August 31, 2012

EPA Docket Center
Environmental Protection Agency
Mail Code: 2822T
1200 Pennsylvania Ave., NW
Washington, DC 20460-0001
Attn: Docket No. EPA-HQ-OAR-2007-0492

Re: Comments of the Associations Regarding the National Ambient Air Quality Standards for Particulate Matter Proposed Rules, Docket ID No. EPA-HQ-OAR-2007-0492.

Dear Sir or Madam:

The National Association of Manufacturers, Aluminum Association, American Chemistry Council, American Coke & Coal Chemicals Institute, American Forest & Paper Association, American Foundry Society, American Iron & Steel Institute, American Petroleum Institute, American Wood Council, BCCA Appeal Group, Brick Industry Association, Council of Industrial

Boiler Owners, Corn Refiners Association, Hardwood Plywood and Veneer Association, Industrial Energy Consumers of America, Motor & Equipment Manufacturers Association, National Association for Surface Finishing, National Federation of Independent Business, National Oilseed Processors Association, National Mining Association, North American Die Casting Association, Rubber Manufacturers Association, U.S. Chamber of Commerce, and Wisconsin Manufacturers & Commerce (collectively, the "Associations") appreciate the opportunity to submit the following comments in response to the Environmental Protection Agency's ("the EPA's") proposed National Ambient Air Quality Standards for Particulate Matter, Docket ID No. EPA –HQ–OAR–2007–0492; FRL–9682-9, 77 Fed. Reg. 38,890 (June 29, 2012) (hereinafter, the "proposed PM NAAQS" or "proposed standard").

The **National Association of Manufacturers** ("NAM") is the largest industrial trade organization in the United States, representing over 13,000 small, medium, and large manufacturers in all 50 states. The NAM is the leading voice in Washington, D.C. for the manufacturing economy, which provides millions of high-wage jobs in the U.S. and generates more than $1.7 trillion in GDP. Its mission is to enhance the competitiveness of manufacturers and improve American living standards by shaping a legislative and regulatory environment conducive to U.S. economic growth.

The **Aluminum Association**, based in Arlington, Virginia, works globally to aggressively promote aluminum as the most sustainable and recyclable automotive, packaging and construction material in today's market. The Association represents U.S. and foreign-based primary producers of aluminum, aluminum recyclers and producers of fabricated products, as well as industry suppliers. The Association provides leadership to the industry through its programs and services and assists in achieving the industry's environmental, societal, and economic objectives. Member companies operate more than 200 plants in the United States, with many conducting business worldwide.

The **American Chemistry Council** ("ACC") is a nonprofit trade association whose member companies represent the majority of the productive capacity of basic industrial chemicals within the United States. The business of chemistry is a $720 billion enterprise and a key element of the nation's economy.

The **American Coke & Coal Chemicals Institute** ("ACCCI") is a trade association representing 100% of the U.S. producers of metallurgical coke used for iron and steel production, including both merchant producers and integrated steel companies with cokemaking capacity, and 100% of the manufacturers of coal chemicals produced from byproducts of cokemaking.

The **American Forest & Paper Association** ("AF&PA") is the national trade association of the paper and wood products industry, which accounts for approximately 5 percent of the total U.S. manufacturing GDP. The industry makes products essential for everyday life from renewable and recyclable resources, producing about $190 billion in products annually and employing nearly 900,000 men and women with an annual payroll of approximately $50 billion.

The **American Foundry Society** ("AFS") is the major trade and technical association for the North American metalcasting industry, with over 7,000 members, representing 2,100 metalcasters in America. U.S. foundries produce a wide range of metal castings and provide employment for over 200,000 workers and support thousands of other jobs indirectly. Ninety percent of all manufactured goods and capital equipment incorporate engineered castings into their makeup.

The **American Iron and Steel Institute** ("AISI") serves as the voice of the North American steel industry and represents member companies accounting for over three quarters of U.S. steelmaking capacity with facilities located in forty-three states.

The **American Petroleum Institute** ("API") is the only national trade association that represents all aspects of America's oil and natural gas industry. Our more than 500 corporate members, from the largest major oil company to the smallest of independents, come from all segments of the industry. They are producers, refiners, suppliers, pipeline operators and marine transporters, as well as service and supply companies that support all segments of the industry.

The **American Wood Council** ("AWC") is the voice of North American traditional and engineered wood products, representing over 60% 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 approximately one-third of a million men and women in well-paying jobs.

The **Brick Industry Association** ("BIA"), founded in 1934, is the recognized national authority on clay brick manufacturing and construction, representing approximately 250 manufacturers, distributors, and suppliers that historically provide jobs for 200,000 Americans in 45 states.

The **BCCA Appeal Group** is a non-profit corporation organized under the laws of the State of Texas. Its purpose is to promote clean air and a strong economy. BCCA Appeal Group members include owners and operators of stationary sources, such as refineries and chemical plants, regulated under the federal Clean Air Act and associated State Implementation Plans.

The **Council of Industrial Boiler Owners** ("CIBO") is an association of industrial boiler owners, architect-engineers, equipment manufacturers, and Universities representing 20 major industrial sectors. CIBO members are in every region of the country and run every type of boiler and fuel combination currently in operation. CIBO was formed in 1978 to promote the exchange of information with industry and government relating to energy and environmental equipment, technology, operations, policies, law and regulations affecting industrial boilers.

The **Corn Refiners Association** ("CRA") is the national trade association representing the corn refining (wet milling) industry of the United States. CRA and its predecessors have served this important segment of American agribusiness since 1913. Corn refiners manufacture sweeteners, ethanol, starch, bioproducts, corn oil and feed products from corn components such as starch, oil, protein and fiber.

Founded in 1921, the **Hardwood Plywood & Veneer Association** ("HPVA") represents the interests of the hardwood plywood, hardwood veneer, and engineered hardwood flooring industries. HPVA member companies produce 90% of the hardwood plywood stock panels and hardwood veneer manufactured in North America.

The **Industrial Energy Consumers of America** ("IECA") is a nonpartisan association of energy intensive manufacturing companies with $710 billion in annual sales and with more than 930,000 employees worldwide.

The **Motor & Equipment Manufacturers Association** (“MEMA”) represents more than 700 companies that manufacture motor vehicle parts for use in the light- and heavy-duty vehicle original equipment and aftermarket industries. Motor vehicle suppliers are the nation’s largest manufacturing segment, directly employing more than 685,000 workers.

The **National Association of Surface Finishing** (“NASF”) represents the interests of businesses, technologists and professionals in the surface coatings industry. Its highly regarded programs and activities are informed by NASF’s mission to advance an environmentally and economically sustainable future for the finishing industry and promote the vital role of surface technology in the global manufacturing value chain.

The **National Federation of Independent Business** (“NFIB”) is the nation’s leading small-business advocacy association, representing members in Washington, D.C., and all 50 state capitals. Founded in 1943 as a nonprofit, nonpartisan organization, NFIB’s mission is to promote and protect the right of its members to own, operate, and grow their businesses. NFIB represents about 350,000 independent-business owners who are located throughout the United States.

The **National Oilseed Processors Association** (“NOPA”) is a national trade association comprised of 12 companies engaged in the production of vegetable meals and oils from oilseeds, including soybeans. NOPA’s 12 member companies process more than 1.6 billion bushels of oilseeds annually at 61 plants located throughout the country, including 56 plants which process soybeans.

The **National Mining Association** (“NMA”) is a national trade association of mining and mineral processing companies whose membership includes the producers of most of the nation’s coal, metals, industrial and agricultural minerals; the manufacturers of mining and mineral processing machinery, equipment and supplies; and the engineering and consulting firms, financial institutions and other firms serving the mining industry.

The **North American Die Casting Association** (“NADCA”) is the sole trade and technical association of the die casting industry representing members from over 350 companies located in every geographic region of the U.S. Die casters manufacture a wide range of non-ferrous castings: from automobile engine and transmission parts to intricate components for computers and medical devices. In the U.S., die casters contribute over $7 billion to the nation’s economy annually and provide over 50,000 jobs directly and indirectly.

The **Rubber Manufacturers Association** (“RMA”) is the national trade association representing companies that manufacture tires in the United States. RMA's eight member companies operate 30 tire manufacturing plants, employ thousands of Americans and produce over 90 percent of the original equipment (“OE”) tires and 80 percent of the replacement tires sold in the United States.

The **U.S. Chamber of Commerce** is the world’s largest business federation representing the interests of more than 3 million businesses of all sizes, sectors, and regions, as well as state and local chambers and industry associations.

Founded in 1911, **Wisconsin Manufacturers & Commerce** (“WMC”) is the state of Wisconsin’s chamber of commerce and largest business trade association representing more than 3,500 employers of every size and from every sector of the economy.

I. Introduction

The Associations represent the nation's leading manufacturing sectors which form the backbone of the nation's industrial ability to grow our economy and provide jobs in an environmentally sustainable and energy efficient manner. We have significant concerns regarding the impact that the EPA's proposed particulate matter ("PM") National Ambient Air Quality Standards ("NAAQS") would have on manufacturing if it were finalized in its proposed form. These concerns are heightened by the fact that a revised standard is not necessary to protect the public health and, as proposed, is far more stringent than the standards in other industrialized countries.[1] As explained below, the current PM NAAQS provides requisite protection of the public health, and additional controls are not necessary at this time. Therefore, the Associations urge the EPA to reconsider its proposal to revise the PM NAAQS standards in a manner that will result in significant burdens on the manufacturing sector that are unnecessary, unlikely to produce the benefits that the EPA expects, and detrimental to the economic health of the industries.

