disposal Authority v. EPA,
358 F.3d 936 (D.C. Cir. 2004).....17

Portland Cement Ass'n v. Ruckelshaus,
486 F.2d 375 (D.C. Cir. 1973).....24

* Authorities upon which we chiefly rely are marked with an asterisk.

* *Sierra Club v. EPA*,
353 F.3d 976 (D.C. Cir. 2004) 11, 23

STATUTES

* 42 U.S.C. § 7412 4

42 U.S.C. §7412(d)(2) 2, 13, 21

* 42 U.S.C. §7412(d)(3)(A) 1, 6, 15, 17

* 42 U.S.C. §7414(a) 24

42 U.S.C. §7414(a)(3) 11

42 U.S.C. §7607(b)(1) 1

* 42 U.S.C. § 7661c(b) 11, 23, 26

CODE OF FEDERAL REGULATIONS

40 C.F.R. §60.42Da(c)(2) 3

40 C.F.R. §64.2(b)(1)(i) 24

40 C.F.R. §70.6(a)(3)(B) 24

FEDERAL REGISTER

59 Fed. Reg. 19,402 (April 22, 1994) 9, 21, 22

60 Fed. Reg. 16,090 (March 29, 1995) 10

60 Fed. Reg. 30,801 (June 12, 1995) 10

60 Fed. Reg. 43,244 (Aug. 18, 1995) 10

61 Fed. Reg. 17,358 (April 19, 1996) 17

62 Fed. Reg. 67,788 (Dec. 30, 1997) 16

64 Fed. Reg. 33,550 (June 23, 1999) 9

64 Fed. Reg. 52,828 (Sept. 30, 1999) 3, 18

66 Fed. Reg. 51,098 (Oct. 5, 2001).....10

73 Fed. Reg. 40,230 (July 14, 2008).....10

73 Fed. Reg. 58,481 (Oct. 7, 2008).....10

75 Fed. Reg. 32,006 (June 4, 2010).....9

76 Fed. Reg. 24,976 (May 3, 2011).....2, 7, 10, 13, 20, 21

76 Fed. Reg. 80,598 (Dec. 23, 2011).....9

77 Fed. Reg. 9,304 (Feb. 16, 2012) 1-13, 15, 16, 18-20, 22-26

77 Fed. Reg. 39,943 (July 6, 2012).....5, 16

OTHER AUTHORITIES

Robert S. Witte & John S. Witte, *Statistics: Ninth Edition* (2010) 165-66.....4

Stephen Jay Gould, *Full House* 98-110 (1996) 4

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

Acronym	English
CAM	Compliance Assurance Monitoring
CEMS	Continuous emissions monitoring
EGU	Electric Generating Unit
EPA	Environmental Protection Agency
HON Rule	59 Fed. Reg. 19,402 (April 22, 1994)
MACT	Maximum Achievable Control Technology
MATS Rule	*National Emission Standards for Hazardous Air Pollutants from Coal and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units*, 77 Fed. Reg. 9,304 (Feb. 16, 2012)
NESHAP	National Emission Standards for Hazardous Air Pollutants
PM	Filterable particulate matter
RTC	Response to Comments
UPL	Upper Prediction Limit formula

JURISDICTION

Petitioners seek review of a final action of the Environmental Protection Agency (EPA): *National Emission Standards for Hazardous Air Pollutants from Coal and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units*, 77 Fed. Reg. 9,304 (Feb. 16, 2012) (the "MATS Rule," or "Rule"), JA____. This Court has jurisdiction under 42 U.S.C. §7607(b)(1). Petitioners timely filed their petition for review on April 16, 2011. *Id.*

STATUTES AND REGULATIONS

Pertinent statutes and regulations appear in an addendum to this brief.

ISSUES FOR REVIEW

1. EPA set all but one of the Rule's existing unit air toxics emission standards at levels the Agency found to reflect the "average emission limitation achieved by the best performing 12 percent of the existing sources." 42 U.S.C. §7412(d)(3)(A). The Rule also permits adjacent, existing units to comply with the standards on a combined, average basis. Those multi-unit averaging provisions render the standards less stringent. Did EPA thereby violate 42 U.S.C. §7412(d)(3)(A), which requires that EPA's standards must "not be less stringent" than the "average emission limitation achieved by the best-performing 12 percent

of the existing sources"? Alternatively, was EPA's failure to impose a "discount factor" and other restrictions to units complying on a combined, average basis arbitrary under the "maximum achievable control technology" standards of 42 U.S.C. §7412(d)(2)?

2. Did EPA act arbitrarily or unlawfully by failing to require monitoring sufficient to determine compliance with emission standards established for non-mercury metals?

BACKGROUND

I. The Utility Mercury and Air Toxics Standards

The Rule sets air toxics standards governing coal- and oil-fired "electric steam generating units": large boilers which burn coal or oil to produce electricity for sale. 77 Fed.Reg. at 9,485 (40 C.F.R. §63.10042), JA____; 76 Fed.Reg. 24,976 (May 3, 2011) (proposal), JA____. Most power plants include several such units, and many include units built in different years. EPA-HQ-OAR-2009-0234-3044 (identifying plants, units, and on-line dates), JA____. These units often deploy different controls, and may be subject to stricter emission limits under other provisions of the Act. Units built between 2005 and 2011, for example, must meet a particulate matter standard twice as protective as the standard in the Rule. *Compare* 40 C.F.R. §60.42Da(c)(2) *with* 77 Fed.Reg. at 9,490 (40 C.F.R. §UUUUU Table 2).

