ORAL ARGUMENT NOT YET SCHEDULED

No. 11-1141 (and consolidated cases)

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

AMERICAN CHEMISTRY COUNCIL

Petitioner,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

On Petition for Review of Final Agency Actions
76 Fed. Reg. 15,554 (Mar. 21, 2011)
78 Fed. Reg. 7,488 (Feb. 1, 2013)

OPENING BRIEF OF INDUSTRY PETITIONERS

Peter H. Wyckoff
Jeffrey A. Knight
PILLSBURY WINTHROP
SHAW PITTMAN LLP
2300 N Street, N.W.
Washington, D.C. 20037
(202) 663-8007
Peter.Wyckoff@pillsburylaw.com
Jeffrey.Knight@pillsburylaw.com

Counsel for American Petroleum Institute

Lisa Marie Jaeger
Sandra Y. Snyder
BRACEWELL & GIULIANI LLP
2000 K Street, N.W., Suite 500
Washington, D.C. 20006-1872
(202) 828-5844
Lisa.Jaeger@bgllp.com
Sandra.Snyder@bgllp.com

Counsel for Council of Industrial Boiler Owners and American Chemistry Council

DATED: August 26, 2014

Listing of counsel continues on the following pages

William L. Wehrum
HUNTON & WILLIAMS LLP
2200 Pennsylvania Avenue, N.W.
Washington, D.C. 20037
(202) 955-1500
wwehrum@hunton.com

Counsel for American Wood Council, American Forest & Paper Association, Corn Refiners Association, Rubber Manufacturers Association and Southeastern Lumber Manufacturers Association

Rachel L. Brand
Sheldon Gilbert
U.S. CHAMBER
LITIGATION CENTER, INC.
1615 H Street, N.W.
Washington, D.C. 20062
(202) 463-5337
rbrand@uschamber.com
sgilbert@uschamber.com

Counsel for Chamber of Commerce of the United States of America

Quentin Riegel
NATIONAL ASSOCIATION OF
MANUFACTURERS
733 10th Street, N.W.
Suite 700
Washington, D.C. 20001
(202) 637-3000
qriegel@nam.org

Counsel for National Association of Manufacturers

Of Counsel:

Leslie A. Hulse
AMERICAN CHEMISTRY COUNCIL
700 2nd Street, N.E.
Washington, D.C. 20002
(202) 249-6131
Leslie_Hulse@americanchemistry.com

Jan Poling
Vice President, General Counsel, &
Corporate Secretary
AMERICAN FOREST & PAPER
ASSOCIATION
1101 K Street, N.W., Suite 700
Washington, D.C. 20005
Jan_Poling@afandpa.org

CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

In accordance with Circuit Rule 27(a)(4) and Circuit Rule 28(a)(1), Industry Petitioners hereby certify as follows:

A. Parties and Amici

Petitioners in these consolidated cases seek review of final actions of the United States Environmental Protection Agency, not action by a federal district court.

1. Petitioners

Sierra Club (11-1182)

American Petroleum Institute (11-1207)

Council of Industrial Boiler Owners (11-1208)

Louisiana Environmental Action Network, and
Sierra Club
Clean Air Council
Partnership for Policy Integrity
Environmental Integrity Project (13-1105)

Council of Industrial Boiler Owners, and
American Chemistry Council
American Wood Council
American Forest & Paper Association
Southeastern Lumber Manufacturers Association
Corn Refiners Association
National Association of Manufacturers
Rubber Manufacturers Association
Chamber of Commerce of the United States of America (13-1107)

2. Respondent

United States Environmental Protection Agency

3. Intervenors

Council of Industrial Boiler Owners and American Chemistry Council are intervenor-respondents in No. 11-1141

Hearth, Patio and Barbecue Association is movant-intervenor in No. 11-1141

Sierra Club, Clean Air Council, and Partnership for Policy Integrity are intervenor-respondents in No. 11-1141

American Petroleum Institute is an intervenor-respondent in No. 11-1141

American Forest & Paper Association, American Wood Council, Chamber of Commerce of the United States, National Mining Association, Rubber Manufacturers Association, Southeastern Lumber Manufacturers Association, Society of Chemical Manufacturers and Affiliates are intervenor-respondents in No. 11-1141

American Gas Association is an intervenor-respondent in No. 11-1141

American Home Furnishings Alliance is an intervenor-respondent in No. 11-1141

American Iron and Steel Institute, American Wood Council, Biomass Power Association, Corn Refiners Association, Energy Recovery Council, National Oilseed Processors Association, Rubber Manufacturers Association are intervenor-respondents in No. 11-1141.

4. Amici

No Amici have filed as of the date of this filing.

B. Rulings Under Review

Petitioners seek review of the final rule titled *National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers*, 76 Fed. Reg. 15,554 (Mar. 21, 2011) and final rule titled *National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers*, 78 Fed. Reg. 7,488 (Feb. 1, 2013).

C. Related Cases

The above-referenced EPA rules have not been subject to review by this Court or by another court previously.

Several cases that raise the same or similar issues are currently pending before this Court, which have not previously been before this or any other court:

1. *United States Sugar Corporation v. EPA*, No. 11-1108 and consolidated cases. The case regards the 2011 final Boiler MACT rule and the 2013 Amendments: 76 Fed. Reg. 15,608 (Mar. 21, 2011) and 78 Fed. Reg. 7,138 (Jan. 31, 2013).

2. *American Forest & Paper Association, Inc., et al. v. EPA*, No. 11-1125 and consolidated cases. The case regards the 2011 final Incinerator rule and the 2013 Amendments: 76 Fed. Reg. 15,704 (Mar. 21, 2011) and 78 Fed. Reg. 9,112 (Feb. 7, 2013).

3. *Solvay USA Inc. v. EPA*, No. 11-1189 and consolidated cases. The case regards the 2011 Nonhazardous Secondary Materials rule and the 2013 Amendments: 76 Fed. Reg. 15, 456 (Mar. 21, 2011) and 78 Fed. Reg. 9,112 (Feb. 7, 2013).

CORPORATE DISCLOSURE STATEMENTS

Industry Petitioners submit the following statements pursuant to Rule 26.1 of the Federal Rules of Appellate Procedure and Circuit Rule 26.1:

American Chemistry Council (ACC): is a not-for-profit trade association that participates on its members' behalf in administrative proceedings and in litigation arising for those proceedings. ACC represents the leading companies engaged in the business of chemistry. ACC has no outstanding shares of debt securities in the hands of the public and has no parent company. No publicly held company has a ten percent (10%) or greater ownership interest in ACC.

American Forest and Paper Association (AF&PA): is the national trade association of the forest products industry, representing pulp, paper, packaging and wood products manufacturers, and forest landowners. Our companies make products essential for everyday life from renewable and recyclable resources that sustain the environment. The forest products industry accounts for approximately 5 percent of the total U.S. manufacturing GDP. Industry companies produce about $175 billion in products annually and employ nearly 900,000 men and women, exceeding employment levels in the automotive, chemicals and plastics industries. The industry meets a payroll of approximately $50 billion annually and is among the top 10 manufacturing sector employers in 47 states. No parent corporation or publicly held company has a ten percent (10%) or greater ownership interest in AF&PA.

American Petroleum Institute (API): is a national trade association representing all aspects of America's oil and natural gas industry. API has over 600 members, from the largest major oil company to the smallest of independents, from all segments of the industry, including producers, refiners, suppliers, pipeline operators and marine transporters, as well as service and supply companies that support all segments of industry. API has no parent company, and no publicly held company has a 10 percent (10%) or greater ownership interest in API.

American Wood Council (AWC): is the voice of North American traditional and engineered wood products, representing over 75% of the industry. From a renewable resource that absorbs and sequesters carbon, the wood products industry makes products that are essential to everyday life and employs over one-third of a million men and women in well-paying jobs. AWC's engineers, technologists, scientists, and building code experts develop state-of-the-art engineering data, technology, and standards on structural wood products for use by design professionals, building officials, and wood products manufacturers to assure the safe and efficient design and use of wood structural components. AWC also provides technical, legal, and

economic information on wood design, green building, and manufacturing environmental regulations advocating for balanced government policies that sustain the wood products industry. No parent corporation and no publicly held company has a ten percent (10%) or greater ownership interest in AWC.

Chamber of Commerce of the United States of America (Chamber): is a non-profit corporation organized and existing under the laws of the District of Columbia. The Chamber is not a publicly held corporation and no corporation or other publicly held entity holds more than ten percent (10%) of its stock. The Chamber is the world's largest federation of business, trade and professional organizations. The Camber represents 300,000 direct members and indirectly represents the interest of more than three million businesses and organizations of every size, in every industry from every region of the country. An important function of the Chamber is to represent the interests of its members in matters before the courts, Congress and the Executive Branch. Many of the Chamber's members are subject to the regulation at issue in this matter.