As an initial matter, adopting the proposed PM NAAQS would violate the Clean Air Act. While the EPA is required to adopt NAAQS that are requisite to protect the public health, this does not provide the Agency with *carte blanche* to adopt unduly restrictive standards that go beyond the levels necessary to protect the public health. Here, the EPA has prejudged the outcome of this rulemaking, assuming that more stringent standards are needed without first assessing the merits of retaining the existing standard and by selecting a Clean Air Science Advisory Committee ("CASAC") chairperson who also publicly stated that more stringent standards were needed in 2006, before the EPA initiated this five-year science review for the PM NAAQS. Rom and Samet (2006). These errors are compounded by the EPA's undue reliance on selective data, rather than a full weighing of all evidence including that which indicates the current NAAQS needs no revision. The selective data include the CASAC's recommendations, the EPA's own reanalysis of unpublished studies, and modeling data that cannot accurately reflect the latest scientific knowledge. In addition, the EPA proposes to include a number of new provisions that are contrary to the Clean Air Act. For example, the EPA proposes to add monitoring provisions that will target maximum rather than ambient air conditions, eliminate spatial averaging provisions, and create guidance documents that will unduly restrict the flexibility provided to the states under the Clean Air Act. These revisions will add significant costs and complexity to the PM NAAQS program, with little hope of providing actual public health benefits. Finally, the rulemaking process itself suffers from systemic errors that will render the final rule unlawful. Should the EPA complete the final rule by December 14, 2012 as planned, it would not only lack the time needed to fully consider all of the public comments it will receive, but would not benefit from the results of the EPA Inspector General's ("IG") investigation of the CASAC's role in reviewing the EPA's PM NAAQS recommendations. Rather than rushing through a legally flawed rule, the EPA must take the time necessary to correct these legal deficiencies and, if necessary, submit a revised proposal for notice and comment.

Second, the EPA's proposed rule contains a series of technical flaws that would render adoption of the proposed standards arbitrary and capricious. As a threshold matter, the EPA's own review process and scientific justifications do not conform to the standards set forth in the

[1] The European Union applies a health-based annual $PM_{2.5}$ standard of 25 $\mu g/m^3$ and an average exposure indicator ("AEI") that will be reduced to 18 $\mu g/m^3$ by 2020. European Union, Environment: Air Quality Standards, *available at* http://ec.europa.eu/environment/air/quality/standards.htm (last visited Aug. 29, 2012). Japan applies an annual $PM_{2.5}$ standard of 15 $\mu g/m^3$. Japan Ministry of the Environment, Environmental Quality Standards in Japan – Air Quality, *available at* http://www.env.go.jp/en/air/aq/aq.html (last visited Aug. 29, 2012).

Clean Air Act ("CAA") and, therefore, cannot justify the adoption of a revised (and substantially more stringent) PM NAAQS. Throughout the proposal, the EPA selectively relies on limited data that support its conclusions, while ignoring entirely the body of evidence that supports maintaining the existing standard. In many instances, even these selected data fail to support the drastic reductions that the EPA seeks to impose. In sum, the EPA fails to take seriously its obligation to propose regulations that "accurately reflect the latest scientific knowledge" by adopting an ends-based approach that selects only the scientific evidence that supports the predetermined conclusion that the existing NAAQS must be revised.

Third, the EPA fails in many respects to fully consider the implementation challenges that its proposal would entail. Given the costs and implementation challenges that the regulated community will face, the Associations urge the EPA not to adopt additional requirements that go beyond what is called for the by Clean Air Act. Specifically, the Associations urge the EPA to avoid any expedited time frames that would limit the time provided to states and the regulated community to comply with any revised requirements. Further, to limit the uncertainty and disruption associated with the revision process, the Associations urge the EPA to consider grandfathering provisions for existing permit applications to ensure that permit applicants are not subjected to different and changing regulations throughout the permit review process that could ultimately threaten the manufacturing growth and economic development that the projects will produce. As it considers public comments and prepares to issue a final rule, the EPA should focus narrowly on the issue at hand: providing requisite protection of the public health. Regardless of their merit, regulations that go beyond this standard will add unnecessary cost and complexity without furthering the goals that Congress set forth in the Clean Air Act.

II. The Proposed PM NAAQS Would Violate the Clean Air Act.

A. The EPA's failure to seek comment on the existing primary annual standard inappropriately prejudges the outcome, leads to inherently biased rulemaking, and is contrary to law**.**

At the outset, by failing to fully consider and solicit comments on maintaining the existing primary annual standard, the EPA has inappropriately prejudged the outcome of this rulemaking. Such an approach not only leads to inherently biased rulemaking, but is also contrary to law. Despite the sweeping nature and impact of the proposed revision, the EPA only seeks limited comment on the proposed revision to the primary annual standard, making clear that the Agency has already decided to lower the existing standard. The only issue still under consideration, and for which the Agency is seeking comment is on a standard ranging from 11-13 $\mu g/m^3$, which is well below the current standard of 15 $\mu g/m^3$. 77 Fed. Reg. at 38,943.

Under the Clean Air Act, the EPA is required to propose revisions to the existing standard "as appropriate." CAA § 109(d)(1). The EPA cannot properly evaluate whether revisions are needed unless it considers *and solicits comments* on the merits of retaining the existing standard. The EPA has failed to do so here, and instead presupposes that a more onerous standard should apply. Thus, the EPA has effectively bypassed the statutory requirement, set forth in section 307(d), to receive and consider public input on the NAAQS. Instead, the EPA presents the decision to lower the standard as a *fait accompli*. This contravenes the very purpose of notice-and-comment rulemaking, which is to ensure that "public comment will be considered by an agency" *before* it reaches its decision, "and the agency may alter its action in light of those comments." *Hall v. EPA*, 273 F.3d 1146, 1163 (9th Cir. 2001). Because the EPA offers no analysis of the current primary annual standard, the assumption that existing standard must be lowered may be unwarranted. The EPA's failure to

consider and provide a full explanation concerning the existing standard will impede the Agency and any Court reviewing the proposed standards from assessing whether the revisions are "appropriate" under the CAA.

Furthermore, the EPA's approach is not supported by the D.C. Circuit's remand of the 2006 standard in *Am Farm Bureau Fed'n v. EPA*, 559 F.3d 512 (D.C. Cir. 2009). In 2006, the EPA reaffirmed the 15 $\mu g/m^3$ standard for the primary annual $PM_{2.5}$ NAAQS that was subsequently challenged in court. The D.C. Circuit remanded the annual $PM_{2.5}$ standard in order to provide the EPA an opportunity "to explain why . . . its annual standard is sufficient 'to protect the public health [with] an adequate margin of safety.'" *Id.* at 520. After finding that the EPA had not adequately explained several issues, the court found that "the EPA's failure to adequately to explain itself is in principle a curable defect." *Id.* at 528. Thus, nothing in the Court's decision suggests that a 15 $\mu g/m^3$ standard is inappropriate. Instead, the Court requested that the EPA explain "why it believes the NAAQS will provide, as required by the CAA, an adequate margin of safety against morbidity in children and other vulnerable subpopulations." *Id.* at 526. In other words, the Court did not require that the EPA establish a more stringent primary annual $PM_{2.5}$ standard, but to explain why the 15 $\mu g/m^3$ standard that it chose was in fact sufficiently protective. By presupposing that a more stringent standard is necessary, the EPA has effectively ignored the Court's direction in *Am. Farm Bureau Fed'n*.

Likewise, the Court did not object to a specific secondary standard but rather to the EPA's failure to identify a specific level of air quality that is requisite to protect the public welfare from known or anticipated adverse effects." *Id.* at 530 (quoting CAA § 109(b)(2)); *see also id.* ("The EPA's failure to identify such a level when deciding where to set the level of air quality required by the revised secondary fine PM NAAQS is contrary to the statute and therefore unlawful."); *id.* ("[W]e need not decide whether it was reasonable for the agency to reject the target recommended by the Staff Paper and the CASAC"). Again, that decision did not address the sufficiency of the 2006 primary standard and secondary standards or the need to adopt a more stringent secondary standard. It merely faulted the EPA for failing to provide any explanation at all for the decision that it made.

By simply presupposing that a more stringent standard is necessary, the Agency has once again failed to adequately explain why the proposed standard is necessary or why a less stringent standard—such as the status quo—is insufficient to protect the public health with an adequate margin of safety. To cure this defect, the EPA must reevaluate the merits of the existing 15 $\mu g/m^3$ standard and provide the public with an opportunity to comment on the results of that reevaluation process.

B. The EPA has failed to demonstrate that revision of the primary $PM_{2.5}$ annual standard is requisite to protect the public health.

Under section 109(b)(1) of the Clean Air Act, the Administrator is required to set the primary annual standard at the level that, "in the judgment of the Administrator" is "requisite to protect the public health."[2] The Act itself does not further define what is "requisite to protect the public health." However, courts have held that a standard is requisite when it is "not higher or lower than is necessary." *Whitman v. American Trucking Ass'n*, 531 U.S. 457, 475 (2001). Thus, a standard that adds stringency without a commensurate gain in public health benefits would not be requisite to protect the public health.

[2] 42 U.S.C. § 7409(b)(1).