EPA set standards for (1) mercury; (2) acid gases (satisfied through a limit on hydrogen chloride emissions, or a limit on sulfur dioxide emissions); and (3) non-mercury metallic toxics (satisfied through compliance with a filterable particulate matter ("PM") limit, or a series of limits on individual metallic pollutants). 77 Fed.Reg. at 9,367-69, JA____-__. EPA established distinct new and existing source standards within each subcategory for each pollutant. *Id.*

A. Numerical Rates, Averaging Periods, and Stringency

The Rule's standards governing existing sources are emission rates. 77 Fed. Reg. at 9,490-93, JA____-__. The standards' stringency – like that of any emissions rate – depends on two basic elements: the numerical emissions rate and averaging period. 64 Fed. Reg. 52,828, 52,930-31 (Sept. 30, 1999) ("[T]he stringency of a standard is a function of both the numerical value of the standard and the averaging period"), JA____-__.

The standards' numerical emissions rates define the amount of pollution that may be emitted when an electric generating unit consumes (or produces) energy – akin to a baseball player's batting average (hits produced when a player appears at the plate). As a batting average can be calculated over a single game, a month, or a full season, a numerical emission rate can be calculated over varying periods of

time – hours or days of boiler operations ("boiler operating" hours or days).[1] That period of time is the "averaging period."

Stringency depends upon averaging period because over longer averaging periods, numerical rates – like batting averages – tend (or regress) towards a central, mean value. See Robert S. Witte & John S. Witte, *Statistics: Ninth Edition* (2010) 165-66 (noting "tendency of scores, especially high scores, to shrink towards the mean"), JA ____-__. Since 1940, tens of thousands of players have achieved a perfect batting average of 1.000 over the three or four at-bats which occur during a single game.[2] Over that time, only one player has achieved a batting average over 0.400 over the five hundred or more at bats that occur over an entire season. *See* Stephen Jay Gould, *Full House* 98-110 (1996), JA____-__.

The same principle governs numerical emissions rates (although 42 U.S.C. § 7412 demands low emissions rates, while batters attempt high batting averages). A spike in pollution may result in a very high short-term emission rate over a few hours, or a few days – just as a flurry of hits creates a high batting average in a single game. But over sixty or ninety days, such short-term spikes are offset by

[1] A "boiler operating day" is a calendar day in which the unit operates under normal conditions. 77 Fed. Reg. 9,484 (40 C.F.R. § 63.10042).
[2] http://www.baseball-reference.com/play-index/game_finder.cgi?year=0&n1=&id=&type=b (last visited October 23, 2012) (searchable compilation of baseball statistics, including both hits and at-bats).

other values closer to (or below) the mean, in the same manner that a single game is offset as a season progresses.

As a result, the maximum numerical emissions rate for generating units declines as the averaging period increases. As EPA explained in the Rule:

> [L]onger-term averages allow particularly high (or low) measurements to be averaged with many more measurements closer to the mean. This results in the highest averages from a longer-term averaging period (e.g., 90 days) being lower than the highest averages in a shorter term averaging period (e.g., 30 days).

77 Fed.Reg. at 9,385, JA____.

Put differently, a standard with a longer averaging period permits short-term spikes in pollution that are prohibited by a shorter averaging period, even with the same numerical emission rate. A short-term averaging period can require a plant to meet the numerical emissions rate *all* the time, while a longer averaging period allows the plant to meet that rate only *some* of the time.[3] Consequently, at any given numerical rate, extending the averaging period's length decreases the stringency of the limit – as EPA has consistently recognized. *Id. See, e.g.*, 77 Fed.Reg. 39,943, 39,946 (July 6, 2012) ("[A] limit expressed as an annual average is inherently less stringent that the same limit expressed as a 30-day average."),

[3] EPA concluded that emissions rates for the toxics regulated by the Rule are highly variable, confirming the existence of emissions spikes for this industry. EPA's Response to Public Comments, Volume 1 (December 2011) at 499, Docket Id. No. EPA-HQ-OAR-2009-0234-20126 ("RTC"), JA____.

JA____, ____. Conversely, maintaining the stringency of a standard while increasing the averaging period requires a decrease in numerical emissions rate.

B. EPA's Floor Analysis

EPA began its standard-setting process for existing sources by determining the "floor" (the least stringent standards permitted by the statute): the "average emission limitation achieved by the best performing 12 percent of existing sources in the category," 42 U.S.C. §7412(d)(3)(A). 77 Fed.Reg. at 9,307, JA____. EPA collected data primarily comprised of stack tests, which measured pollution during three test-runs of each unit, each lasting a handful of hours. From that data, EPA selected the units it believed representative of the best-performing twelve percent of existing units, and sought to determine the numerical emissions rate and averaging period reflecting their maximum, variable emissions. Maximum Achievable Control Technology (MACT) Floor Analysis for Coal- and Oil-fired Electric Utility Steam Generating Units for Final Rule (Dec. 16, 2011) at 3-4, Docket ID No. EPA-HQ-OAR-2009-0234-20132) ("Floor Memo") JA____-__.