Corn Refiners Association (CRA): is a non-profit, national trade association headquartered in the District of Columbia. CRA has no parent corporation. CRA serves as the voice of the U.S. corn wet millers industry in the public policy arena. CRA is comprised of 6 member companies with 23 plants located throughout the United States.

Council of Industrial Boiler Owners (CIBO): is a trade association of industrial boiler owners, architect-engineers, related equipment manufacturers, and University affiliates with over 100 members representing 20 major industrial sectors. CIBO has not issued shares to the public, although many of CIBO's individual members have done so.

National Association of Manufacturers (NAM): is the nation's largest industrial trade association, representing small and large manufacturers in every industrial sector in all 50 states. The NAM's mission is to enhance the competitiveness of manufacturers by shaping a legislative and regulatory environment conducive to U.S. economic growth and to increase understanding among policymakers, the media and the general public about the vital role of manufacturing to America's economic future and living standards. The NAM has no parent company, and no publicly held company has a ten percent (10%) or greater ownership interest in the NAM.

Rubber Manufacturers Association (RMA): is a non-profit, national trade association headquartered in the District of Columbia. RMA has no parent corporation, and no publicly held company has a ten percent (10%) or greater

ownership interest in RMA. RMA is the national trade association representing tire manufacturing companies that manufacture tires in the United States. RMA member companies include: Bridgestone Americas, Inc.; Continental Tire the Americans, LLC; Cooper Tire & Rubber Company; The Goodyear Tire & Rubber Company; Michelin North America, Inc.; Pirelli Tire North America; Toyo Tire Holdings of Americas Inc. and Yokohama Tire Corporation. RMA's eight member companies operate 30 tire manufacturing plants, employ thousands of Americans and ship over 90 percent of the original equipment tires and 80 percent of the replacement tires sold in the United States.

Southeastern Lumber Manufacturers Association (SLMA): is a trade association that represents independently-owned sawmills, lumber treaters, and their suppliers in 17 states throughout the Southeast. SLMA's members produce more than 2 billion board feet of solid sawn lumber annually, employ over 12,000 people, and responsibly manage over a million acres of forestland. These sawmills are often the largest job creators in their rural communities, having an economic impact that reaches well beyond people that are in their direct employment. The association serves as the unified voice of its members on state and federal government affairs and offers various other programs including networking events, marketing and management, and operational issues. No parent corporation and no publicly held company has a ten percent (10%) or greater ownership interest in SLMA.

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

CASES

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

STATUTES

REGULATIONS

FEDERAL REGISTER NOTICES

OTHER AUTHORITIES

GLOSSARY OF TERMS

ACC	American Chemistry Council
CAA	Clean Air Act
CIBO	Council of Industrial Boiler Owners
CO	Carbon Monoxide
EPA	United States Environmental Protection Agency
GACT	Generally Available Control Technology
General Provisions	40 C.F.R. 63 Subpart A
HAPs	Hazardous Air Pollutants
Hg	Mercury
MACT	Maximum Achievable Control Technology
MMBtu	One Million British Thermal Units
NESHAP	National Emission Standards for Hazardous Air Pollutants
PM	Particulate Matter

STATUTES AND REGULATIONS

Relevant statutes and regulations are reproduced in the Addendum.

JURISDICTIONAL STATEMENT

This Court has jurisdiction under 42 U.S.C. § 7607(b)(1), CAA § 307(b)(1). Industry Petitioners sought review in this Court of these two final EPA actions pursuant to that provision:

National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers; Final Rule, 76 Fed. Reg. 15,554 (Mar. 21, 2011);

National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers; Final Rule; Notice of Final Action on Reconsideration, 78 Fed. Reg. 7,488 (Feb. 1, 2013).

Petitions for review of each of these rules were filed within the 60-day period prescribed by CAA § 307(b)(1).

STATEMENT OF ISSUES

1. Regarding the energy assessment:

   A. Whether EPA exceeded its authority by requiring sources to perform an energy assessment on portions of the facility are not part of the defined source category; and

B. Whether EPA acted arbitrarily and capriciously by requiring an energy assessment without satisfying the requirements for beyond-the-floor, work practice, and management practice standards.

2. Regarding boiler malfunction events, whether EPA exceeded its authority or acted arbitrarily and capriciously, when it failed to set either:

A. Numeric emission standards that accounted for boiler malfunction events; or

B. Work and management practice standards that apply during boiler malfunction events.

STATEMENT OF THE CASE

The Area Source Rule sets national emission standards for hazardous air pollutants ("NESHAPs") emitted by industrial, commercial, and institutional boilers located at "area sources." 76 Fed. Reg. 15,554 (Mar. 21, 2011) ("2011 Rule") (JA___), as amended by 78 Fed. Reg. 7,488 (Feb. 1, 2013) ("2013 Amendments") (JA___).[1]

[1] References to the "Area Source Rule," "Rule," and "Final Rule" mean the 2011 Area Source Rule as amended by the 2013 Amendments. This rule is one of four interdependent rules proposed in 2010. 75 Fed. Reg. 32,006 (June 4, 2010) (major source boiler rule) (JA___); 75 Fed. Reg. 31,896 (June 4, 2010) (Area Source Rule) (JA___); 75 Fed. Reg. 31,938 (June 4, 2010) (incinerator rule) (JA___); 75 Fed. Reg. 31,844 (June 4, 2010) (solid waste definition rule) (JA___). On March 21, 2011, EPA published its final rules. 76 Fed. Reg. 15,608 (Mar. 21, 2011) (JA___); 76 Fed. Reg. 15,554 (Mar. 21, 2011) (JA___); 76 Fed. Reg. 15,704 (Mar. 21, 2011) (JA___); 76 Fed. Reg. 15,456 (Mar. 21, 2011) (JA___). That same day, EPA announced a reconsideration of certain provisions of the rules. 76 Fed. Reg. 15,266 (Mar. 21, 2011) (JA___). Several parties also petitioned EPA for reconsideration of various issues. *See, e.g.,* CIBO Petition for Reconsideration, EPA-HQ-OAR-2006-0790-2490 (May

An area source is "any stationary source of hazardous air pollutants that is not a major source." CAA § 112(a)(2).[2] By definition, area sources emit lesser amounts of hazardous air pollutants ("HAPs") than major sources, yet they are subject to many of the same requirements as major sources, including emissions reduction requirements.

Boilers[3] subject to the Area Source Rule are numerous and very diverse in size, fuel, complexity and ownership. Often, multiple boilers subject to the Area Source Rule are located at the same site. For example, a large university typically operates institutional boilers to supply electricity and steam energy to meet the demands of buildings and systems on campus. The university campus may also rely on separate smaller boilers to provide targeted services such as heating and cooling research laboratories. University of Minnesota, EPA-HQ-OAR-2006-0790-2292, Comments on Proposed Area Source Rule at 4 (Sept. 22, 2010) (JA___). This co-location of boilers is also very common for industrial sites, which may operate multiple industrial

---

2011) (JA___). On December 23, 2011, EPA proposed revisions to three rules and sought public comment on the revisions. 76 Fed. Reg. 80,598 (Dec. 23, 2011) (JA___); 76 Fed. Reg. 80,532 (Dec. 23, 2011) (JA___); 76 Fed. Reg. 80,452 (Dec. 23, 2011) (JA___). In January and February 2013, EPA published the final major source, area source and incinerator rules. 78 Fed. Reg. 7,138 (Jan. 31, 2013) (JA___); 78 Fed. Reg. 7,488 (Feb. 1, 2013) (JA___); 78 Fed. Reg. 9,112 (Feb. 7, 2013) (JA___).

[2] A "stationary source" is any building, structure, facility, or installation which emits or may emit any air pollutant," excluding nonroad engines. CAA § 112(a)(3) (referencing CAA § 111(a)(3)). A "major source" is a unit that emits at least 10 tons per year of a single HAP or 25 tons per year of any combination of HAPs. CAA § 112(a)(1).

[3] A "boiler" is "an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water." 40 C.F.R. § 63.11237.

boilers in buildings across the facility to provide energy (thermal or electrical) to manufacturing and related production processes. Council of Industrial Boiler Owners ("CIBO"), EPA-HQ-OAR-2006-0790-1783, Comments on Proposed Area Source Rule at 30 (Aug. 20, 2010) (JA___). An area source may also have a single industrial, commercial or institutional boiler that provides steam to a specific end use, such as a hospital complex or commercial complex.

The U.S. Environmental Protection Agency ("EPA" or the "Agency") estimates that the final rule will affect 180,000 existing area source boilers and another 6,800 new boilers over the initial three-year period of the rule. 78 Fed. Reg. at 7,489 (JA___). Of the affected boilers, 600 are subject to numeric emission limits. EPA Fact Sheet: Final Adjustments to the Air Toxics Standards for Industrial, Commercial, and Institutional Boilers at Area Source Facilities (Dec. 20, 2012), *available at* http://www.epa.gov/airquality/combustion/docs/20121221_boilers_area_recon_fs.pdf (JA___). Such boilers are exposed to potential enforcement actions and penalties when they exceed the numeric limits. The Rule also requires boilers to reduce their emissions through work and management practice standards and to meet other requirements, including conducting an energy assessment. Thus, while the emissions of HAPs from an area source are lower than those of a major source, the complexity of the Rule for the owners and operators of area source boilers is not.