The legislative history of Section 109 further clarifies that Congress intended the NAAQS be set at a level requisite to protect sensitive subpopulations, but not the most sensitive individuals within those subpopulations.[3] In establishing a NAAQS that will protect the health of sensitive populations, "reference should be made to a representative sample of persons comprising the subgroup rather than to a single person in such group."[4] This is consistent with the general scientific approach of studying groups of people and drawing conclusions about the mean response of the group, which avoids basing conclusions on a result that may be an outlier. Accordingly, the EPA and the courts have consistently recognized that the NAAQS are not required to protect the most sensitive individuals within a population.[5]

The record presented by the EPA is wholly insufficient to support the conclusion that a more stringent primary annual standard is requisite to protect the public health. First, when taken as a whole, the record suggests that the existing standard remains sufficient to protect the public health. Since the 15 $\mu g/m^3$ standard was established, risks associated with $PM_{2.5}$ exposure have declined, while uncertainty regarding the relationship between $PM_{2.5}$ exposure and morbidity and mortality have increased. Further, "supplementary" protection offered by the 24-hour standard continues to provide an adequate margin of safety to protect children and other sensitive subpopulations. Second, the proposed rule suggests that the need for a more stringent standard is based on the CASAC's findings rather than the independent judgment of the Administrator. The CASAC is an advisory committee designed to provide recommendations to the Administrator; she cannot simply accept those recommendations at face value without exercising her own independent judgment based on the record as a whole.

1. The current annual standard of 15 $\mu g/m^3$ continues to protect sensitive subpopulations with respect to morbidity with an adequate margin of safety.

The EPA also fails to adequately address whether the current annual standard of 15 $\mu g/m^3$ remains requisite to protect sensitive populations and provide an adequate margin of safety. In order to issue a downward revision of the current annual standard, the Administrator must provide a "reasoned basis for the change." *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins.*, 463 U.S. 29, 42 (1983). The Agency has failed to do so here. Further, the Agency ignores the "requisite" standard mandated by Congress in the Clean Air Act and instead adopts a standard that it asserts will offer "increased protection" against health effects associated with PM emissions. 77 Fed. Reg. at 38.890, 93. The EPA is not at liberty to add to the Clean Air Act. Amending statutes fall within the purview of the legislature, and Congress never established such a standard that comprehends "increased protection." As a result, the EPA fails to offer any evidence that contradicts its earlier conclusion that an annual standard of 15 $\mu g/m^3$ is requisite to protect the public health with an adequate margin of safety. As explained below, the

[3] S. REP. NO. 91-1196, at 10 (1970).

[4] *Id.*

[5] *See* 75 Fed. Reg. 6474, 5475 n.2 (Feb. 9, 2010) (primary NAAQS for nitrogen dioxide); 71 Fed. Reg. 61,144, 61,145 n.1 (Oct. 17, 2006) (NAAQS for particulate matter); 50 Fed. Reg. 37,484, 37,488 (Sept. 13, 1985) (NAAQS for carbon monoxide), 44 Fed. Reg. 8202, 8210 (Feb. 8, 1979) (NAAQS for photochemical oxidants); *see also Lead Indus. Ass'n v. EPA,* 647 F.2d 1130 (D.C. Cir. 1980) (upholding EPA's establishment of the initial NAAQS for lead at a level that it estimated would protect 99.5% of the sensitive population from "potentially adverse" effects); *see also Safe Air for Everyone v. Idaho*, 469 F. Supp. 2d 884, 892 (D. Idaho 2006) (recognizing that the NAAQS "are designed to protect sensitive populations but not required to protect the most sensitive within a population").

administrative record including the latest scientific knowledge supports the maintenance of the existing annual standard.

First, recent studies—including those cited by the EPA—suggest that the estimates of relative risk per unit of $PM_{2.5}$ exposure may have actually declined over time. The EPA itself notes that relative risk data are extremely uncertain and highlight its "limited understanding of the heterogeneity of relative risk estimates in areas across the country." 77 Fed. Reg. at 38,905. At least one recent study cited by the EPA has concluded that the estimates of risk per unit of $PM_{2.5}$ have decreased since the EPA's 2006 review. Dominici (2007). Other recent analyses of the data on which the EPA primarily relies suggest that, when confounding factors such as age and co-pollutants are accounted for, estimates of relative risk per unit of $PM_{2.5}$ exposure have declined rather than increased over time. Smith (2012).[6] For example, when reviewing relative risk estimates from the ACS Cohort Studies, Dr. Smith suggests a possible "trend toward lower relative risk estimates with longer follow up periods." Smith (2012). At most then, recent studies suggest no change in relative risk per unit of $PM_{2.5}$ exposure, while leaving open the possibility that relative risks are actually decreasing. Thus, a comparison of risk estimates between 2006 and 2012 confirm that the existing standard remains requisite to protect the public health.

Second, a consideration of the entire body of scientific studies regarding $PM_{2.5}$ exposure shows increasing uncertainty regarding potential effect of $PM_{2.5}$ on morbidity and mortality. In the proposed rule, the EPA admits that it placed "greatest weight on those studies that reported positive and statistically significant associations" with respect to mortality and morbidity. 77 Fed. Reg. at 38,927. In doing so, the EPA dismissed equally relevant studies that reported null findings with respect to mortality. *See, e.g.*, Vedal and Dutton (2006); Wittmaack (2007); Peters et al. (2009).[7] Even the studies on which the EPA relies demonstrate considerable inconsistency in results. 77 Fed. Reg. at 38,909 ("Epidemiological studies evaluating health effects associated with long- and short-term $PM_{2.5}$ exposures have reported heterogeneity in responses both within and between cities and geographic regions within the U.S."). These inconsistent and uncertain results cannot provide a reasoned basis to change the existing annual standard. *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 42.

Third, the EPA's policy goal of providing increased protection cannot be justified as necessary to ensure the "adequate margin of safety" required by the Clean Air Act. 42 U.S.C. § 7409(b)(1). This is the same legal standard that the the EPA applied in previous revisions that established the existing annual standard and, as described above, the EPA has provided no scientific basis for lowering the annual PM standard here. Moreover, the supplementary 24-hour standard adds to the margin of safety that protects children and other sensitive subpopulations. According to the EPA, when the 24-hour standard is the generally controlling standard, annual mean $PM_{2.5}$ concentrations were reduced to as low as 8 $\mu g/m^3$, well below the existing or proposed annual standard. 77 Fed. Reg. at 38,906. Thus, the existing annual standard, when considered along-side the 24-hour standard, is not only requisite to protect the public health, but also ensures an adequate margin of safety for sensitive subpopulations.

In sum, the studies and evidence upon which the EPA relied confirm the Administrator's prior judgments that established the existing annual standard. An assessment based on the legal standards imposed by the Clean Air Act, rather than the EPA's own policy preferences, continues to support an annual $PM_{2.5}$ standard of 15 $\mu g/m^3$.

[6] Complete citations for all scientific studies are included in Attachment A.
[7] A number of additional studies published before 2006 also reported null findings. *E.g.*, Ito et al (2003); Moolgavkar (2003); Klemm and Mason (2003); Chock et al (2000).

2. The EPA is not bound by the CASAC-recommended range or any other CASAC recommendations.

As part of the EPA's study and rulemaking process, it requested that the CASAC review two draft Policy Assessments prepared by the EPA. The CASAC asserted that standards as low as 11 $\mu g/m^3$ could be "supported by the epidemiological and toxicological evidence, as well as by the risk and air quality information." 77 Fed. Reg. 38,938. The CASAC also suggested that it would be "'reasonable' for the EPA to eliminate the spatial averaging provisions" that had previously been incorporated into primary annual standards. *Id.* at 38,924. Finally, the CASAC asserted that the current 30-35 $\mu g/m^3$ 24-hour secondary standard should be maintained in the revised NAAQS. *Id.* at 38,939. The Administrator uniformly accepted the advice of the CASAC and her provisional conclusions are in complete agreement with the CASAC's recommendations. 77 Fed. Reg. at 38,940-41, 44.

The Administrator has a statutory obligation to exercise her own judgment on what level is requisite to protect the public health. Under the Clean Air Act, the NAAQS are determined in the "*judgment* of the Administrator, based on such criteria and allowing an adequate margin of safety, [to be] requisite to protect the public health" and determined in the "*judgment* of the Administrator, based on such criteria, [to be] requisite to protect the public welfare from any known or anticipated adverse effects." CAA § 109(b)(1) & (2). The CASAC does not determine the NAAQS, and abdicating the Administrator's role risks violating the statutory requirement that the Administrator's judgment dictate the regulations.

Both the Clean Air Act and the EPA's past conduct confirm the EPA's authority to depart from the CASAC's advice in NAAQS proceedings based on the Administrator's independent judgment. This authority is implicit in the text of the CAA, which includes procedural requirements the EPA must follow when its proposed rules differ "in any important respect" from the CASAC's recommendations. CAA § 307(d)(3). This provision would be wholly unnecessary if the EPA lacked the authority to depart from the CASAC's advice. The EPA has exercised this authority repeatedly in recent years, adopting standards based on the Administrator's own judgment, even when it differed from the CASAC's recommendations. *See, e.g.*, 73 Fed. Reg. 16436, 16477 (Mar. 27, 2008) (2008 Ozone NAAQS; "The Administrator observes that he reaches a different policy judgment than the CASAC Panel based on apparently placing different weight in two areas: the role of the evidence from the Adams studies and the relative weight placed on the results from the exposure and risk assessments."); 71 Fed. Reg. 61144, 61173-78 (Oct. 17, 2006) (2006 PM NAAQS; explaining why the EPA Administrator chose a standard above the CASAC-recommended range). The Clean Air Act vests the Administrator with authority to determine the NAAQS that are requisite to protect the public health. Thus, the Administrator has the authority and obligation to diverge from the CASAC's advice if, in her independent judgment, the CASAC's recommendations are inconsistent with the requirements of the Clean Air Act. If instead the Administrator merely accepts the CASAC recommendations on their face and fails to exercise any independent judgment, she will have failed to comply with the CAA's statutory requirement.