To determine the numerical emissions rate achieved by those best-performing units, EPA used "a statistical formula," the "upper prediction limit" ("UPL") which, according to EPA, determined the maximum rates any of those units would likely reach. 76 Fed.Reg. 25,041 ("[I]f [EPA] were to randomly select a future…average of 3 runs…we can be 99 percent confident that the reported

level will fall at or below" the value generated by the UPL), JA____. *See* Floor Memo at 4-5, JA____-__.

EPA selected 30 boiler operating days as the averaging period, finding that period to be the longest necessary to "account for . . . process and fuel variability," RTC Vol. 1 at 564, JA____-__. The Agency determined that the resulting standards – the unit-specific emissions rates resulting from these calculations, with a thirty boiler operating day averaging period – represented the floor, or the "minimum stringency" permitted by the Act, 77 Fed.Reg. 9,307. RTC Vol. 1 at 459-60, JA __-__. *See also* 76 Fed.Reg. at 25,045, JA ____.

EPA set almost all the Rule's standards at those floor levels. The agency imposed stricter limits (using §112(d)(2)'s "beyond the floor" process) for only one pollutant, in one subcategory (the mercury standard, for the subcategory of coal-fired units burning lower energy coals). Beyond the Maximum Achievable Control Technology (MACT) Floor Analysis for Coal- and Oil-fired Electric Utility Steam Generating EGUs (March 14, 2011) at 1, Docket ID No. EPA-HQ-OAR-2009-0234-2924 ("Beyond the floor Memo"), JA____; 77 Fed.Reg. at 9,307, JA____.

C. **The Averaging Alternative**

The Rule provides a "compliance alternative" allowing adjacent existing units under common ownership to combine their emissions rates into a single,

multi-unit average. Plant owners may "averag[e] the emissions from an individual affected [unit] that is emitting above the ... limits with other affected [units] at the same facility that are emitting below the … limits." *Id.* at 9,385, JA____; *see id.* at 9,473-75 (40 C.F.R. §63.10009(a)-(j)) (the "Averaging Alternative"), JA____-__.

The Averaging Alternative thereby allows units to calculate their emissions rate over a much longer averaging period than the 30 boiler operating day averaging period at which, according to EPA, the Rule's numerical emissions rates are the floor. For example, if three adjacent units cannot all comply individually with the Rule's numerical emissions rates over the prescribed 30 boiler operating day averaging period, the Averaging Alternative allows the owner to combine 30 boiler operating days from *each* unit into a single, combined average calculated over a total of 90 boiler operating days. 77 Fed.Reg. at 9,385, JA____.

That increase in averaging period renders the limit less stringent, as adding 60 days to the averaging period for a single unit would. By analogy, an entire baseball team's batting average includes many more at bats than a single player's batting average; as a result, the highest *team-wide* average over any game, or season, will be lower than the highest *single player's* batting average. Similarly, the additional boiler operating days included under the Averaging Alternative make the standard less stringent than the unit-specific floor. The Alternative masks high unit-specific emissions that would otherwise be prohibited; rather than meet

the specified numerical emissions rate all (or most of) the time, units need only meet them some of the time.

EPA has previously acknowledged that multi-unit averaging renders emission standards less stringent. Where the Agency has allowed such averaging, it has simultaneously provided a "discount factor" that lowers the numerical emissions rate to compensate for the increase in averaging period. For example, in the Hazardous Organic rulemaking ("HON Rule") (which EPA cites in support of the Averaging Alternative, 77 Fed.Reg. at 9,386, JA____) EPA concluded that, to "ensure at least the same air quality benefit as point by point compliance," multi-source averaging requires, *inter alia*, "a discount factor" requiring plants complying on a combined, average basis to meet a lower numerical emission rate. 59 Fed.Reg. 19,402, 19,425 (April 22, 1994), JA____, __. *See also* 76 Fed.Reg. 80,598 (Dec. 23, 2011), JA____, & 75 Fed.Reg. 32,006, 32,035 (June 4, 2010) (discount factor "ensure[s] averaging will be at least as stringent as the MACT floor limits"), JA____, ____; 64 Fed.Reg. 33,550, 33,622 (June 23, 1999) (imposing discount factor), JA____, ____; 63 Fed. 50,280, 50286 (Sept. 21, 1998) (same)JA____, ____; 60 Fed.Reg. 43,244, 43,254 (Aug. 18, 1995) (same), JA____, ____; 60 Fed.Reg. 16,090, 16,104 (March 29, 1995) (same), JA____, ____; 60 Fed.Reg. 30,801, 30,812 (June 12, 1995) (same), JA____, ____. *See also* 73 Fed.Reg. 58,481, 58,484 (Oct. 7, 2008) (permitting states to "consider the use

of averaging" *only* "in conjunction with more stringent limits"), JA____, ____; 73 Fed.Reg. 40,230, 40,233 (July 14, 2008) (same), JA____, ____; 66 Fed.Reg. 51,098, 51,124 (Oct. 5, 2001) (Agency would need "to set more stringent emissions standards" to allow averaging while still "achiev[ing] the 'greatest degree of emission reduction'" identified), JA____, ____.