The Area Source Rule and the major source boiler rule have significant interrelationships because units in the two source categories share core physical and

operational features.[4] The two issues Industry Petitioners challenge in this case correspond to those same issues raised in the major source case. *See* Opening Brief of Industry Petitioners, *United States Sugar Corp. v. EPA*, No. 11-1108 (D.C. Cir. Aug. 12, 2014), ECF No. 1507310.

A. Statutory Requirements for Setting Area Source Standards

EPA must set emission standards for HAPs for all listed source categories and subcategories. CAA § 112(d)(1). For units at major sources, standard setting is governed by § 112(d)(2) and must reflect the maximum achievable control technology or "MACT." CAA § 112(d)(2). For units at area sources, in lieu of setting § 112(d)(2) MACT standards, EPA "may" set standards "which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants." CAA § 112(d)(5). Standards based on this authority are referred to as generally available control technology, or "GACT"

[4] Linking the boiler rules and incinerator rule is the shared definition of "solid waste." This definition is the subject of another rulemaking and lawsuit. 78 Fed. Reg. 9,112 (Feb. 7, 2013) (JA___); *Solvay USA Inc. v. EPA*, No. 11-1189 (D.C. Cir. 2013). A boiler of any size at any facility that burns "any solid waste material from commercial or industrial establishments" is defined as an incinerator. CAA § 129(g)(1). Thus, depending on how EPA defines "solid waste," an industrial, commercial or institutional boiler—be it located at a major source or an area source—is defined as either a boiler (regulated under § 112 if it burns no waste) or an incinerator (regulated under § 129 if it burns any waste). Thus, in addition to the standards for boilers, some area sources are potentially directly affected by the standards for incinerators.

standards. Thus, EPA must set MACT standards for units at major sources and may set MACT or GACT standards for units at area sources.[5]

If EPA sets a MACT numeric standard, the statute specifies the minimum level of stringency, which is commonly called the "MACT floor." The MACT floor for new sources "shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator." CAA § 112(d)(3). For existing sources, the MACT floor generally shall not be less stringent than "the average emission limitation achieved by the best performing 12 percent of the existing sources . . . ." CAA § 112(d)(3)(A). EPA may set a numeric MACT standard at a level that is more stringent than the MACT floor, but may do so only where warranted based on consideration of defined statutory criteria. CAA § 112(d)(2); *Mossville Envtl. Action Now v. EPA*, 370 F.3d 1232, 1235 (D.C. Cir. 2004). A standard that is more stringent than the MACT floor is commonly called a "beyond-the-floor" limit. *Id.*

The procedure for setting GACT standards under § 112(d)(5) is less prescriptive. *Nat'l Ass'n of Clean Water Agencies v. EPA*, 734 F.3d 1115, 1120 (D.C. Cir. 2013). GACT standards must be based on technology that EPA determines is "generally available" to area sources to control emissions. CAA § 112(d)(5). The legislative history confirms that Congress purposefully defined GACT standards to be

[5] In some instances, EPA must set MACT standards for area sources; EPA's selection of MACT versus GACT standards is not being challenged here.

"less stringent" than MACT standards. S. Rep. No. 228, 101st Cong., 1st Sess. at 150 (1989).

In addition to the choice between MACT or GACT numeric standards for area sources, EPA may also choose to set non-numeric MACT or GACT standards. Non-numeric MACT standards are generally called "work practice" standards and are determined under § 112(h). Non-numeric GACT standards are "management practice" standards and are determined under § 112(d)(5). A typical work practice or management practice standard for a boiler is a requirement to periodically tune up the boiler to maintain good combustion efficiency. *See, e.g.,* 40 C.F.R. § 63.11223(a).

MACT work practice standards are authorized when it is "not feasible to prescribe or enforce an emission standard." CAA § 112(d)(2). The CAA defines infeasibility to include "any situation" where "the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations." CAA § 112(h)(2). In contrast, the CAA does not impose any constraints on EPA's discretion to set GACT management practice standards. CAA § 112(d)(5).

In sum, if EPA sets a MACT standard, it may set a numeric emissions standard, *id.* § 112(d)(2); it may set a work practice standard, *id.* §§ 112(d)(2), 112(h); or it may set a combination of a numeric and work practice standards, *id.* § 112(d)(2)(E). If EPA sets a GACT standard, it may set a numeric standard, a management practice standard, or a combination. *Id.* § 112(d)(5).

B. Specific Elements of the Area Source Rule

The Area Source Rule regulates emissions of three HAPs or their surrogates[6] from seven subcategories of area source boilers: coal, biomass, oil, seasonal boilers, limited-use boilers, small oil-fired boilers (having heat input capacity less than or equal to 5 million British thermal units ("MMBtu") per hour), and some boilers using a continuous oxygen trim system. Table 1 to Subpart JJJJJJ, 40 C.F.R. Part 63; 78 Fed. Reg. at 7,517-18 (JA___). The Rule sets numeric MACT or numeric GACT standards for some pollutants from some boiler subcategories.[7] In setting those numeric standards, EPA did not account for emissions from sources during malfunction events (when the boiler, emissions control equipment, or monitoring equipment is operating unstably), yet the standards apply during malfunction events. 40 C.F.R. § 63.11201; 78 Fed. Reg. at 7,506 (JA___). For other pollutants and subcategories, the Rule sets MACT work practice standards or GACT management practice standards, and creates an "energy assessment requirement" for all existing coal, oil and biomass-fired units with heat input capacity of at least 10 MMBtu/hr. Table 2 to Subpart JJJJJJ, 40 C.F.R. Part 63; 78 Fed. Reg. at 7,518-19 (JA___).

[6] The Rule regulates emissions of Hg, CO and PM (the latter two non-HAP pollutants serve as surrogates for multiple HAPs).

[7] Numeric MACT standards apply to Hg and CO emissions from new and existing large coal-fired boilers; numeric GACT standards apply to PM emissions (as a surrogate for non-Hg urban metal HAP) from new large coal, biomass and oil-fired boilers. 78 Fed. Reg. at 7,488-89 (JA___).

The two elements of the Rule Industry Petitioners challenge are EPA's imposition of an energy assessment requirement and EPA's failure to account for malfunction events when setting standards.

1. Energy assessment requirement

The Area Source Rule requires sources to conduct an "energy assessment." This requirement was first proposed in 2010 (75 Fed. Reg. 31,896, 31,901 (June 4, 2010) (JA___), was adopted in the Final Rule (76 Fed. Reg. at 15,560 (JA___)), and was retained in the 2013 Amendments (78 Fed. Reg. at 7,493 (JA___)). The source category regulated by this Rule is defined to include only *boilers* at area sources. 40 C.F.R. § 63.11194(a). Yet the energy assessment requires sources to inspect and analyze far more than just boilers at an affected facility. The energy assessment applies to virtually any part and characteristic of a facility that has an area source boiler, including:

- the boiler system (which includes components beyond the boiler itself)
- operating characteristics of boiler systems, specifications of energy use systems, operating and maintenance procedures, unusual operating constraints
- major energy use systems consuming energy from affected boilers
- architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage

Affected sources must also identify "major energy conservation measures," and analyze their "energy savings potential." 78 Fed. Reg. at 7,518-19 (JA__); Table 2 to Subpart JJJJJJ, 40 C.F.R. Part 63 (as amended). Finally, affected sources must prepare a "comprehensive report assessing each of these factors and detailing the ways to

improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments." *Id.*

EPA requires the energy assessment for all existing coal, biomass, or oil-fired boilers with a heat input capacity of 10 MMBtu/hour or greater. *Id.* In the proposed rule, which set MACT numeric standards for those sources, EPA justified the assessment as an "additional beyond-the-floor standard" associated with MACT standards. 75 Fed. Reg. at 31,920 (JA___). In the Final Rule, which imposes some MACT and some GACT standards on those same sources, EPA justifies the energy assessment as a MACT beyond-the-floor standard and a GACT management practice standard. 76 Fed. Reg. at 15,567 (JA___).

Once the energy assessment is completed, a facility must submit a signed certification that an assessment was completed that accurately depicts the facility. 40 C.F.R. § 63.11214(c). Facilities also must permanently retain a copy of the energy assessment. *Id.* § 63.11225(c)(2)(iii). The comprehensive energy assessment requires facilities to compile—and potentially make public—information about a facility's operations that reflect business decisions and future planning, such as methods to reduce costs. CIBO, EPA-HQ-OAR-2006-0790-2443, Comments on Proposed Area Source Rule Reconsideration at 20 (Feb. 21, 2012) (JA___).