C. The EPA's reliance on its own reanalysis of selective unpublished data from long-term and short-term studies to determine the level of air quality that is requisite to protect the public health would violate the CAA.

The EPA violated several sections of the Clean Air Act by conducting its own reanalysis of unpublished data. Due to the alleged paucity of public information, the EPA relies on its own study of otherwise unpublished data to support the proposed secondary standard concerning

visibility. Proposed Rule, 77 Fed. Reg. 38890, 38974 (June 29, 2012) ("[T]he reanalysis of urban preference studies conducted in the Visibility Assessment for this review. . . ."). However, the EPA did not include the underlying, unpublished data in the docket or submit those data to the CASAC for review. Thus, not only has the EPA failed to comply with the CAA's procedural requirements, it has failed to provide a basis for determining that its own reanalysis "accurately reflect[s] the latest scientific knowledge."

The EPA notes a number of issues which call into question the reliability of the data in the unpublished studies as well as the ultimate conclusions of its reanalysis. For example, the studies did not define "acceptable" visibility, allowing each study participant to respond arbitrarily "based on her/her own values" rather than providing a uniform and objective standard. *Id.* By leaving key terms undefined, the EPA's conclusions are dependent on the biases of anonymous survey participants. If the EPA chooses to adopt visibility standards, they should be based on sound science, not public opinion based on a small, undisclosed sample. In addition, the EPA notes key differences between the aggregated studies, including "(1) scene characteristics; (2) image presentation methods (e.g., projected slides of actual photos, projected images generated using WinHaze . . .); (3) number of participants in each study; (4) participant representativeness of the general population of the relevant metropolitan area; and (5) specific wording used to frame the questions used in the group interview process." *Id.* at 38,975. Without access to the underlying data in the unpublished and unreviewed studies, the significance of these deficiencies remains unknown. As a result, neither the public nor the courts can appropriately assess whether the EPA's cavalier dismissal of these concerns was warranted or whether other, unidentified concerns may exist due to the lack of any objective standard.

Section 307(d)(3) of the CAA requires that "[a]ll data, information, and documents referred to in this paragraph on which the proposed rule relies shall be included in the docket on the date of publication of the proposed rule." The purpose of this requirement is to ensure that the public has a basis on which to evaluate the content of the EPA's proposals. Courts have repeatedly faulted the EPA for withholding key data and studies from the docket until after the public comment period has closed. *See, e.g.*, *West Virginia v. EPA*, 362 F.3d 681, 869 (D.C. Cir 2004); *Kennecott Corp. v. EPA*, 684 F.2d 1007, 1020 (D.C. Cir. 1982). When the "reasonableness and accuracy" of the undisclosed data are critical to the EPA's decision, the failure to disclose the underlying data in a timely manner constitutes reversible error. *Kennecott*, 684 F.2d at 1019-20. Here the EPA makes clear that its own reanalysis played a central role in the proposed visibility standards, meaning that the undisclosed, unpublished data are critical to the EPA's decision. Unless the EPA produces these underlying data and provides another opportunity for public comment, it would be reversible error to adopt the visibility standard as proposed. This need for additional disclosure and comment is particularly problematic given the abbreviated review schedule included in the proposed Consent Decree and could lead a court to find the EPA's standards are arbitrary and capricious, and contrary to law. *See* Nat'l Ass'n of Manufacturers et al., Comments of the Associations Regarding Proposed Consent Decree for NAAQS for PM, Docket ID No. EPA-HQ-OGC-2012-0474 at 7 (July 26, 2012) ("[T]his is simply not enough time for the EPA to do its work fairly, adequately, and in compliance with law.").

The EPA's reliance on its own unpublished data also deprived the CASAC from an opportunity to provide a meaningful review as required by Congress. *See* CAA § 109(d)(2). In fact, the CASAC was unable to provide a review of various aspects of the proposed rule. *See* Proposed Rule, 77 Fed. Reg. at 38987 ("CASAC did not have the benefit of the EPA's recent assessment of the data quality issues associated with the use of continuous FEMs as the basis for hourly $PM_{2.5}$ mass measurements."); *id.* ("Earlier drafts of this Policy Assessment did not include discussion of a calculated $PM_{2.5}$ indicator based on a 24-hour averaging time, CASAC

did not have a basis to offer advice regarding a 24-hour averaging time."). The CASAC's inability to provide statutorily required guidance deprives the EPA of an important source of independent advice. Particularly in cases such as this, where the EPA relies on unpublished and unreviewed data, the CASAC review process mandated by Congress ensures that the EPA's reports are subjected to an independent scientific review in advance of the notice and comment period.

The EPA's reliance on its own reanalysis of selective data also violates Section 108(a)(2) of the CAA because the EPA cannot assure the public that its reanalysis of unpublished data "accurately reflect the latest scientific knowledge." As the D.C. Circuit has noted, "rigorous scientific and public review [is] essential to the preparation of a document [that] 'accurately reflects the latest scientific knowledge . . . ." *Lead Industries Ass'n, Inc. v. EPA*, 647 F.2d 1130, 1157 (D.C. Cir. 1980); *see also American Trucking Ass'ns v. EPA*, 175 F.3d 1027, 1060 (1999) (Tatel J., dissenting) (the EPA can have confidence in epidemiological evidence that is "filtered through peer-reviewed, published studies") *rev'd* by *Whitman v. American Trucking Ass'ns*, 531 U.S. 457 (2001). In *Lead Industries*, the reports on which the EPA ultimately relied were repeatedly submitted to a Science Advisory Board ("SAB") subcommittee and twice returned as scientifically inadequate before a final report was endorsed by the SAB. *Lead Industries*, 647 F.3d at 1138 n.7. Here, the EPA failed entirely to submit the reanalysis to the CASAC for a review of the EPA's summary. Reanalysis of any selective data is likely to be inaccurate because the selection of which data to include biases results. Moreover, the EPA's reanalysis relies upon unpublished data that have not been subject to a peer review process that ensures accuracy within the scientific community. In sum, the EPA's reliance on unpublished and unreviewed data and reanalysis—in lieu of peer reviewed, published reports—cannot accurately "reflect the latest scientific knowledge," as required by the Clean Air Act.

By failing to obtain peer review or CASAC review of the reanalysis on which the secondary visibility standards are based, the EPA acted in contravention of the Clean Air Act. CAA §§ 108(a)(2); 109(d)(2). Furthermore, the EPA's dependence on studies not in the docket violates Section 307(d)(3) of the Clean Air Act. Given the sparse data available regarding visibility issues and the lack of rigorous review of existing data, the EPA should defer consideration of a new secondary standard until the next five-year review when adequate published data may be available. Until existing data are supplemented and appropriately reviewed, there is simply no assurance that the standards proposed by the EPA "accurately reflect the latest scientific knowledge."

D. Designations and Classifications Issues

1. The EPA guidance on area designations for a revised $PM_{2.5}$ NAAQS would be unnecessary and legally inappropriate.

The EPA has indicated that it intends in the future to issue guidance on designating areas as "attainment," "nonattainment," and "unclassifiable" for purposes of a revised $PM_{2.5}$ NAAQS. 77 Fed. Reg. at 39,017 ("The EPA intends to more fully address issues affecting area designations in designations guidance that will be issued around the same time as any revised PM2.5 NAAQS are finalized.").

Such guidance would be unnecessary and legally inappropriate because the Clean Air Act provides a process and legal criteria for designations. The process begins with a recommendation from each state on designating portions of the state as attainment, nonattainment, or unclassifiable:

> By such date as the Administrator may reasonably require, but ***not later than 1 year after promulgation*** of a new or revised national ambient air quality standard for any pollutant under section 7409 of this title, the Governor of each State shall . . . submit to the [EPA] Administrator a list of all areas (or portions thereof) in the State, designating as--
>
> (i) ***nonattainment, any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet)*** the national primary or secondary ambient air quality standard for the pollutant,
>
> (ii) ***attainment***, any area (other than an area identified in clause (i)) that meets the national primary or secondary national ambient air quality standard for the pollutant, or
>
> (iii) ***unclassifiable***, any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

42 U.S.C. § 7407(d)(1)(A) (emphasis added). The EPA may only depart from a state's recommendations if it is "necessary" to do so, and the EPA must give the state 120 days' notice and an opportunity to defend the original recommendation:

> [T]he Administrator may make such modifications as the Administrator deems ***necessary*** to the designations of the areas (or portions thereof) submitted under subparagraph (A) [by the states] (including to the boundaries of such areas or portions thereof). Whenever the Administrator intends to make a modification, the Administrator shall notify the State and ***provide such State with an opportunity to demonstrate why any proposed modification is inappropriate***. The Administrator shall give such notification ***no later than 120 days before the date the Administrator promulgates the designation, including any modification thereto***. . . .