The Agency provided no corresponding "discount" in the MATS Rule. The resulting relaxation in the stringency of the Rule's emission standards poses real risks to the health and well-being of those near power plants. The Alternative relieves plant owners of the obligation of meeting the specified numerical rates during *every* 30 days those units operate; it thereby allows periods of high emissions that would be otherwise prohibited. *See* 77 Fed.Reg. at 9,385 (noting that alternative allows units to exceed the short-term emissions limit), JA____. EPA has found that such short-term spikes in air toxics from oil- and coal-fired generating units pose substantial threats to human health. *See, e.g.*, 76 Fed.Reg. at 25,004 (describing harm resulting from "short-term" exposure to acid gases), JA____.

In addition to permitting higher rates of pollution, the Averaging Alternative will, as a practical matter, allow power plants to emit a greater quantity of toxic air pollution. Many older, highly-polluting units are located next to newer units subject to limits that are significantly more stringent than those prescribed by the

MATS Rule. EPA-HQ-OAR-2009-0234-3044 (spreadsheet identifying plants, units, and on-line dates), JA___. Allowing older and dirtier units to emit at rates higher than those in the Rule – by averaging their emissions with those from newer and cleaner units subject to lower emission standards than the Rule's, for example – increases the overall amount of pollution that existing plants can emit. *See supra* at 2-3 (citing 40 C.F.R. § 60.42Da(c)(2)).

D. The Rule's Monitoring Provisions for Non-Mercury Metallic Toxics

For major sources (including the power plants governed by the Rule) EPA "shall" "require enhanced monitoring." 42 U.S.C. §7414(a)(3). EPA must require continuous emissions monitoring ("CEMS") unless alternative methods "provide sufficiently reliable and timely information for determining compliance." *Id.* §7661c(b). EPA's monitoring regime "must 'provide a reasonable assurance of compliance with emissions standards.'" *Sierra Club v. EPA*, 353 F.3d 976, 990-91 (D.C. Cir. 2004) (quoting *NRDC v. EPA*, 194 F.3d 130, 136 (D.C. Cir.1999).

Although EPA found that continuous monitoring of particulate matter emissions was feasible, the Rule does not require it. 77 Fed.Reg. at 9,384, 9,466 (40 C.F.R. §63.10000(c)(1)(iv)), JA____, ____. Instead, the Rule allows sources to elect one of several options, three of which are challenged here.

First, plant owners may measure particulates or metals through quarterly stack tests comprised of three test runs averaging three hours per run. *Id*. at 9,372, 9,384, 9481 (40 C.F.R. § 63.10023(a)), JA____,____, ____. The Rule deems units compliant where the average of the emission rates measured during the stack tests' runs meets the relevant emission limits at each unit (or on a plant-wide basis, if the source qualifies for emissions averaging). *See id.* (40 C.F.R. §63.10023(c)), JA____, ____.

Second, the Rule allows much less frequent testing – once every three years – for any unit that demonstrates during three successive years of stack testing that its emissions are 50 percent or less of the limit. 77 Fed.Reg. at 9,371, 9,384, 9470-72 (40 C.F.R. §§63.10005(h), 63.10006(b)), JA____, ____, ____-__. The Rule (unlike EPA's initial proposal) requires no monitoring of operating limits or other parameters in between the quarterly or once-in-three-year stack tests under these two options. 77 Fed.Reg. at 9,371, 9,384, JA____, ____.

Third, plant owners installing a "Continuous Parametric Monitoring System" are allowed to conduct a stack test once a year, rather than quarterly. In between the annual test, the source must try to meet an operating limit derived from a raw data signal (e.g., milliamps) that corresponds to the highest single hour of emissions measured during the most recent nine hour test. *Id.* at 9466, 9481 (40 C.F.R. §§63.10000(c)(1)(iv), 63.10023), JA____, ____. EPA expects this

monitoring option to be adopted by most sources. 77 Fed.Reg. at 9,304, 9,370, JA____, ____.

SUMMARY OF ARGUMENT

All petitioners seek vacatur of the Averaging Alternative, which is severable from the rest of the Rule. The Environmental Integrity Project and Chesapeake Climate Action Network seek remand of the monitoring provisions for non-mercury metals.

EPA defined unit-specific emission standards – specific numerical emissions rates over a 30 boiler operating day averaging period – as the "MACT floor," representing the "minimum stringency" permitted by 42 U.S.C. §7412(d)(3)(A). 76 Fed.Reg. at 24,981, 25,044-45, JA____, ____-__. The Averaging Alternative unlawfully relaxes the standards' stringency below that statutory minimum, by extending their averaging period. Furthermore, EPA provided no rational basis for its refusal to provide a "discount factor," either to maintain the stringency of its standards as required by §112(d)(3), or under §112(d)(2)'s "beyond-the-floor" requirements, 42 U.S.C. §7412(d)(2).