2. Treatment of malfunction events

Sources must comply with applicable emission standards (numeric or non-numeric) "at all times the affected boiler is operating." 40 C.F.R. § 63.11201(d); 78

Fed. Reg. at 7,506 (JA____). Sources must therefore comply during normal operation, periods of startup and shutdown and any malfunction events. Startup, shutdown and malfunction are defined terms.[8]

Under the General Provisions regulations adopted in 1994,[9] startup, shutdown and malfunction periods were subject to the same regulatory treatment. These three periods were excluded from emission standards, provided that a site-specific plan for startup, shutdown and malfunction events was developed and implemented. 59 Fed. Reg. 12,408 (Mar. 16, 1994) (JA___). In 2008, that provision was vacated by this Court, prompting EPA to revisit how to regulate sources during startup, shutdown and malfunction periods. *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008) ("*General Provisions Decision*").

---

[8] A "startup" is "either the first-ever firing of fuel in a boiler for the purpose of supplying steam or heat for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose." 40 C.F.R. § 63.11237.

A "shutdown" is "the cessation of operation of a boiler for any purpose." *Id.* EPA is reconsidering the definitions of startup and shutdown and these issues have been severed by a per curiam order into *American Chemistry Council v. EPA,* No. 13-1258 (D.C. Cir. Oct. 16, 2013).

A malfunction is "any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions." 40 C.F.R § 63.2.

[9] The General Provisions are standard program requirements that are incorporated by reference (in whole or in part) into most MACT and GACT rules.

In 2010, EPA proposed numeric standards that would apply during all times of boiler operation—normal, startup, shutdown and malfunction. EPA asserted that the numeric standards appropriately reflected boiler emissions data and variability during startup and shutdown, concluding that "startups and shutdowns will not affect the achievability of the standard." 75 Fed. Reg. at 31,901 (JA___). Thus, EPA proposed to apply the numeric standards during those periods. For malfunctions, EPA proposed to apply the same numeric standards, but the record reflects no corresponding analysis of whether malfunctions would affect the achievability of the standard. *Id.* at 31,901-02 (JA____).

In the Final Rule, EPA took a different approach to startup and shutdown periods. As in the proposal, the record reflects EPA's analysis concerning the appropriateness of numeric limits for startup and shutdown. EPA explains that it:

> considered whether performance testing, and therefore, enforcement of numeric emission limits, would be practicable during periods of startup and shutdown. With regards to performance testing, EPA determined that it is not feasible to complete stack testing—in particular, to repeat the multiple required test runs—during periods of startup and shutdown due to physical limitations and the short duration of startup and shutdown periods.

76 Fed. Reg. at 15,560 (JA___). On that basis, EPA developed work practice standards for startup and shutdown periods, concluding that "a separate standard must be developed for these periods." 76 Fed. Reg. at 15,577 (JA___).

For malfunction events, EPA did not change the Final Rule as it did for startup and shutdown. The Final Rule applies the numeric standards to malfunction events,

requiring that boiler emissions during a malfunction event meet the same limits that apply during normal boiler operations. The Rule record shows no consideration—in contrast to startup and shutdown—of whether performance testing and enforcement of numeric limits would be feasible, given the physical limitations of boilers during a malfunction. The Final Rule makes no finding of "infeasibility" for setting MACT numeric standards for malfunctions, which would have led to the establishment of work practice standards in lieu of numeric MACT standards. 76 Fed. Reg. at 15,561 (JA___). Instead, EPA gives up on considering malfunctions in any standard and asserts that it is "impracticable" to consider the wide range of possible malfunction scenarios and too difficult to write a work practice MACT standard. *Id.* EPA uses this same explanation for refusing to set GACT management practice standards. *Id.*

Commenters pointed out that malfunction events present the same if not greater limitations as startup and shutdown,[10] and challenged EPA's failure to address that fact in its analysis. EPA acknowledges that equipment failures and resulting higher emissions can occur even at well-maintained boilers. *Id.* Yet rather than address malfunction events in its standard setting, EPA declares that they are not a "distinct operating mode" and therefore, need not be considered when setting standards. *Id.* The term "distinct operating mode" does not appear in the CAA or in the MACT General Provisions, nor is it defined in this Rule.

[10] EPA has long recognized the "difficulty of determining compliance" during startup, shutdown and malfunction. 58 Fed. Reg. 42,760, 42,777 (Aug. 11, 1993) (JA___).

The Rule provides an affirmative defense to some claims of violations of the standards during malfunctions. 40 C.F.R. § 63.11226. However, this Court vacated a similar affirmative defense provision in another NESHAP rule as violating CAA § 304(a) in *Natural Resources Defense Council v. EPA*, 749 F.3d 1055 (D.C. Cir. 2014). In response to that decision, EPA plans to reconsider the affirmative defense and has moved to sever the affirmative defense issue from this case. Respondent's Motion to Sever, *Am. Chem. Council v. EPA*, No. 11-1141 (D.C. Cir. Aug. 1, 2014), ECF No. 1505796. Although the affirmative defense provided only potential relief from civil penalty claims due to malfunction-related violations, now facilities have not even that limited regulatory relief for unavoidable malfunction events.

The application of numeric standards (developed for normal operations) during malfunctions has real consequences for sources. Continuous compliance with numeric emission limits is exacting. When the numeric standards are set based only on emission reduction levels achieved during normal operations, but are applied to equipment malfunction events, non-compliance with the standards during malfunction events is a likely outcome. ACC, EPA-HQ-OAR-2006-0790-2444, Comments on Proposed Area Source Rule Reconsideration at 10 (Feb. 21, 2012) (JA___).

If the numeric limit does not fully account for the full range of possible emissions, a facility is exposed to claims of federal or state violations brought by enforcement authorities or third parties. *Id.* (JA___). During periods of boiler

instability, if emissions exceed the standards, these events must be reported to the permitting authority as deviations from standards. 40 C.F.R. § 63.11222(b). Deviations may be determined to be violations at the discretion of EPA or the State enforcement authority. EPA, EPA-HQ-OAR-2006-0790-2330, Response to Public Comments on the Proposed Area Source Rule, Vol. 3, at 22 (Mar. 21, 2011) (JA___). Deviations may also give rise to claims of violations brought by third parties. Utility Air Regulatory Group, EPA-HQ-OAR-2006-0790-1957, Comments on Proposed Area Source Rule at 40 (Aug. 23, 2010) (JA___). Sources therefore have no certain path to compliance with the Rule's numeric standards—only to post-facto exposure to claims of violations.

SUMMARY OF ARGUMENT

The Area Source Rule (as amended by the 2013 Amendments) must be vacated in part and remanded in part to address two provisions because EPA lacked authority, and acted arbitrarily and capriciously.

First, EPA exceeded its authority by imposing an energy assessment requirement on portions of the facility that are not part of the defined source category. The source category subject to regulation consists only of "boilers" but the Rule imposes requirements comprehensively across equipment operations and business-related aspects of the facility. EPA also lacked authority to establish the energy assessment as a beyond-the-floor limit without first setting a floor for that limit and EPA arbitrarily and capriciously imposed the energy assessment as a "beyond-the-

floor standard." EPA established the energy assessment as a "work practice" or "management practice" standard without authority and without satisfying the requisite statutory criteria for those standards. The energy assessment requirement must be vacated in its entirety.

Second, EPA failed to follow statutory requirements and set either numeric or work and management practice-based standards that account for boiler malfunction events. EPA issued numeric standards that, contrary to the statute, are not "achievable." EPA failed to issue work practice or management practice standards where called for by the statute. The Court should vacate and remand the numeric standards as applied to malfunction events.

STANDING

Petitioners have standing because their members have suffered an injury-in-fact caused by the Area Source Rule that is redressable by the relief they seek. *See Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992). Petitioners have standing on behalf of their members because (1) at least one member would have standing in its own right; (2) the interests Petitioners "seek[] to protect are germane to [their] purpose[s]"; and (3) participation by an individual member is not necessary. *See Sierra Club v. EPA*, 292 F.3d 895, 898 (D.C. Cir. 2002) (citation omitted). Industry Petitioners represent members who are subject to regulation under the Rule and will suffer concrete, particularized injury as a result. *See, e.g.,* AF&PA, EPA-HQ-OAR-2006-0790-1939, Comments on Proposed Area Source Rule (Aug. 2010) (JA__); CIBO, EPA-HQ-

OAR-2006-0790-2443, Comments on Proposed Area Source Rule Reconsideration (Feb. 21, 2012) (JA__). Industry Petitioners represent members who own and operate boilers subject to the emission standards and other requirements of the Rule. Complying with these requirements imposes significant costs on the members and expose members to fines and penalties for failure to comply with the standards and requirements.