42 U.S.C. § 7407(d)(1)(B)(ii) (emphasis added).

The EPA guidance on designations would be inappropriate because it would supplant state flexibility contemplated by the statute. Congress did not direct the EPA to establish a "one size fits all" approach for designations, through guidance or otherwise. The Clean Air Act gives states and local governments the "primary responsibility" to prevent and control air pollution. 42 U.S.C. § 7401(a)(3). Courts have repeatedly recognized this "primary responsibility," for example, when rejecting the EPA's NAAQS designations that erroneously departed from the state's recommendation (*Catawba County, North Carolina v. EPA*, 571 F.3d 20 (D.C. Cir. 2009) (holding that the EPA's nonattainment designation of Rockland County, New York was arbitrary and capricious)), or when rejecting erroneous EPA disapprovals of state air quality plans (*State of Texas v. EPA*, No. 10-60414 (5th Cir. Aug. 13, 2012) (vacating the EPA disapproval of the Texas "Flexible Permits" air program)). States should retain the full extent of their existing authority to frame area boundaries, subject only to "necessary" revisions by the EPA.

Thus, the EPA should not issue guidance on area designations for a revised $PM_{2.5}$ NAAQS.

2. The EPA should not presume that primary and secondary NAAQS nonattainment areas would be the same.

The EPA has expressed a presumption that the boundaries for primary and secondary NAAQS nonattainment areas should be identical:

> The EPA's examination of air quality monitoring data current at the time of this proposal indicates that, for the proposed levels for primary standards and the secondary $PM_{2.5}$ visibility index standard, it is likely that the vast majority of monitors violating this secondary standard would overlap with monitors violating the primary standards. Since the same types of emissions sources contribute to concentrations affecting attainment status for both the proposed primary and secondary NAAQS, ***the EPA expects that the nonattainment area boundaries in locations with such overlap would be identical***.

77 Fed. Reg. at 39,017 (emphasis added).

Any presumption of identical boundaries would be contrary to the legal standard Congress established for setting nonattainment area boundaries. Nonattainment areas are to include "any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant." 42 U.S.C. § 7407(d)(1)(A)(i). This inquiry is specific to each new or revised NAAQS. However, attainment of the primary and secondary NAAQS can be expected to vary between areas, because of the forms by which the proposed NAAQS are defined—the primary NAAQS is defined by reference to $PM_{2.5}$ mass in the air, while the secondary NAAQS is a visibility index that is affected by individual $PM_{2.5}$ compounds, humidity levels, and other confounding factors. If, in fact, applicable monitoring data show that nonattainment of the primary and secondary NAAQS overlap in a given area, that fact will be self-evident as the state or district prepares its recommended designations. An EPA presumption to that effect would be premature.

Similarly, identification of the sources of emissions that contribute to NAAQS violations is likely to vary between nonattainment of the mass-based primary and visibility-based secondary NAAQS. A region that contains emissions sources leading to NAAQS nonattainment is to be included in the nonattainment area if it "contributes to ambient air quality in a nearby area that does not meet[] the national primary or secondary ambient air quality standard for the pollutant." 42 U.S.C. § 7407(d)(1)(A)(i). However, as the EPA acknowledges, there is considerable heterogeneity in the health effects associated with PM exposure that “may be attributed in part to the potential for different components within the mix of ambient fine particles to differentially contribute to health effects observed in the studies and to exposure-related factors.” 77 Fed. Reg. 38,905. The same heterogeneity should be expected for visibility. As a result, different PM sources with equivalent PM emissions may have very different visibility impacts. Thus, there is no factual or legal no basis for consolidating these statutory criteria for distinct NAAQS.

Further, if the EPA were to suggest now that the boundaries for primary and secondary NAAQS nonattainment areas should be identical, that suggestion would be inconsistent with the statutory process by which states first recommend nonattainment area boundaries. The

designation process begins with each state submitting a list of recommendations to the EPA. 42 U.S.C. § 7407(d)(1)(A). The EPA may modify those recommendations if a modification is "necessary," but the EPA must first give the state at least 120 days' notice and an opportunity to demonstrate why the proposed modification would be inappropriate. 42 U.S.C. § 7407(d)(1)(B)(ii). Thus, the EPA should await states' recommendations, rather than prejudge the end result of the designation process.

Additionally, a presumption of identical primary and secondary NAAQS nonattainment area boundaries would unnecessarily complicate air quality planning. If any area that did not meet or contributed to air quality that did not meet either NAAQS were included in the nonattainment area, primary and secondary NAAQS nonattainment areas would tend to be made larger.

Larger nonattainment areas would complicate air quality planning by making it difficult for individual locations that attain the relevant NAAQS (or cease contributing to nearby nonattaining air quality) to be designated or redesignated to attainment. As an example, a county not attaining the secondary NAAQS might be included in one nonattainment area with other counties violating the primary NAAQS. If the county attains the secondary NAAQS, it should be redesignated to attainment under 42 U.S.C. § 7407(d)(3). However, including the county in an unrelated nonattainment area would delay the redesignation until the entire multi-county area attains both of the NAAQS. This delay is not contemplated by the Clean Air Act. In the meantime, the area would remain subject to burdensome and unnecessary nonattainment planning and permitting requirements. The statute does not support the EPA in "simplifying" the nonattainment area boundary determination with this effect, particularly in a manner that would apply nationwide and without regard to the individual state choices and recommendations developed through the statutory designation process.

3. Designations should be based on monitoring data, rather than modeling predictions.

The EPA has indicated that it expects area designations for the NAAQS to "be based on 3 consecutive years of certified air quality monitoring data from the years 2010 to 2012, or 2011 to 2013." 77 Fed. Reg. at 39,017. The Associations agree with the EPA that area designations should be based on monitoring data, and urge the EPA not to base designations on modeling predictions. Modeling predictions typically overestimate ambient concentrations and thus would bias designation decisions in favor of nonattainment status, notwithstanding the statutory criterion that an area only be designated nonattainment if it "does not meet" the NAAQS (or affects a nearby area that does not meet the NAAQS), *see* 42 U.S.C. § 7407(d)(1)(A)(i). In contrast, monitoring can definitively answer whether the air quality actually meets, or does not meet, the applicable NAAQS. The EPA regulations at 40 C.F.R. Part 58, which are developed through notice and comment rulemaking, provide a basis for judging the adequacy of a monitoring network. Further, the EPA's longstanding practice in past designation actions appears to be to designate areas nonattainment only where monitoring data shows an exceedance of the NAAQS. There is no reason to depart from this practice for $PM_{2.5}$.

E. The truncated review period included in the proposed consent decree is too short and will result in a rule that is arbitrary and capricious.

In the proposed consent decree, the EPA attempts to make up for earlier delays in completing its five-year review of the PM NAAQS by agreeing to a truncated and impractical time period for consideration of public comments. Many of the Associations submitted

comments, which we incorporate herein, that explain in detail the challenges posed by the proposed consent decree.[8] In order to sign a final rule by December 14, 2012, the EPA would have only 100 days to review and evaluate all of the comments—including any new scientific and technical data discussed in the comments, prepare a notice of final rulemaking explaining and justifying all of its decisions in the final rulemaking, respond to relevant comments and arguments, write a response to comments document, and coordinate as appropriate with the Office of Information and Regulatory Affairs. Under the compressed time schedule in the proposed consent decree, the Agency will only be able to give a passing glance to the voluminous and technical comments that it will receive. Such a response to public comments would be arbitrary and capricious, as the EPA has an obligation under the Clean Air Act to fully consider all of the evidence before it, including the information provided by commenters.

First, the EPA has an obligation to fully consider and respond to the comments it receives on any proposed rulemaking. An agency's rule is considered arbitrary and capricious "if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view of the product of agency expertise." *Motor Vehicle Mfrs. Ass'n, Inc. v. State Farm Mut. Ins. Co.*, 463 U.S. 29, 43 (1983). The public comment process plays a critical role in ensuring that agency decisions are not arbitrary and capricious. "[T]he point of notice-and-comment rulemaking is that the public comment will be considered by an agency and the agency may alter its action in light of those comments." *Hall v. EPA*, 273 F.3d 1146, 1163 (9th Cir. 2001). As explained below, the unnecessarily truncated review period will prevent the EPA from fully considering the arguments presented in comments as well as the data and evidence on which those comments rely. This abbreviated review will prevent the EPA from fully considering important aspects of the problems raised by commenters and may well result in a final rule that runs counter to the full body of evidence before the Agency. Such an approach would be arbitrary and capricious.

Second, the EPA itself has persuasively argued that a compressed three-month review period will prevent the Agency from adequately reviewing the thousands or even tens of thousands of comments that it will receive. Assistant Administrator McCarthy explained that this rulemaking is particularly complicated and that the EPA expects "more time and effort are needed to interpret and apply the science . . . compared to the last review, not less." *Am. Lung Ass'n v. EPA*, Case Nos. 1:12-cv-00243, 1:12-cv-00531, Decl. of Regina McCarthy at 14 (D.D.C. May 4, 2012) ("McCarthy Decl."). The Agency emphasized that the current review involves more standards than past PM NAAQS reviews, including a "separate and distinct" $PM_{2.5}$ secondary standard. McCarthy Decl. at 15-16. The Agency also explained that "a very large body of new science" has been developed since the last revisions and it anticipates the comments will cite "numerous new studies." *Am. Lung Ass'n v. EPA*, Defs.' Memo In Opposition to Pl. ALA's Application for Preliminary and Permanent Injunction and in Support of Cross-Mot. For Summ. Judg. as to Remedy at 15, 18. In light of this complexity, Assistant Administrator McCarthy asserted that completing the rulemaking by August 15, 2013 was the "most expeditious schedule" the EPA could possibly meet. McCarthy Decl. at 16-17.