The Rule's monitoring provisions unlawfully fail to provide "sufficiently reliable and timely information for determining compliance," thereby allowing facilities to emit non-mercury metals at significantly higher levels than the statute allows. The Parametric Monitoring Alternative measures compliance with a

parameter that corresponds to emissions *above* the emissions limit. And stack tests conducted as infrequently as once every three years cannot ensure compliance with a 30-day standard.

STANDING

Petitioners have a central interest in environmental and public health, including the dangers posed by the air toxics regulated by the Rule. *See e.g.*, Addendum (Wall ¶¶ 4, Harwood ¶ 5; Tidwell ¶ 5; Schaeffer ¶¶ 3-4). Petitioners' members live, work, and recreate in communities where existing multi-unit coal- and oil-fired power plants are located. *Id.* (Wall ¶¶ 7-11, Eno ¶¶ 3, 15); Pannone ¶ 10; Daniels ¶ 1). Those members are directly exposed to the air toxics emitted by such plants, including arsenic, cadmium, lead, mercury and acid gases, and to the accompanying risk of adverse health effects of such exposures, including, *inter alia*, severe respiratory and carcinogenic effects.

The Averaging Alternative permits existing plants to emit acid gases and other air toxics beyond the amounts permitted by the statute, and beyond what would be emitted if unit-by-unit compliance were required. *Id.* (Sahu Decl. ¶¶ 18-21, describing increased pollution affecting petitioners' members; Wall ¶ 18; Eno ¶¶ 12-14). Those harms would be remedied by this Court's vacatur of the Averaging Alternative. *Id.* (Wall ¶ 19; Tidwell ¶ 8).

The Rule's unlawful monitoring provisions also permit more particulate matter and metallic air toxics pollution from coal- and oil-fired power plants than is lawful. *Id.* (Tidwell ¶ 8; Daniels ¶¶ 5-6). Chesapeake Climate Action Network's members are exposed to and harmed by that excess pollution. *Id.* (Daniels ¶¶ 1-3). The requested relief would allow EPA to strengthen the Rule and redress that harm.

ARGUMENT

I. EPA's Averaging Alternative is Unlawful.

A. The Averaging Alternative Violates §112(d)(3).

1. The Averaging Alternative Relaxes the Stringency of Limits That EPA Set At the Statutory Floor.

EPA's floor analysis sought the maximum numerical emission rates of the best performing units. Floor Memo 4-5, JA ____. The Agency concluded that those numerical rates, *measured over a 30-day averaging period*, were "the average emission limitation achieved by the best performing 12 percent of the existing sources," 42 U.S.C. §7412(d)(3)(A), and therefore the "floor," or "minimum stringency" permitted by the Act, *Nat'l Lime v. EPA,* 233 F.3d 625, 629 (D.C. Cir. 2000). 77 Fed. Reg. at 9479-80 (establishing 30 boiler operating day averaging time for limits), JA____-__. *See* RTC Vol. 2 at 31, JA _____ ("an averaging period of 30 boiler operating days…is sufficient to account for normal variability, as well

as other brief, inadvertent occurrences."). The Agency set all of the standards (save one) at that floor.

The statute does not permit EPA to relax its limits below the floor. 42 U.S.C. §7412(d)(3)(A). But the Averaging Alternative does exactly that; it increases the standards' averaging period from 30 boiler operating days to 60 (for two units), 90 (for three), or more. 77 Fed.Reg. at 9,385, JA____. The Alternative thereby reduces the standards' stringency – and violates the statutory floor. *See supra* at 8-11.

The Rule itself confirms that by adding boiler operating days to the standards' averaging period, EPA relaxes their stringency. 77 Fed.Reg. at 9,385 (to comply with §112's floor, a longer-term compliance period would require a lower emissions rate), JA____. *See* Memo re Hg averaging, JA ____. The Agency "illustrated" that relaxation by demonstrating that, as the averaging period increases, units' maximum mercury emission rates decrease. *Id.*, JA ____.[4] *See*

[4] For mercury only, EPA permitted adjacent units not only to combine their emissions, but to use 90 boiler operating days from *each* unit (rather than 30 operating days) to generate that combined average (so that three units would calculate their mercury average over 270 boiler operating days – 90 from each unit). *See* 77 Fed.Reg. at 9,385-86, 40 C.F.R. §63.10009(a)(2), JA____-__. EPA provided a "discounted" mercury limit that applies to units using this averaging period of 90 (rather than 30) boiler operating days per unit. That discount does not, however, address reduction in stringency resulting from the addition of boiler

generally 77 Fed.Reg. at 39,946 (extending the averaging period of a limit, without reducing the numerical emissions rate, results in an "inherently less stringent" limit), JA____; 62 Fed.Reg. 67,788, 67,797 (Dec. 30, 1997) ("At a fixed numerical value, a standard or limit is…less stringent as the averaging period increases…"), JA____, ____; 61 Fed.Reg. 17,358, 17,431 (April 19, 1996) ("Changing the averaging period would necessitate changing the emission standard" to maintain equivalent stringency), JA____, ____. *See also Mossville Envtl. Action Now v. E.P.A.*, 370 F.3d 1232, 1241 (D.C. Cir. 2004) (upholding EPA decision to set more stringent standards than those contained in certain permits, because EPA explained that "a longer averaging time…require[s] a lower average limit"). The Averaging Alternative reduces the stringency of EPA's standards below the emissions limitation identified by EPA as the floor. It is therefore unlawful. 42 U.S.C. §7412(d)(3)(A).