ARGUMENT

I. THE ENERGY ASSESSMENT REQUIREMENT IS BEYOND THE SCOPE OF EPA'S § 112 AUTHORITY AND IS ARBITRARY AND CAPRICIOUS.

EPA exceeded its authority by imposing an energy assessment requirement on portions of the facility that are not part of the defined source category. EPA also lacked authority to set a beyond the floor limit without first determining a floor for that limit and EPA arbitrarily and capriciously imposed the energy assessment as a § 112(d)(2) "beyond-the-floor standard." EPA established the energy assessment as a § 112(h) "work practice" or § 112(d)(5) "management practice" standard without authority and without satisfying the requisite statutory criteria for those standards.

A. EPA Lacks Authority to Impose Requirements That Extend Beyond the Source Category.

CAA § 112(c) expressly requires EPA to establish a "list of all categories and subcategories of major sources and area sources" of HAPs. CAA § 112(c)(1). That list sets the bounds of EPA's standard setting authority: "For the categories and the subcategories the Administrator lists, the Administrator shall establish emission

standards under subsection (d)." CAA § 112(c)(2).[11] EPA must follow the plain language of the Clean Air Act. *Chevron v. NRDC*, 467 U.S. 837, 842-43 (1984) ("If the intent of Congress is clear, that is the end of the matter; for the court as well as the agency, must give effect to the unambiguously expressed intent of Congress."). The CAA does not give EPA any interpretive room to establish requirements for sources outside of a source category or subcategory in the context of setting sources' emission standards for that category or subcategory. Rather, in setting emission standards, EPA may only distinguish "among classes, types, and sizes of sources *within* a category or subcategory." CAA § 112(d)(1) (emphasis added); *see also Sierra Club v. EPA*, 479 F.3d 875, 885 (D.C. Cir. 2007) (Williams, J., concurring) ("the language of subsections 112(d)(2) and (3) pervasively refers to standards for sources in each '*category or subcategory.*'") (emphasis in original).

EPA first listed industrial boilers and commercial and institutional boilers as a major source category in 1992. 57 Fed. Reg. 31,576, 31,591 (July 16, 1992) (JA___). In that listing rule, EPA explained that "exclusive use of the term 'category' will clarify the applicable requirements of section 112." *Id.* at 31,579 (JA___). In the proposed Area Source Rule, EPA defined this category as "industrial boilers and commercial and institutional boilers," noting that the source categories were "included in the area source list published on July 19, 1999." 75 Fed. Reg. at 31,899 (JA___). The category

[11] *See also* CAA § 112(d)(1) (restating that "[t]he administrator shall promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of hazardous air pollutants").

definition did not change in the Final Rule. 76 Fed. Reg. at 15,557 (JA___). The Final Rule "regulates industrial boilers and institutional/commercial boilers that are located at area sources of HAP." *Id.*

EPA further defines "boiler" in the Rule to mean only the device itself. 76 Fed. Reg. at 15,599 (JA___) (codified at 40 C.F.R. § 63.11237). A "boiler" is defined in the Rule as "an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water." *Id.* (JA___). "Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled." *Id.* (JA___). Having thus defined the affected source category, EPA is unambiguously constrained by § 112 to regulate only the equipment that comprises that source category.

The energy assessment requirement is unlawful because it extends far beyond boilers to regulate virtually every piece of equipment at all affected facilities. For example, it covers all "major" energy use systems, including "process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air-conditioning systems; hot water systems; building envelope; and lighting; or other systems that use steam, hot water, process heat, or electricity provided by the affected boiler." 40 C.F.R. § 63.11237. It covers not only equipment, but also the "operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints," and "available architectural and engineering plans,

facility operation and maintenance procedures and logs, and fuel usage…." Table 2 to Subpart JJJJJJ, 40 C.F.R. Part 63. From a practical perspective, this approach simplistically recasts complex business and operational decisions as potential energy-saving opportunities, without considering sophisticated manufacturing processes, employee safety, competitive advantage of products, or upstream or downstream processing activities that may drive those decisions. ACC, EPA-HQ-OAR-2006-0790-2444, Comments on Proposed Area Source Rule Reconsideration at 19 (Feb. 21, 2012) (JA__).

Based on this exhaustive review of the *facility* as a whole, the energy assessment directs sources to produce "[a] list of major energy conservation measures that are within the facility's control" and "[a] list of the energy savings potential." Table 2 to Subpart JJJJJJ, 40 C.F.R. Part 63. Facilities must then prepare a "comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the timeframe for recouping those investments." *Id.* That wide-ranging obligation goes far beyond EPA's § 112 authority. 57 Fed. Reg. at 31,579 (JA___). Once EPA defines a source category it has thereby defined the parameters for the applicable requirements of § 112. EPA may impose requirements regarding only the equipment and operations that belong to that category. The energy assessment requirement is unlawful because it imposes obligations that go well beyond the unambiguous limitation of § 112 authority over HAPs emitted from the boiler source category EPA established.

B. The Energy Assessment Requirement Is Not a Lawful "Beyond-the-Floor" Standard.

The energy assessment requirement also violates the CAA because EPA failed to consider the key statutory prerequisites to establishing a "beyond-the-floor" requirement. Standards issued under § 112(d)(2) must be achievable considering the costs, non-air quality health and environmental impacts and energy requirements of the measure. CAA § 112(d)(2). EPA failed to analyze any of these factors. Therefore, the energy assessment is unlawful.

1. A "Beyond-the-Floor" Energy Assessment Requirement Is Unlawful Because There Is No Underlying "MACT Floor" Determination.

This Court has stated that setting a MACT standard is a two-step process:

> The Agency begins by setting the minimum stringency standards required by section 7412(d)(3) for new and existing sources.…Once the Agency sets statutory floors, it then determines, considering cost and the other factors listed in section 7412(d)(2), whether stricter standards are "achievable." 42 U.S.C. § 7412(d)(2). The Agency calls such stricter requirements "beyond-the-floor" standards.

Nat'l Lime Ass'n v. EPA, 233 F.3d 625, 629 (D.C. Cir. 2000) ("*National Lime II*").

Here, EPA violated these requirements because the Agency failed to determine a MACT floor for the energy assessment requirement. Instead, EPA attempts to press into service the MACT floors it determined in conjunction with establishing the other emissions limitations and work practice and management practice requirements prescribed by the rule. This approach is fatally flawed because the mandatory two-step standard-setting approach necessarily requires each emissions limitation or

standard to be based on its own floor determination. In other words, the energy assessment requirement is unlawful because it is not a product of the mandatory two-step MACT standard-setting process of the CAA.

2. EPA Did Not Adequately Consider the Costs of the Theoretical Beyond-the-Floor Emissions Reductions.

Even if EPA had set a floor for the energy assessment requirement, EPA must consider costs when setting "beyond-the-floor" standards. *See Ass'n of Battery Recyclers, Inc. v. EPA*, 716 F.3d 667, 673 (D.C. Cir. 2013) (the Clean Air Act "expressly *directs* EPA to consider costs when setting beyond-the-floor standards."). Commenters on the proposed rule explained that EPA's "beyond-the-floor" analysis was flawed because EPA was unable to quantify any HAP emissions reductions that might result from the assessment requirement and, therefore, could not determine cost effectiveness. 76 Fed. Reg. at 15,567 (JA___). In response, EPA admits that emissions reductions "cannot be precisely estimated," but asserts that the energy assessment requirement is "directionally sound" and that, "[b]y definition, any emission reduction would be cost effective or else it would not be implemented." *Id.* at 15,568 (JA___).

"Directionally sound" is not good enough. EPA concedes that the assessment requirement would affect facilities subject to the assessment at a total annualized cost of $52 million, with per-facility costs ranging from "$2500 to $55,000…." 75 Fed. Reg. at 31,907, 31,915 (JA___, JA___). At the same time, EPA also concedes that it

cannot quantify the HAP emissions reductions the energy assessment would achieve. Thus, the Rule forces industry to expend millions to achieve no quantifiable HAP emissions reductions. This clearly is not an adequate cost analysis for purposes of imposing the energy assessment requirement. In any event, imposing significant costs with no ascertainable benefit also is patently arbitrary.

EPA's observation that energy efficiency projects will not be implemented unless they are cost effective adds nothing to this equation. As EPA candidly admits, the energy assessment requirement does not compel sources to implement efficiency projects—it simply requires an analysis to be conducted. Thus, even if EPA could determine with certainty that some efficiency projects would be implemented (which it cannot), the resulting HAP emissions reductions would not be attributable to the rule.