Third, the Consent Decree's truncated timeline is inconsistent with the EPA's past experience with PM NAAQS rulemakings. As the Agency itself has acknowledged, the mere five and a half months from proposal to final rule is "virtually unprecedented in a NAAQS

[8] Comments of the Associations Regarding Proposed Consent Decree for National Ambient Air Quality Standards for Particulate Matter, Docket ID No. EPA-HQ-OGC-2012-0474 (Attachment B).

rulemaking." *Am Lung Ass'n v. EPA*, Defs.' Reply at 2. In the past three PM NAAQS revisions, the EPA spent an average of 363 days responding to public comments.[9] In the 2006 revision, the EPA received more than 120,000 public comments and produced a 435 page, single spaced response to comments document. McCarthy Decl. at 13. Given the complexity of this proposed revision, it is likely that the number of comments will exceed that in the 2006 revision, requiring an even greater commitment of resources for an adequate consideration and response. In light of the EPA's past experience, there is no basis for asserting that such a review can be completed in a fraction of the time the EPA has needed in the past.

The EPA's own assessment of this rulemaking, as well as its past experience, clearly demonstrates that 100 days will be insufficient to fully address the voluminous comments that it will receive in response to this proposed rule. Adopting a final rule under such circumstances would be arbitrary and capricious and would require the EPA to complete yet another rulemaking. Thus, the expedited schedule included in the Consent Decree will not only result in an unlawful rule, but will frustrate the EPA's purpose by further delaying any necessary revisions to the PM NAAQS.

F. The EPA should not revise the PM NAAQS until the EPA Inspector General's ongoing investigation is complete and the public can be assured that the CASAC has provided objective/impartial advice as required under Section 109(d)(2) of the CAA.

In light of the current uncertainty surrounding the CASAC's review of the EPA's PM NAAQS, the Agency should delay its review process until the EPA IG has concluded its investigation. The CASAC was created by Congress to serve as an "independent scientific review committee" that could advise the EPA regarding, among other things, NAAQS revisions. 42 U.S.C. § 7409(d). The CASAC plays a central, although not dispositive,[10] role in the EPA's NAAQS revision process. Congress directed the CASAC to "'advise the administrator of areas in which additional knowledge is required to appraise the adequacy and basis of existing, new, or revised [NAAQS]' and to 'describe the research efforts necessary to provide the required information[.]'" *American Trucking Ass'ns v. EPA*, 283 F.3d 355, 359 (D.C. Cir. 2002)(quoting 42 U.S.C. § 7409(d)(2)(C)). Before issuing or revising NAAQS, the EPA must "set forth or summarize and provide a reference to any pertinent findings, recommendations, and comments by [the CASAC]." 42 U.S.C. § 7607(d)(3). The EPA is not bound to the CASAC's recommendations, so long as it provides "an explanation for the reasons for such differences." *Id.* Thus, the CASAC serves as an independent body that provides advice to the EPA throughout the rulemaking process and also provides the public with an independent analysis that can be used to understand and critique the Agency's proposals during the notice and comment period.

The CASAC's review played a central role in the EPA's assessment and final proposal to revise the PM NAAQS. In fact, the record is replete with references to the EPA's reliance on the CASAC's recommendations. The circumstances here, however, raise significant concerns regarding the EPA's reliance on the CASAC. As the EPA is aware, the creation and composition of the PM NAAQS CASAC Panel is currently under investigation by the EPA IG. *See* Letter from Arthur A. Elkins, Jr., EPA IG, to Hon. James M. Inhofe (Mar. 8, 2012). In two letters to the EPA IG, Sen. Inhofe raised a series of questions regarding the independence and impartiality of the

[9] The 2006 review lasted from April 17, 2006 until October 17, 2006 (183 days). 71 Fed. Reg. 61,144 (Oct. 17, 2006). The 1997 review lasted from February 18, 1997 until July 18, 1997 (150 days). 62 Fed. Reg. 38,652 (July 18, 1997). The 1987 review lasted from June 5, 1985 until July 1, 1987 (756 days). 52 Fed. Reg. 24,634 (July 1, 1987).
[10] *See supra* p. 10, describing EPA's authority to depart from CASAC's recommendations.

CASAC subcommittee that the EPA assembled to review the PM NAAQS revision process. *See* Letter from Hon. James M. Inhofe to Arthur A. Elkins, Jr, EPA IG (Aug. 4, 2011); Letter from Hon. James M. Inhofe to Arthur A. Elkins, Jr, EPA IG (Dec. 19, 2011). In response to these letters, the EPA IG commenced an investigation that would review, among other things, the following questions:

- Did EPA violate its own guidance on peer review by selecting members for the 2011 PM NAAQS Panel who had made public pronouncement against the standard under review?

- What percentage of those reappointed [from the 2006 Panel] have made public statements opposing or supporting the 2006 annual standard?

- Was the 2011 PM Review Panel balanced in terms of viewpoints expressed in accordance with the requirements of FACA?

- It is permissible or acceptable under current Administration policy to select the authors of the main studies on which EPA relied to participate in the review Panel? What were EPA's stated reasons for doing so?

Letter from Arthur A. Elkins, Jr. to Hon. James M. Inhofe at 3.

The issues included in the EPA IG's investigation go to the core of the CASAC's purpose—to provide independent and unbiased advice to the EPA. If the EPA IG finds that the PM NAAQS Panel assembled by the EPA was selected on the basis of an assumed bias toward the EPA's preferred policy choice, the credibility of its recommendations would be called into question and the EPA's reliance on those recommendations would be arbitrary and capricious. But regardless of the EPA IG's final conclusions, the CASAC's role as an objective science review body is compromised and will remain so until the investigation is complete. Under these circumstances, it would be irresponsible for the EPA to finalize the PM NAAQS revision until the EPA IG's investigation is complete. If the EPA's Inspector General finds the Panel selection process defective, the EPA would have an opportunity to correct its error by convening a new, impartial Panel to conduct an additional review. To act in the face of such uncertainty would be irresponsible and necessitate a finding that the rulemaking process violated the Clean Air Act if the EPA IG finds the Panel selection process improper.

G. The EPA's proposed revisions to monitoring requirements to focus on roadside monitoring are improper because they likely would produce results that would not reflect ambient conditions.

The EPA's proposed reliance on near-road monitoring is also extremely problematic, as it would be focus on maximum, rather than ambient, $PM_{2.5}$ concentrations. When a monitoring site is located in close proximity to a "unique dominating local $PM_{2.5}$ source," The EPA's current rules only permit comparisons to the 24-hour standard. 40 C.F.R. § 58.30; 77 Fed. Reg. at 39,008. The EPA proposes to "clarify[]" that monitors near mobile sources, including highways "should not be considered 'unique,'" and can be compared to the annual NAAQS. Proposed Rules, 77 Fed. Reg. at 39,008. In addition, the EPA would require "near-road" monitors in the 52 metropolitan areas with over a million people. *Id.* at 39,010. As a result of these changes, compliance with annual NAAQS standards in virtually every metropolitan area will be based on $PM_{2.5}$ data that substantially overestimates the ambient conditions experienced by local residents.

The purpose of identifying and establishing NAAQS for criteria pollutants including $PM_{2.5}$ is to ensure that states can maintain *ambient* air quality levels sufficient to protect public health. The EPA's reliance on near-road monitoring would ignore the ambient $PM_{2.5}$ concentrations experienced by citizens and instead base attainment and non-attainment decisions on heightened $PM_{2.5}$ measurements associated with environmental conditions that few, if any, citizens would actually experience on an annual basis. As the EPA recognizes, "there are gradients in near-roadway $PM_{2.5}$ that are most likely to be associated with heavily traveled roads, particularly those with significant heavy-duty diesel activity." 77 Fed. Reg. at 39009. As a result of this gradient, $PM_{2.5}$ concentrations will drop dramatically as one moves away from heavily traveled roads, meaning that the highest concentrations cannot represent the *ambient* $PM_{2.5}$ concentrations experienced by the vast majority of people. Nonetheless, the EPA proposes that the mandatory near-road monitors "be located at the elevation and distance from the road where *maximum* concentration of $PM_{2.5}$ occurs in this environment. *Id.* at 39010. A monitoring protocol designed to measure *maximum* concentrations will systematically overstate *ambient* $PM_{2.5}$ concentrations and should not be compared to annual PM standards for regulatory purposes. To establish a monitoring protocol that intentionally overestimates ambient $PM_{2.5}$ concentrations would be arbitrary and capricious and contrary to the Clean Air Act.

In any event, the existing Part 58 rules regarding monitoring at unique, micro- and middle-scale hotspots are sufficient to protect the public health. The existing regulations provide adequate data to determine the typical concentrations in populated areas and the general background concentration levels. *See* 40 C.F.R. Subpart G. App'x. D. When data are representative of typical concentrations that residents in populated areas would experience on a regular basis, they are is compared to the annual standard. However, because higher concentrations associated with localized hotspots will only be experienced sporadically (if at all), they are instead compared to the 24-hour standard, which is designed to address acute rather than chronic exposure. The EPA identifies no justifiable reason to depart from current practice by placing monitors at locations of maximum $PM_{2.5}$ concentrations and then treating those data as representative of ambient air quality conditions in the region. Should the EPA pursue installing near-road monitors, we urge the Agency to clearly designate these "research" monitors and clearly articulate that these monitors are not to be compared against NAAQS for non-attainment designation purposes.