2. EPA Has Not Demonstrated That the Averaging Alternative Comports With §112's Floor Requirements.

EPA bears the burden of "demonstrat[ing] with substantial evidence – not mere assertions" that its standards satisfy §112's floor requirements. *Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855, 866 (D.C. Cir. 2001). *See Northeast*

---

operating days from multiple units; it compensates only for the extension of a single unit's averaging time from 30 to 90 days. 77 Fed. Reg. at 9,386, JA____.

Maryland Waste Disposal Authority v. EPA, 358 F.3d 936, 954-955 (D.C. Cir. 2004). EPA has not even attempted to show that the Averaging Alternative conforms with §112(d)(3).

EPA claims that inter-unit averaging is permitted because "the total quantity of any particular HAP that may be emitted by that portion of a contiguous major source…will not be greater under the averaging mechanism than it could be if each individual EGU in the subcategory complied separately with the applicable standard." 77 Fed.Reg. at 9,385, JA____. But EPA did not set standards limiting the "total quantity" of emissions from a collection of averaged units; it set standards limiting the *rate* of emissions from individual electric generating units. The total quantity of emissions does not define an emissions rate's stringency; as EPA has repeatedly acknowledged, the stringency of a standard set as an emissions rate "is a function of *both* the numerical value of the standard and the averaging period." 64 Fed.Reg. 52,828, 52,930-31 (emphasis added), JA____, ____-__. That the "total quantity" of emissions from combined units may not increase is thus irrelevant to the stringency of standards that control the rate of emissions.[5]

[5] In real-world effect, too, the Averaging Alternative will increase the total quantity of emissions from existing plants. Many units are, as a matter of law, bound by emission limits much lower than the Rule's. By allowing adjacent units to "credit" those lower emissions against their own, the Averaging Alternative permits pollution that would otherwise be illegal. *See supra* at 10-11; *infra* at 21-22.

EPA also contends that it does not need to provide a "discount factor," reducing the standards' numerical emissions rate to compensate for the increase in averaging period resulting from the Averaging Alternative, 77 Fed.Reg. at 9,386, JA____ – even though it has routinely included such a discount in prior rules, to maintain compliance with the statutory floor. *Supra* at 9-10 (citing rules providing discount factors). EPA claims a discount factor was "unwarranted" in this Rule due to "other," unspecified, "emissions averaging criteria," and "the homogeneity of fuels within the rules [sic] subcategories." 77 Fed.Reg. at 9,386, JA____. EPA offers nothing to explain how these elements of its Rule would sustain the stringency of its floor standards – and, in fact, they do not.

The "criteria" associated with the Averaging Alternative do not prevent the relaxed stringency that results from an increased averaging period.[6] Those criteria address unrelated statutory constraints on EPA's authority – such as the prohibition on multi-unit averaging for new units, and the incoherence that would result from combining emissions of different pollutants or governed by different standards. 77 Fed.Reg. at 9,386, JA____.

---

[6] The Rule nominally prohibits: averaging between different types of pollutants; averaging between sources that are not part of the same affected source; averaging between sources that "are not subject to the same [air toxics standard]"; and "averaging between existing sources and new sources." 77 Fed.Reg. at 9,385, JA____.

Contrary to EPA's claim, moreover, existing units in the same subcategories can burn dramatically *non*-homogenous fuels. Under the Rule's definitions, units in the "coal-fired" subcategories can include units that burn up to 89.9 percent biomass, or other non-coal fuel (over 3 years), as well as units burning coal exclusively; the oil-fired subcategory is equally broad. *Id*. at 9,484, 9,486 (40 C.F.R. §63.10042), JA____, ____. And homogeneity in fuels is, at any rate, irrelevant unless it eliminates the variability of units' *emissions* (because it is variability in emissions – the difference between "particularly high" rates and the mean – that makes the averaging period a central component of emission standards' stringency, 77 Fed.Reg. at 9,385, JA____). EPA has concluded that the units within EPA's subcategories have widely varying emissions; according to the Agency the highest emission rates even among the "best performers" are ten times the mean. 76 Fed.Reg. at 25,041, JA____; Floor Memo at B-2 (comparing mean emissions of best-performing twelve percent with UPL), JA____. Given that variation, fuel homogeneity is irrelevant to the Averaging Alternative's effect on stringency.

The agency also asserts (without explanation) that its "UPL analyses [were] developed to take" the decreased stringency resulting from an increased averaging period "into account." RTC Vol. 2 at 363, JA ____. But the UPL analyses contain nothing that would eliminate (or even mitigate) the Averaging Alternative's

additional relaxation of the standards. EPA explicitly concluded that "an averaging period of *30 boiler operating days* …is sufficient to account for normal variability," following application of its UPL formula. RTC Vol. 2 at 31, JA ___ (emphasis added). The UPL, by its terms, predicts the maximum numerical emissions rate only over the three stack tests required at a single unit; had EPA applied it to the larger number of stack tests that occur when multiple units comply on a combined, average basis, the agency's UPL formula would have produced more stringent floors. 76 Fed.Reg. at 25,041-42 (UPL formula "estimate[s] [the] MACT floor level" only "if the best performing sources were able to replicate the compliance tests in our data base" – a three-run test from a single unit), JA____; *see also* RTC Vol. 1 at p.518 (floor calculation assumed that "it will be the average of a 3-run test that will determine compliance"), JA____.