3. EPA Failed to Consider the Non-Air Quality Health and Environmental Impacts of the Energy Assessment.

EPA is also obligated to consider "any non-air quality health and environmental impacts" when establishing beyond-the-floor standards. *Cement Kiln Recycling Coal. v. EPA*, 255 F.3d 855, 857 (D.C. Cir. 2001). This Court has remanded MACT rules where "nowhere in the record does [EPA] appear to have taken account of any non-air quality health effects." *Nat'l Lime II*, 233 F.3d at 635. It is arbitrary and capricious to fail entirely "to consider an important aspect of the problem.…" *North Carolina v. EPA*, 531 F.3d 896, 906 (citation and quotation marks omitted),

modified on reh'g, 550 F.3d 1176 (D.C. Cir. 2008). EPA must consider the impacts that "result from the required efforts to *control* the air quality impacts of the underlying manufacturing process." *Sierra Club v. EPA*, 353 F.3d 976, 990 (D.C. Cir. 2004) (emphasis in original).

EPA generally states that "improving energy efficiency reduces negative impacts on the environment." 75 Fed. Reg. at 31,907 (JA___). This conclusory statement is inadequate for two reasons. First, just saying it is so does not make it so—such a general assertion must be backed up. Yet, there is no further justification to be found in the record.

Second, even accepting EPA's assertion at face value, it completely misses the point. EPA is required to consider "non-air quality" impacts in assessing the need for a beyond-the-floor standard. Yet, EPA's only specific claim is that the energy assessment will result in "reduce[d] negative impacts on the environment." *Id.* Any effect that flows from "reduce[d] negative impacts on the environment" is assumed to be an air quality impact, not a non-air quality impact. Thus, EPA's assertion is irrelevant.

4. EPA Failed to Consider the Energy Requirements of the Energy Assessment.

Section 112(d)(2) requires EPA to consider "energy requirements" when evaluating beyond the floor requirements. *Nat'l Lime II*, 233 F.3d at 634. These concerns are particularly germane where EPA is proposing to impose an energy

assessment obligation. Yet EPA does not even mention the phrase "energy requirements" in the Final Rule preamble. This plainly does not pass muster as an assessment of the energy requirements that might be attributable to the energy assessment requirement. Thus, EPA utterly failed to consider this statutorily required factor.

C. The Energy Assessment Is Not a Lawful Work Practice Standard.

EPA appears to characterize the energy assessment as a "work practice" standard, rather than a numeric standard, by placing it in Table 2 in the Rule. *See* Table 2 to Subpart JJJJJJ, 40 C.F.R. Part 63. But nowhere in the record does EPA explain why a work practice is justified here. As a result, the energy assessment as a work practice standard is unlawful.

Section 112 allows EPA to promulgate work practice standards only when "it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard for control of a hazardous air pollutant or pollutants." CAA § 112(h)(1). An emission standard is not feasible when: (1) the relevant HAPs cannot practically or legally be vented "through a conveyance designed and constructed to emit or capture such pollutant[s]"; or (2) "the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations." CAA § 112(h)(2).

Nowhere in the record addressing the energy assessment does EPA explain why the HAPs regulated under this rule cannot practically or legally be vented

through air pollution control devices. Similarly, EPA also fails to explain why it is not technologically or economically practicable to measure the HAPs that EPA asserts will be reduced by virtue of the energy assessment.

Because EPA has failed to show that the energy assessment work practice requirement is justified under the express criteria of CAA § 112(h), it cannot lawfully be defined as a work practice standard.

D. The Energy Assessment Lacks a Legal Foundation as a GACT Standard.

EPA also attempts to find authority in § 112(d)(5) to justify the energy assessment as a GACT standard, but that section—like § 112(d)(2)—provides no basis for the requirement. Congress was clear in what it intended EPA to accomplish in setting GACT standards for area sources: "promulgate standards or requirements…*to reduce emissions of hazardous air pollutants*." CAA § 112(d)(5) (emphasis added). EPA cannot simply re-label the energy assessment as a GACT standard where the energy assessment cannot and will not achieve Congress's goals for § 112(d)(5). The energy assessment does not "reduce emissions of hazardous air pollutants." It requires sources to evaluate their use of energy. EPA acknowledges this shortcoming of its requirement in responses to commenters who asserted that energy efficiency does not necessarily reduce HAP, nor does it necessarily indicate a best performing unit. EPA, EPA-HQ-OAR-2006-0790-2330, Response to Public Comments on the Proposed Area Source Rule, Vol. 2 at 423-24, 478 (Mar. 21, 2011)

(JA___).

This is a critical failing of the energy assessment, which deprives the requirement of all statutory legitimacy. The energy assessment is not mentioned in EPA's MACT and GACT floor analyses prepared for the Area Source Rule. *See generally* ERG, EPA-HQ-OAR-2006-0790-2333, Revised MACT and GACT Floor Analysis for the Industrial, Commercial, and Institutional Boilers National Emission Standards for Hazardous Air Pollutants – Area Source (Feb. 2011) (JA___); ERG, EPA-HQ-OAR-2006-0790-2407, Revised (November 2011) MACT Floor Analysis for the Industrial, Commercial, and Institutional Boilers National Emission Standards for Hazardous Air Pollutants – Area Source (Nov. 2011) (JA___). These memoranda explain the foundation for every MACT and GACT standard in the Rule—with the sole exception of the energy assessment—providing such detail as the number of units and emissions data and narrative descriptions of EPA's reasoning for floor setting, adopting or rejecting a beyond the floor standard and setting work practice or management standards.

The complete proffer of analysis for the energy assessment as GACT for the biomass and oil subcategories comes down to a mention in the Rule's preamble: "In this final rule, the energy assessment requirement is both a beyond-the-floor control for the MACT-based standards for the coal subcategory and a GACT for the biomass and oil subcategory because energy assessments are generally available and have already been performed at numerous facilities." 76 Fed. Reg. at 15,567 (JA___).

EPA provides a bit more explanation in a response to comment: "[s]ince [an] energy assessment has been performed at many facilities, we considered the requirement to conduct an energy assessment as a GACT management practice." EPA, EPA-HQ-OAR-2006-0790-2330, Response to Public Comments on the Proposed Area Source Rule, Vol. 2 at 447 (Mar. 21, 2011) (JA___). These conclusory statements are not a rational basis for EPA's exercise of its § 112 authority. EPA claims that factual data exists regarding energy assessments conducted at many facilities, but EPA has not shown how it used that data to ascertain what constitutes GACT under § 112(d)(5).[12]

II. EPA UNLAWFULLY FAILED TO ACCOUNT FOR MALFUNCTIONS WHEN SETTING THE RULE'S EMISSION STANDARDS.

EPA ignored clear statutory directions in setting the numeric standards and in failing to set work or management practice standards to cover all periods of boiler operation. In ignoring the un-achievability of its standards, EPA also acted arbitrarily and capriciously.

The Rule requires facilities to meet numeric technology-based limits that were developed using data from normal boiler operations (when systems are

[12] EPA also claims authority from § 112(k) for requiring the energy assessment as a GACT management practice standard. EPA, EPA-HQ-OAR-2006-0790-2330, Response to Public Comments on the Proposed Area Source Rule, Vol. 2 at 448 (JA___) ("Also, for area source facilities, EPA has the authority under section 112(k) to set management practices, as GACT, which is the case for area source facilities having a biomass-fired or oil-fired boiler with input capacity of 10 million Btu per hour or greater."). Section 112(k) provides no such authority. Sections 112(d) and 112(h) govern standard setting for area sources and alone can be the bases for EPA's authority.

technologically stable) during malfunction events (when systems are not technologically stable). The result is MACT standards that are not reflective of what is achieved in practice by the best-performing existing sources, and GACT numeric standards that are not generally achievable with available control measures, as Congress intended and required in § 112.

EPA's decision also contradicts a fundamental principle, announced and consistently applied by this Court over the past 40 years, that EPA must account for malfunctions when setting technology-based standards. Contrary to EPA's implication,[13] its departure from precedent was not required or justified by this Court's decision in the *General Provisions Decision*.[14] While that case held that a CAA § 112-compliant standard must apply at all times, it did not overrule longstanding precedent requiring EPA to take malfunctions into account when setting technology-based standards. EPA impermissibly disregarded this precedent by failing to either consider malfunctions when setting numeric emissions limits under § 112(d) or establish a work practice standard under § 112(h).

A. CAA § 112(d) Requires that Numeric Standards Reflect Emissions Control Achieved in Practice or Generally Available.

EPA derived its numeric standards for boilers from data reflecting emission levels achieved in practice during normal operation. EPA deliberately excluded

[13] *See* 76 Fed. Reg. at 15,560 (JA___); 75 Fed. Reg. at 31,901 (JA___).
[14] *Sierra Club v. EPA*, 551 F.3d 1019, 1027-28 (D.C. Cir. 2008), *cert. denied,* 559 U.S. 991 (2010).

emissions data from malfunction events when calculating the average emission rate of existing sources.[15] Yet EPA decided to apply those standards to malfunction events even though it explicitly recognized the practical reality that even well-designed and well-maintained equipment "can sometimes fail and that such failures can sometimes cause an exceedance of the relevant emissions standard." 76 Fed. Reg. at 15,561 (JA___). EPA claims that "nothing in section 112(d) or in case law requires that EPA anticipate and account for the innumerable types of potential malfunction events in setting emission standards." *Id.* at 15,560 (JA___). EPA is simply wrong.