H. The EPA has failed to show that the elimination of spatial averaging is requisite to protect the public health.

Since it was first instituted in 1997, the form for the annual $PM_{2.5}$ standard has permitted spatial averaging of monitoring data across multiple monitoring sites. 77 Fed. Reg. at 38,924. The ability to employ spatial averaging has always been subject to a series of technical constraints. Those constraints were tightened in the 2006 revision in light of "the potential for disproportionate impacts on potentially at-risk population, which found the that highest concentrations in an area tend to be measured at monitors located in areas where the surrounding population is more likely to have lower education and income levels and higher percentages of minority populations." *Id.* (citing 71 Fed. Reg. 61,166 (Oct. 17, 2006)). Thus, after recognizing these disproportionate impacts, the EPA implemented a series of more stringent requirements for spatial averaging to ensure that the standard remained requisite to protect the public health.

In this proposed rule, the EPA proposes to revise the form for the annual $PM_{2.5}$ standard to eliminate spatial averaging entirely. *Id.* at 38,925. Instead, "for each area with multiple monitors, the appropriate reporting monitor with the highest design value would determine the

attainment status for that area." *Id.* The EPA also notes that it is changing its monitoring protocol and, for urban areas, will require near-road monitoring that is designed to capture maximum, rather than ambient $PM_{2.5}$ concentrations. This sweeping change in the nature of the $PM_{2.5}$ form will have significant impacts and could dramatically increase the number of areas deemed to be nonattainment area.

However, the EPA has failed to demonstrate that the proposed form is requisite to protect public health. First, nothing in the data cited by the EPA suggests that the prior form was no longer sufficient to protect the public health. *Whitman v. American Trucking Ass'n*, 531 U.S. 457, 473 (2001). As the EPA acknowledges, it was already aware in 2006 that monitors with the highest readings were located near at-risk populations. Thus, the post-2006 studies on which the EPA relies merely confirm the EPA's prior assessment. As a result, the EPA has failed to identify any change in the latest scientific knowledge between 2006 and 2012 which would justify any change at all in the $PM_{2.5}$ form as it pertains to spatial averaging.

In fact, the EPA refers to use of health effects studies that specifically use spatial average multi-monitor values (rather than the single highest monitor) as a tool for attempting to evaluate health effects. Thus, rather than discouraging local areas from siting and using of multiple monitors to determine ambient PM concentration, the EPA should instead reaffirm the benefits of a spatial averaging approach and eliminate provisions that constrain the use of spatial averaging. The Associations believe this would actually make the NAAQS *more* consistent with the approaches used in the health effect studies upon which the EPA relies. Continuing the use of spatial averaging would reward areas that have invested in more ambient air quality monitoring to better understand and assess public health, rather than providing an incentive for state/local decision makers to remove population based monitors that are unnecessary under the proposed single-monitor approach but provide valuable information about community-wide ambient PM concentrations.

Further, assuming *arguendo* that the studies cited by the EPA rendered the 2006 form insufficient to protect the public health, the EPA failed to consider whether modifying—rather than eliminating—the constraints on spatial modeling would have been sufficient to protect the public health. If so, then elimination of spatial averaging would go beyond what is requisite to protect the public health. Here, it is likely that the EPA's proposed form goes beyond what is requisite. When combined with the EPA's revised monitoring protocol, the elimination of spatial modeling will essentially subject entire metropolitan areas to nonattainment designations based on the *maximum* measurable $PM_{2.5}$ concentrations. Thus, the single, highest monitoring reading will not be representative of the community as a whole, or even of the at-risk population that the EPA is seeking to protect. As the Associations have explained, NAAQS are intended to protect sensitive subpopulations, but not the most sensitive individuals within those subpopulations. *See supra* p. 7-8. By failing to provide for spatial averaging while simultaneously seeking to maximize $PM_{2.5}$ concentrations in monitoring results, the EPA is doing just that. As a result, its proposed form goes far beyond what is requisite to protect the public health.

I. The EPA is correct in proposing to retain the existing 24-hour $PM_{2.5}$ standard at 35µg/m^3.

The Associations support the EPA's proposal to retain the existing 24-hour $PM_{2.5}$ standard at 35 µg/m^3. We agree with the EPA's assessment that recent studies of short-term PM exposure do not support a revision to the existing standard. Instead, these studies generally confirm the Administrator's prior judgment in setting the 24-hour standard and, due to the uncertainty observed at lower concentrations, concentrations cannot support a downward

revision. Thus, the studies considered by the EPA do not offer a reasoned basis to change the 24-hour standard. *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 42

First, the scientific studies produced since the EPA's last review in 2006 do not support a revision to the 24-hour standard. As explained above, recent studies suggest that estimates of risk from $PM_{2.5}$ are declining, rather than increasing. *See supra* p. 9. At the same time, the uncertainties associated with short-term $PM_{2.5}$ exposure—particularly at levels below 35 $\mu g/m^3$—do not support a downward revision of the 24-hour standard. Thus, although a few studies suggested a positive correlation between lower short term $PM_{2.5}$ concentrations and health impacts, the EPA appropriately dismissed these results:

> Many of these studies had significant limitations (e.g. limited statistical power, limited exposure data) or equivocal results (i.e. mixed results within the same study area) as briefly identified above and discussed in more detail in the Policy Assessment. Other studies reported positive but not statistically significant results or null associations also in areas that likely would have met the current suite of $PM_{2.5}$ standards. *Overall, the entire body of results from these single-city studies is mixed, particularly as 24-hour 98th percentile concentrations go below 35 $\mu g/m^3$*.

77 Fed. Reg. at 38,937-38. As a result, the EPA appropriately concluded that such studies were "unsuitable to form the basis for setting the level of a 24-hour standard." The Associations agree with the EPA that the latest scientific knowledge does not support a downward revision to the 24-hour standard.

In addition, the EPA's overall policy approach, which places a primary emphasis on annual standards, provides additional protection against short-term $PM_{2.5}$ exposure and supports the EPA's proposal to retain existing 24-hour standards. In designing the PM NAAQS standards, the EPA intended that the annual standard would "generally control the overall distribution of 24-hour exposure levels, resulting in fewer and lower 24-hour peak concentrations." 77 Fed. Reg. at 38,901 n.20. Thus, an area in attainment for annual $PM_{2.5}$ standards would, in most circumstances, also meet the 24-hour standard. This result has been borne out in practice, as virtually every area in attainment for the annual standard is also in attainment for the 24-hour standard.[11] As a result, the EPA does not need to lower the 24-hour standard further in order to ensure that the standard will protect the pubic health with an adequate margin for safety.

J. The EPA is correct in proposing to retain the existing 150 $\mu g/ m^3$ PM_{10} standard.

For the same reasons, the Associations support the EPA's proposal to maintain the primary hourly PM_{10} NAAQS of 150 $\mu g/m^3$. The Associations believe that the considerable scientific uncertainties inherent in the studies of public health effects from coarse PM, which provide limited support for a PM_{10} NAAQS at the existing PM_{10} NAAQS level of 150 $\mu g/m^3$, definitively do not support a more stringent standard of any kind. In the period of time since the EPA's precautionary determination in 2006 to retain the 24-hour standard of 150 $\mu g/m^3$, the body of scientific evidence linking coarse PM and health effects has not changed substantially. Indeed, the unresolved uncertainties that plague $PM_{10-2.5}$ epidemiological and toxicological

[11] *See* EPA, Fine Particle ($PM_{2.5}$) Designations, *available at* http://www.epa.gov/airquality/particlepollution/designations/index.htm.

studies of the health impacts of coarse PM raise the question of whether the existing standard is more stringent than necessary to protect the public health. If the existing standard continues to be excessively precautionary, then a further reduction in the standard is more than would be necessary to protect the public health. Therefore, the Administrator's proposed conclusion that the current PM_{10} NAAQS continues to be requisite, and a further reduction in the level of the standard is not necessary to protect the public health, is rational and supported by the record.

III. Adoption of the Proposed Rule Would be Arbitrary and Capricious Due to the Technical Deficiencies in the EPA's Analysis.

A. The EPA's proposed revision of the annual $PM_{2.5}$ NAAQS is inappropriately based on a failure to consider relevant and significant aspects of the problem and violates the standards under the Clean Air Act.

1. The downward revision of the primary $PM_{2.5}$ NAAQS does not conform to the Clean Air Act standards.

Although the EPA has an obligation to *review* NAAQS at five-year intervals, the Agency is under no obligation to *revise* the NAAQS during each review process. *See Environmental Defense Fund v. Thomas*, 870 F.2d 892, 898 (2d Cir. 1989); *see also* 42 U.S.C. § 74090(b) (standards "*may* be revised in the same manner as promulgated"). Thus, the Agency's authority to revise NAAQS is not without bounds and must conform to the same requirements that apply when NAAQS are initially issued.

First, any new or revised standard proposed by the EPA must "accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare . . . ." *See Lead Industries Ass'n, Inc. v. EPA*, 647 F.2d 1130, 1137 (D.C. Cir. 1980). In the context of a revised NAAQS, the EPA must consider whether new scientific knowledge developed since the last review process differs from that which was previously relied upon. If the updated science merely confirms the prior scientific conclusions or is unsettled, there is no basis for revising the existing NAAQS.