B. The Averaging Alternative Violates §112(d)(2)'s "Beyond-the-Floor" Requirements.

The Averaging Alternative also violates §112(d)(2), which requires the Agency to craft emissions standards reflecting the "maximum" reductions achievable. 42 U.S.C. §7412(d)(2). EPA has previously acknowledged (in the HON Rule) that where it authorizes averaging among units, "the mandate of section 112(d)(2)" demands that "some portion of [the cost savings realized through averaging] should be shared with the environment by requiring sources

using averaging to achieve more emission reductions," through a discount factor. 59 Fed.Reg. at 19,430, JA____; *see also supra* at 9-10.

EPA also concluded, in the HON Rule, that, "controls applied to comply with a state or Federal rule or statute (other than the HON) cannot be used to generate emission averaging credits," 59 Fed.Reg. at 19,433, JA____. Absent that restriction, EPA noted that multi-unit averaging allows a "windfall" that is inconsistent with §112(d)(2), and "more total emissions." *Id.*, JA____ (noting that "credits for controls applied to comply with another rule increase the source's ability to generate [pollution], but do not generate new emission reductions"). The MATS Rule contains no such limitation.

Having acknowledged that §112(d)(2)'s mandate for the "maximum" achievable reduction in toxic pollution applies when it permits multi-source averaging, and having established a prior norm of imposing these restrictions to satisfy that mandate, EPA provides no rational explanation for its failure to impose them here. The Agency never applied the various factors set out in §112(d)(2). *See* 77 Fed.Reg. at 9,385-86, JA____-__. And (for the reasons set forth above), EPA has provided no clear and "reasoned explanation" for its failure to "'adhere to its precedents'" to ensure that the Averaging Alternative complies with §112(d)(2). *Jicarilla Apache Nation v. U.S. DOI*, 613 F.3d 1112, 1119-20 (D.C. Cir. 2010) (citation omitted). *See Atchison v. Wichita Bd. of Trade*, 412 U.S. 800, 808 (1973).

II. EPA's Monitoring Alternatives for Non-Mercury Metals Are Unlawful.

A. The Parametric Monitoring Alternative Fails to Provide Reasonable Assurance of Compliance.

The Parametric Monitoring Alternative allows sources to demonstrate compliance with the non-mercury metal standard through annual stack tests, so long as they do not exceed a raw data "signal" between annual tests. Stack test compliance determinations are based on the *average* of emissions measured during the nine hour test. But because the signal is set to correspond to the *highest* hour of emissions from the most recent annual test, even if emissions during that hour were *above* the limit, 77 Fed.Reg. at 9,481 (40 C.F.R. §63.10023), JA____, the Parametric Monitoring Alternative does not "provide a reasonable assurance of compliance with" the standard, as it must. *Sierra Club*, 353 F.3d at 990-91; 42 U.S.C. § 7661c(b).

For example, PM concentrations during the first eight hours of a nine-hour annual stack test might average 0.025 lbs/MMbtu, while peaking at 0.06 lbs during the ninth hour. In this example, the unit would meet the applicable limit, because the stack test's *average* emission rate would fall below 0.030 lb/MMbtu, the limit for non-mercury metals. But EPA's final Rule would allow the facility to show "compliance" until the next yearly stack test based on a raw data signal corresponding to PM concentrations two times higher than the limit the source is

required to meet. EPA has not explained how adherence to a signal that corresponds to emissions levels *above* the limit assures compliance with the limit, and therefore has not "reasonably articulated the basis" for parametric monitoring. *Cf. Sierra Club*, 353 F.3d at 991.

Also, the emission limits for non-mercury metals are based on a "floor" that EPA established by evaluating average emissions during stack tests that are conducted over several hours, not by analyzing a single hour of test results. *See, e.g.*, Floor Memo, *supra*. EPA's monitoring approach is therefore inconsistent with the method it used to develop the standard, and opens the door to emissions higher than the floor. This Court has remanded particulate matter standards before when test methods used to set the standard conflicted with those used to measure compliance. *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 396-97 (D.C. Cir. 1973); *see also Clean Air Implementation Project v. EPA*, 150 F.3d 1200, 1203 (1998).

EPA suggests that gaps in this monitoring can be filled by the compliance assurance monitoring (CAM) requirements at 40 C.F.R. part 64 and Title V requirements at part 70. 77 Fed.Reg. at 9384. But the CAM rules do not apply to the MATS Rule or to any "emission limits or standards proposed by the Administrator after November 15, 1990, pursuant to section 111 or 112 of the Act." 40 C.F.R. §64.2(b)(1)(i). It is unclear whether the state-administered Title V

rules would apply, as Part 70 kicks in only "[w]here the applicable requirement does not require periodic testing." 40 C.F.R. §70.6(a)(3)(B). EPA does not conclude in the Rule that Title V would be applicable. In any event, 42 U.S.C. §7414(a) directs EPA, not the states, to "require enhanced monitoring" "in the development of any . . . emission standard under section 7412," including the MATS Rule. EPA cannot satisfy this requirement by alluding to monitoring requirements that may or may not be applied by the states in individual permitting decisions.