Section 112(d) requires EPA to base MACT standards on identified emission reduction measures or the demonstrated emission performance of existing sources, and to limit emissions only "where achievable." This requirement applies *a fortiori* to GACT numeric standards, which are based on control measures that are "generally achievable" to sources, and which "can be less rigorous than those required for major sources. . . ." *Nat'l Mining Ass'n. v. EPA,* 59 F.3d 1351, 1353-54 (D.C. Cir. 1995). Nothing in § 112(d) authorizes EPA to create a standard with which EPA knows even the best performers cannot comply.

In the real world, as EPA concedes, malfunctions are inevitable and consequential enough to raise emissions above normal levels. When it ignores emissions that best performing sources experience during malfunctions, EPA

[15] *See, e.g.,* ERG, EPA-HQ-OAR-2006-0790-2331, Revised Development of Baseline Emission Factors for Boilers and Process Heaters at Commercial, Industrial, and Institutional Facilities at 20 (Jan. 2011) (JA___).

breaches its duty to set standards on the basis of real world performance. It fails to take into account how sources actually operate and unlawfully prohibits emissions that cannot be avoided. *See, e.g., Sierra Club v. EPA*, 167 F.3d 658, 665 (D.C. Cir. 1999) (a best performing source should not violate standard that is supposed to be based on what it "achieve[s] in practice").

EPA argues that § 112(d) allows it to ignore malfunctions when setting MACT standards because the standards must reflect the achievements of the best performers and "the *goal* of best performing sources is to operate in such a way as to avoid malfunctions of their units." 76 Fed. Reg. at 15,561 (JA___) (emphasis added). EPA offers the same argument for ignoring malfunctions in setting GACT standards, even though best performers' emissions reductions are not the basis for setting GACT standards. But in failing to consider malfunction events of best performers EPA ignores two realities: (1) Congress pegged the stringency of the standards not to goals or perfection, but instead what has occurred in-practice, and (2) EPA itself expressly acknowledges that even best performers will inevitably experience malfunctions resulting in increased emissions. *See id.* (JA___) ("EPA recognizes that even equipment that is properly designed and maintained can sometimes fail and that such failure can sometimes cause an exceedance of the relevant emissions standard."). Rather than supporting its interpretation, EPA's argument actually underscores that Congress wanted real world practicalities, including the inevitability of malfunctions, to guide the § 112(d) standard-setting process. *See, e.g., Sierra Club v. EPA*, 353 F.3d at

980 ("The idea is to set limits that, as an initial matter, require all sources in a category to at least clean up their emissions to the level that their best performing peers *have shown can be achieved*." (emphasis added)).

The only judicial precedent EPA cites as support for its claim that it may ignore the effect of malfunctions on the achievability of MACT standards is *Weyerhaeuser v. Costle*, 590 F.2d 1011, 1058 (D.C. Cir. 1978). *Weyerhauser* does not help EPA. First, that decision addressed a Clean Water Act requirement that, unlike the MACT "floor" was "technology forcing" and intended to require development of new control technology. *See id.* at 1025, 1057. Second, the *Weyerhauser* court rejected the idea that standards developed taking upset conditions into account, such that the effluent limitations could be achieved by "properly operated and maintained plants,"[16] must also include an exemption that would accommodate "uncontrollable acts of third parties." *Id.* at 1058. In any event, this Court ten years later applied the same approach to technology-based standards under the Clean Water Act as it has applied in the CAA cases discussed below. *See NRDC v. EPA*, 859 F.2d 156, 206-10 (D.C. Cir. 1988) (concluding that a "technology-based standard discards its fundamental premise when it ignores the limits inherent in the technology.").

[16] *Weyerhaeuser,* 590 F.2d at 1057. The *Weyerhaeuser* Court distinguished that situation from the one addressed in *Essex Chemical*, 486 F.2d 427 (D.C. Cir. 1973), *cert denied*, 416 U.S. 969 (1974), where "EPA ignore[d] the possibility of upsets in setting clean air standards. . . ." *Id.* at 1058 n.83.

B. This Court Has Repeatedly Confirmed That EPA Must Account for Malfunctions When Setting Technology-Based Standards.

This Court has consistently told EPA that it must factor malfunctions into its technology-based standard setting process under the CAA. In the first NSPS case, this Court acknowledged manufacturers' concerns that malfunctions are an "inescapable aspect of industrial life," and agreed that EPA must make allowance for periods of start-up, shutdown and malfunction when setting technology-based emission standards. *Portland Cement Ass'n v. Ruckelshaus,* 486 F.2d 375, 398-99 (D.C. Cir. 1973), *cert. denied,* 417 U.S. 921 (1974) ("*Portland Cement I*"). In *Essex Chemical*, petitioners objected to "EPA's failure to provide that lesser standards, or no standards at all, should apply when the stationary source is experiencing startup, shutdown, or mechanical malfunctions through no fault of the manufacturer." *Essex Chem. Corp.,* 486 F.2d at 432. The Court agreed and remanded the rule to address this issue, stating: "[t]he identical issue was raised in *Portland Cement I* and the court there found the challenge persuasive enough to merit a remand." *Id.* at 433. The Court added that such changes were "necessary to preserve the reasonableness of the standards as a whole." *Id.*

In *National Lime I,* the Court reiterated EPA's duty to consider malfunctions when setting technology-based standards: "In *Essex Chemical* as well as *Portland Cement I* we expressed concern that the standards set might not have been achievable in periods of abnormal operation, *e.g.*, during the 'startup, shutdown and (equipment)

malfunction' periods that occur in plant operation; and we remanded for further consideration of this issue." *Nat'l Lime Ass'n v. EPA*, 627 F.2d 416, 430 (D.C. Cir. 1979) ("*National Lime I*"). The *National Lime I* court remanded EPA's rule for several reasons, concluding that "the record does not support the 'achievability' of the promulgated standards for the industry as a whole…." *Id.* at 431 (citing *Essex Chem. Corp.,* 486 F.2d at 433-34).

Finally, in a CAA § 112 case, *Cement Kiln Recycling Coalition v. EPA*, this Court decided to vacate, rather than simply remand, the MACT standards for several reasons, including:

> industry petitioners may be correct that EPA should have exempted [hazardous waste combustors] from regulatory limits during periods of startup, shutdown, and malfunction, permitting sources to return to compliance by following the steps of a startup, shutdown, and malfunction plan filed with the Agency. We have similar doubts about EPA's decision to require sources to comply with standards even during openings of emergency safety valves caused by events beyond the sources' control.

255 F.3d at 872.

In sum, this Court has consistently recognized that failure to account for malfunctions when setting technology-based standards under the CAA can result in requirements that are inconsistent with the Clean Air Act. That is true both before and after the 1977 and 1990 CAA Amendments. In this rulemaking, EPA unlawfully failed to adhere to that principle.

C. The *General Provisions Decision* Did Not Alter EPA's Obligation to Account for Malfunctions When Setting Technology-Based Standards.

EPA implies that the *General Provisions Decision* somehow relieved it of the obligation to account for boiler malfunction events in setting standards. *See* 76 Fed. Reg. at 15,560 (JA___); 75 Fed. Reg. at 31,901-02 (JA___). In fact, the opposite is true.

That case concerned a blanket exemption, in the General Provisions, from compliance with MACT standards during malfunctions (unless the standards for a particular source category provided otherwise). The Court struck down that provision because it did not result in continuous § 112-compliant emission standards, since, as EPA acknowledged, the General Provisions exemption was not established under either of the provisions for setting HAP emission limits, § 112(d) or § 112(h). *General Provisions Decision*, 551 F.3d at 1027-28. At the same time, the Court stated that the requirement, based on its interpretation of the inclusion of "continuous" in the CAA definition of "emission standard," that *some* standard consistent with § 112 apply at all times does not mean that *the same* standard must apply at all times. *Id.* at 1027. The Court specifically noted the potential for EPA to address malfunctions through its § 112(h) work practice authority. *Id.* at 1028.

The *General Provisions Decision* therefore did nothing to negate the principle that EPA must consider malfunctions when it sets § 112-compliant emission standards for individual source categories. In fact, the *General Provisions Decision* reached the same

conclusion that the *National Lime I* court reached (although it did not discuss or even cite *National Lime I*): Congress included "continuous" in the definition of "emission standard" to preclude the use of "intermittent" emission controls.[17] The Court's reasoning applies with equal force to MACT and GACT standards: the CAA requires "that *some* § 112 standards apply continuously." 551 F.3d at 1021 (emphasis added). Thus, for area source boilers, continuous application of regulations under MACT §§ 112(d)(2) or 112(h) or GACT § 112(d)(5), is required. The *General Provisions Decision* does not give EPA license to ignore certain periods of boiler functions when setting continuously applicable standards.

Industry Petitioners do not seek an exemption from the standards during malfunctions, nor non-"continuous" intermittently applied MACT or GACT standards, but only standards that account for the performance of available technology during malfunction events.[18]

---

[17] 551 F.3d at 1027. As the *National Lime I* court explained, when Congress defined "emission standard" in the 1977 CAA Amendments as a requirement that limits emissions "on a continuous basis," it was responding to information that some sources temporarily reduced emissions only during adverse weather conditions. 627 F.2d at 434 n.54. Because technology-based standards that account for malfunctions are not the sort of deliberate intermittent control technique addressed by the 1977 CAA Amendments, the *National Lime I* court opined that the 1977 CAA Amendments likely did not change its prior holdings that EPA must consider malfunctions when setting technology-based standards. *See id.* at 430.

[18] *See also Kamp v. Hernandez*, 752 F.2d 1444, 1452-53 (9th Cir. 1985) ("Congress's primary purpose behind requiring regulation on continuous basis was to exclude intermittent control techniques from the definition of emission limitations," and therefore EPA's interpretation that an emission standard operates continuously "so

D. EPA's Failure to Address Malfunctions Using CAA § 112 Standard-Setting Provisions Was Arbitrary and Capricious.

EPA's admission that numeric emission standards that do not consider malfunctions are not continuously achievable[19] means that EPA's rule was not only contrary to statute,[20] but also arbitrary and capricious. *See National Lime I*, 627 F.2d at 430 ("Promulgation of standards based upon inadequate proof of achievability would defy the Administrative Procedure Act's mandate against action that is 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.'").

EPA declares that malfunctions are not a "distinct operating mode" and therefore need not be considered in setting standards. 76 Fed. Reg. at 15,560 (JA___). This statement contradicts the well-established treatment by EPA of malfunction events as one of three periods of operation during which excess emissions can be reasonably anticipated to occur and determining compliance difficult to determine. 59 Fed. Reg. at 12,422 (General Provisions final rule) (JA___); *see also* CIBO, EPA-HQ-OAR-2002-0058-2702, Comments on Proposed Major Source Rule at 102-103 (Aug. 20, 2010), incorporated by reference by EPA-HQ-OAR-2006-0790-1783 at 17 (JA___). EPA expended significant effort to develop the appropriate regulatory treatment for these periods. *See, e.g.,* 58 Fed. Reg. at 42,777 (discussion

---

long as some limitation on emissions, although not necessarily the same limitation, is always imposed" was consistent with the 1977 CAA Amendments).

[19] *See* 76 Fed. Reg. at 15,560 (JA___).

[20] *National Lime I,* 627 F.2d at 433 ("[B]y failing to explain how the standard proposed is achievable under the range of relevant conditions which may affect the emissions to be regulated, the Agency has not satisfied this initial burden.").

relating to startup, shutdown and malfunction). EPA's abrupt abandonment in this Rule of its reasoning behind treating malfunction events as another distinct boiler operating period is no more than an Agency pronouncement and is arbitrary. *Nat'l Ass'n of Clean Water Agencies,* 734 F.3d at 1143.

EPA's claim that accounting for malfunctions is too difficult is unavailing. 76 Fed. Reg. at 15,561 (JA ___). Difficulty is no excuse to avoid complying with the law. *See Cement Kiln Recycling Coal.,* 255 F.3d at 865 ("Even accepting the proposition that factors affecting source performance…are difficult to quantify," if "EPA cannot meet this requirement using the MACT methodology, it must devise a different approach capable of producing floors that satisfy the Clean Air Act.") (citations omitted).

This is particularly true where EPA has other statutory options to account for malfunctions. EPA could establish a work practice standard under CAA § 112(h). Such standards may replace MACT numeric standards where it is "not feasible…to prescribe or enforce an emission standard," CAA § 112(h)(1), including where "the application of measurement methodology to a particular class of sources is not practicable…." CAA § 112(h)(2)(B). Another option EPA has is to set GACT management practices under § 112(d)(5). The use of management practice standards where GACT level controls are required is at EPA's discretion. CAA § 112(d)(5). Commenters asserted, and EPA agreed, that it would be impracticable for EPA to set numeric emission standards for malfunctions for this source category. 76 Fed. Reg. at

15,560-61 (JA__). This is true for many reasons, particularly because malfunctions are infrequent and unpredictable. *Id.* at 15,560 (JA__).

Malfunctions can also be of short duration, which may make stack testing technically infeasible. This very issue led EPA to promulgate a work practice standard, in lieu of numeric limitations, for startup and shutdown periods. *Id.* at 15,576-77 (JA___). EPA now abruptly abandons the well-settled logic of that approach. Several commenters suggested easily implementable work practices for malfunctions. EPA, EPA-HQ-OAR-2006-0790-2330, Response to Public Comments on the Proposed Area Source Rule, Vol. 3 at 191, 234, 247 (Mar. 21, 2011) (JA___). Options presented include requiring pre-determined malfunction plans with provisions designed to minimize emissions and return to system stability as expeditiously as possible, conducting root cause investigations, or establishing an acceptable threshold of exceedances over a period of time. *Id.* (JA___). EPA, however, rejects them without elaboration. EPA's lone assertion that it would be too difficult to account for malfunctions, in either numeric or work and management practice standards, is insufficient. *See Nat'l Ass'n of Clean Water Agencies,* 734 F.3d at 1143 (remanding because "one sentence in the Federal Register is not enough of a basis to uphold EPA's new approach").

Section 112(d)(2)(E) permits EPA to devise emission standards that combine numeric elements with work practice elements, applying each as appropriate. This

gives EPA ample latitude to develop § 112-compliant standards based on statutory criteria that are continuously applicable.

CONCLUSION

For the foregoing reasons, the Court should (1) vacate the energy assessment requirement; and (2) vacate and remand the Rule's numeric emission standards as applied to malfunction events.

Dated: August 26, 2014

Respectfully submitted,

Lisa Marie Jaeger
Sandra Y. Snyder
BRACEWELL & GIULIANI LLP
2000 K Street, N.W., Suite 500
Washington, DC 20006-1872
(202) 828-5800
Lisa.Jaeger@bgllp.com
Sandra.Snyder@bgllp.com

Counsel for Council of Industrial Boiler Owners and American Chemistry Council

William L. Wehrum
HUNTON & WILLIAMS LLP
2200 Pennsylvania Avenue, N.W.
Washington, DC 20037
(202) 955-1500
wwehrum@hunton.com

Counsel for American Wood Council, American Forest & Paper Association, Corn Refiners Association, Rubber Manufacturers Association, and Southeastern Lumber Manufacturers Association

Peter H. Wyckoff
Jeffrey A. Knight
PILLSBURY WINTHROP SHAW PITTMAN LLP
2300 N Street, N.W.
Washington, D.C. 20037
(202) 663-8007
Peter.Wyckoff@pillsburylaw.com
Jeffrey.Knight@pillsburylaw.com

Counsel for American Petroleum Institute

Rachel L. Brand
Sheldon Gilbert
U.S. CHAMBER LITIGATION CENTER, INC.
1615 H Street, N.W.
Washington, D.C. 20062
(202) 463-5337
rbrand@uschamber.com
sgilbert@uschamber.com

Counsel for Chamber of Commerce of the United States of America

Quentin Riegel
NATIONAL ASSOCIATION OF MANUFACTURERS
733 10th Street, N.W.
Suite 700
Washington, DC 20001
(202) 637-3000
qriegel@nam.org

Counsel for National Association of Manufacturers

Of Counsel:

Leslie A. Hulse
AMERICAN CHEMISTRY COUNCIL
700 2nd Street, N.E.
Washington, D.C. 20002
(202) 249-6131
Leslie_Hulse@americanchemistry.com

Jan Poling
Vice President, General Counsel
& Corporate Secretary
AMERICAN FOREST & PAPER ASSOCIATION
1101 K Street, N.W., Suite 700
Washington, DC 20036
(202) 463-2590
Jan_Poling@afandpa.org

CERTIFICATE OF COMPLIANCE

Pursuant to Rule 32(a)(7)(C) of the Federal Rules of Appellate Procedure and Circuit Rules 32(a)(1) and 32(a)(2)(C), I hereby certify that the foregoing Opening Brief of Industry Petitioners contains 9,757 words as counted by a word processing system that includes headings, footnotes, quotations, and citations in the count, and therefore is within the 11,200 word limit set by the Court.

Dated: August 26, 2014

/s/ Lisa Marie Jaeger
Lisa Marie Jaeger

CERTIFICATE OF SERVICE

I certify that the foregoing Opening Brief of Industry Petitioners was electronically filed with the Clerk of the Court on August 26, 2014, using the CM/ECF system and thereby served upon all ECF-registered counsel.

/s/ Lisa Marie Jaeger
Lisa Marie Jaeger