B. Stack Testing Conducted Quarterly or Every Three Years Fails to Provide Reasonable Assurance of Compliance.

The final Rule eliminates operating limits that EPA included at proposal to assure compliance with emission limits for non-mercury metals between stack tests. 77 Fed.Reg. at 9,371, 9,384, JA____,____. Under the final Rule, sources that show compliance with the non-mercury metals standard through quarterly stack testing (or, in certain cases, testing once every three years) need not take any steps to demonstrate compliance with the 30-day standard in between stack tests. Such infrequent stack testing cannot "provide a reasonable assurance of compliance with emissions standards" given EPA's determination that stack test results are highly variable.

EPA's standards for power plants are premised on a high degree of variability in levels of toxic pollutants emitted by power plants. For example, the mean of the stack test results for particulate matter that EPA used to define the floor was 0.00216 lbs/mmbtu, but EPA set the limit at more than 1000 percent of that mean value in the final Rule after adjusting upwards to accommodate expected variability in the emissions of the best performers. Floor Memo, *supra*, at B-2 (comparing mean emissions of best-performing twelve percent with UPL). EPA has not explained how stack testing separated by intervals far longer than the 30-day averaging period of the standard, and without any control of operating conditions in between tests, provides "sufficiently . . .timely" or "sufficiently reliable" information, 42 U.S.C. §7661c(b), to reasonably assure compliance.

Nor does the procedure for designating "low emitting" sources assure that those sources will comply during the three years that separate their stack tests. Sources qualify as low emitting when their emissions are 50 percent of the limit or less during three successive years of stack testing. But testing at 50 percent of the limit does not provide reasonable assurance of compliance with the limit when variability is expected to increase emissions by more than 1000 percent above the mean, even among the best performers. Floor Memo at B-2, JA __. The source could take advantage of this option even it its own parametric monitoring showed that it had not met the standard in between stack tests.

CONCLUSION

Petitioners respectfully request that the Court vacate the Averaging Alternative. 77 Fed.Reg. 9,473-75 (40 C.F.R. §63.10009(a)-(i)), JA____. *See North Carolina v. FERC*, 730 F.2d 790, 795-96 (D.C. Cir. 1984). The Alternative is entirely severable; there is no substantial doubt that an agency would have adopted the remaining portion on its own, *Davis County Solid Waste Mgmt. v. EPA*, 108 F.3d 1454, 1459 (D.C. Cir. 1997), and severance and vacatur "will not impair the function of the [remaining regulation] as a whole." *K Mart Corp. v. Cartier, Inc.*, 486 U.S. 281, 282 (1988).

Chesapeake Climate Action Network and Environmental Integrity Project further request remand without vacatur of the Rule's enhanced monitoring provisions, to enable EPA to fix the identified problems with those provisions. Because those petitioners' purpose is the "enhanced protection of the environmental values" provided by the Clean Air Act, and because some monitoring requirements are essential to continued implementation of the Rule, those petitioners request that the monitoring provisions should remain in place during the remand. *See Environmental Defense Fund v. EPA*, 898 F.2d 183, 190 (D.C. Cir. 1990).

Dated: October 23, 2012

Respectfully submitted,

/s/James S. Pew
James S. Pew
Neil Gormley
Earthjustice
1625 Massachusetts Ave., NW
Suite 702
Washington D.C. 20036-2212
(202) 667-4500
jpew@earthjustice.org
ngormley@earthjustice.org
Counsel for Sierra Club

/s/Sanjay Narayan(with permission)
Sanjay Narayan
Sierra Club Environmental Law Program
85 Second Street, 2nd Floor
San Francisco, CA, 94105
(415) 977-5769
sanjay.narayan@sierraclub.org
Counsel for Sierra Club

/s/Ann Brewster Weeks(with permission)
Ann Brewster Weeks
Darin Schroeder
Clean Air Task Force
18 Tremont Street, Suite 530
Boston, MA 02108
(617) 624-0234 ext. 156
aweeks@catf.us
dschroeder@catf.us
Counsel for Conservation Law Foundation

/s/Eric Schaeffer(with permission)
Eric Schaeffer
Environmental Integrity Project
1 Thomas Circle, Suite 900
Washington, DC 20005
(202) 296-8800
eschaeffer@environmentalintegrity.org
Counsel for Environmental Integrity Project and Chesapeake Climate Action Network

CERTIFICATE REGARDING WORD LIMITATION

Counsel hereby certifies that, in accordance with Federal Rule of Appellate Procedure 32(a)(7)(C), the foregoing **Proof Opening Brief of Environmental Petitioners** contains 5,961 words, as counted by counsel's word processing system.

DATED: October 23, 2012

/s/ James S. Pew
James S. Pew

CERTIFICATE OF SERVICE

I hereby certify that on this 23rd day of October, 2012 I have served the foregoing **Proof Opening Brief of Environmental Petitioners** on all registered counsel through the Court's electronic filing system (ECF).

/s/James S. Pew
James S. Pew