Second, to the extent that there is new scientific information available, the EPA must consider whether it alters the ambient standards that are "requisite to protect public health. 42 U.S.C. § 7409(b)(1). As the Supreme Court has recognized, requisite "means sufficient, but not more than necessary." *Whitman v. American Trucking Ass'n*, 531 U.S. 457, 473 (2001). Thus, the mere fact that new scientific studies have been developed does not authorize the EPA to issue a downward revision to a NAAQS. Unless the newly discovered scientific knowledge demonstrates that the existing standard is no longer sufficient, the EPA must retain the existing NAAQS.

The EPA's proposed rule violates both of these principles. First, the EPA's analysis and proposed rule fail to accurately reflect the latest science because the Agency improperly relied on a narrow selection of scientific studies that support its policy goals, while ignoring other technically superior studies that reach a contrary result. Thus, at best, the state of scientific knowledge is unsettled and cannot support a change from current standards. Furthermore, when taken as a whole, the current state of the science suggests that the existing standard of 15 µg/m3 is sufficient (and therefore requisite) to protect the public health. As a result, there is simply no basis for the EPA to revise the PM NAAQS at this time.

2. The EPA's proposed annual standard does not accurately reflect the latest scientific knowledge.

The EPA's analysis and recommendations, as reflected in the Policy Assessment and proposed rule, fail to "accurately reflect the latest scientific knowledge." 42 U.S.C. 7408(a)(2). Instead of engaging in an objective review of the science, the EPA assumes causality between $PM_{2.5}$ exposure and mortality and morbidity and then selectively relies on studies that support this predetermined result. *See* 77 Fed. Reg. at 38,901 (the EPA "place[ed] greatest weight on those short-term studies that reported clearly statistically significant associations with mortality and morbidity effects."). However, as the D.C. Circuit has explained, "there is no APA precedent allowing an agency to cherry-pick a study on which it has chosen to rely in part." *American Radio Relay League, Inc. v. FCC*, 524 F.3d 227, 237 (D.C. Cir. 2008). As a result of its ends-based scientific assessment, the EPA relies on a selective set of published studies that suffer from significant weaknesses. Those weaknesses are discussed briefly below.

- Harvard Six Cities Study: The data collected in the Harvard Six Cities study are insufficient to identify independent associations between $PM_{2.5}$ and other confounding co-pollutants. In addition, follow-up studies reporting a correlation between decreased $PM_{2.5}$ concentrations and decreased mortality failed to account for the increasing age of the study subjects. *See* Villenueve et al. (2002). Further, discrepancies in results among the six cities in the study produce considerable uncertainty.

- American Cancer Society Cancer Prevention Study: The initial study failed to account for ecological confounders, including co-pollutants and in a subsequent two-pollutant model, the association between PM and mortality was statistically insignificant. Krewski et al (2000). Other analyses of the study suggest that differences in mortality rates may be more closely associated with other occupational and environmental risk factors. Pope et al. (2002); Grahame and Schlesinger (2005).

- Women's Health Initiative: This study also failed to account for the impact of a series of co-pollutants, even though they were measured. In addition, the study failed to address critical differences between $PM_{2.5}$ associations within and between cities that question the causal link between $PM_{2.5}$ and mortality. Jerrett and Burnett (2007).

- Medicare Cohort Air Pollution Study: This study failed to address the confounding affects of environmental co-pollutants or the smoking history of individual subjects.

Despite the compelling body of literature critiquing these four studies—which has been provided to the EPA during its review process—the Agency has choosen to rely almost exclusively on these studies. Given these critical flaws, the studies described above cannot accurately reflect the latest scientific knowledge.

In addition, the EPA has systematically dismissed or ignored the growing body of literature that critiques or contradicts the findings of the studies described above. In many cases, the studies that the EPA dismisses are highly reliable and the Agency's justifications for dismissing them appear disingenuous. For example, the Agency dismisses Janes et al (2007) because it only included three years of data, yet endorsed Miller et al (2007), which only

included one year of data. By failing to apply consistent, science-based criteria for accepting scientific studies, it is clear that the EPA has relied on selective, ends-based criteria that supports its policy preference, rather than engaging in an objective review of the full range of scientific perspectives on the potential health effects of PM exposure.

A review of existing literature shows a large and growing body of literature that questions whether there is a causal relationship between $PM_{2.5}$ exposure and mortality. These studies, which incorporate other confounding factors, including co-pollutants, suggest that the observed correlation between PM exposure and mortality is in fact spurious. While the EPA has already been made aware of these studies, one study—published after the EPA's Integrated Scientific Assessment was complete—requires additional explanation.[12] Greven et al (2011) directly addressed the problem of confounding factors by decomposing observed associations between PM exposure and morality into distinct spatial and temporal scales. The study concluded that national-scale associations were highly likely to be confounded due to inadequate control for other variables. At the local level, the study was unable to detect any change in mortality resulting from a reduction in $PM_{2.5}$. Greven e al (2011) was a follow-up study that confirmed the results in a prior study of PM exposure using the same methodology. Janes (2007). This earlier study reached the same conclusion regarding the role of confounding factors. Once the confounding factors were accounted for, the study concluded that "there is little evidence of an association between 12-month exposure to $PM_{2.5}$ and mortality." *Id.* These studies, which directly contradict the assumed causal relationship that forms the basis for the EPA's proposed revisions to the PM NAAQS, represent the latest and most comprehensive scientific knowledge regarding PM exposure and mortality and cannot be ignored by the EPA.

The EPA also ignores the latest scientific knowledge in asserting a linear relationship between $PM_{2.5}$ concentrations and mortality. Based on a limited and selective review of PM exposure studies, the EPA concludes that "there is no evidence to support the existence of a threshold below which effects would not occur." 77 Fed. Reg. at 38,918. In reaching this conclusion, the EPA ignores a number of recent studies which have found support for such a threshold effect, including Stylianou and Nicolich (2009), Gamble and Nicolich (2006), Koop and Tole (2003), and Abrahamowicz et al (2003).. These studies were ignored entirely by the EPA in the proposed rule.

This recent research regarding the role of confounding variables and the likelihood of threshold effects in $PM_{2.5}$ exposure demonstrates the uncertainty and challenges that must be overcome in order to develop scientifically sound policy and regulations for $PM_{2.5}$. Rather than addressing these scientific studies and allowing them to inform the EPA's review process, the Agency chose to ignore them and focus instead on a select group of studies that support its policy preferences. As a result, the EPA's review process and any standard that results from it will be arbitrary and capricious. The Clean Air Act requires the EPA to develop standards that "accurately reflect the last scientific knowledge" and a selective approach that dismisses all contrary evidence cannot satisfy this standard. Instead, the EPA must grapple with the uncertainties and even inconsistencies in the scientific literature, even if the end result will not justify a downward revision of the NAAQS. *See American Radio Relay League*, 524 F.3d at 237 ("Where, as here, an agency's determination 'is based upon a complex mix of controversial and uncommented upon data and calculations,' there is no APA precedent allowing an agency to cherry-pick a study on which it has chosen to rely in part." (citations omitted)). Therefore, the

[12] Under the Clean Air Act, the EPA is required to base its decision on the "latest scientific knowledge," 42 U.S.C. § 7408(b)(1), and must also consider as part of the administrative record the information provided during the comment period. Therefore, EPA cannot dismiss Greven et al (2011) as untimely simply because it was published after the Integrated Scientific Assessment was completed.

Associations urge the EPA to reconsider its proposal in light of all of the relevant evidence and only then determine if a revised NAAQS is necessary to protect the public health.

B. Even under the EPA's analysis of the science in the record, a lower annual standard is not requisite to protect the public health because the standard will produce no meaningful public health benefit and could incur health dis-benefits.

Even if, hypothetically, the EPA's analysis of the underlying science regarding $PM_{2.5}$ is accepted, this alone does not establish that a lower annual standard is requisite to protect the public health. In the past year, the EPA has issued or proposed a series of regulations under the Clean Air Act that will produce significant reductions in $PM_{2.5}$ concentrations along with a series of important health benefits. As a result of these regulations, the EPA expects significant reductions in $PM_{2.5}$ emissions, even in the absence of a new NAAQS for $PM_{2.5}$. As a result of these reductions in $PM_{2.5,}$ the EPA cannot establish that, on its own, the revised NAAQS standard will have significant impact in reducing $PM_{2.5}$ emissions. If the EPA cannot establish that the proposed rule will independently reduce $PM_{2.5}$ concentrations, there is no basis to assert that the proposed rule will be "requisite to protect the public health."

Over the past year, the EPA has issued or proposed three regulations which it says will produce dramatic decreases in $PM_{2.5}$ emissions over time. In the Mercury Air Toxics Standards rule, the EPA asserted that changes to the regulation would reduce $PM_{2.5}$ emissions by 52,000 tons per year. 77 Fed. Reg. 9,304, 9,424 (Feb. 16, 2012).[13] As a result, the EPA claims that premature deaths will be reduced by between 4,200 and 11,000, work loss days will be reduced by 540,000, and total monetized benefits will exceed $90 million. 77 Fed. Reg. at 9429-30. Likewise, the EPA asserts that the proposed Boiler MACT rule would allegedly reduce $PM_{2.5}$ emissions by 25,600 tons per year. 76 Fed. Reg. 80,598, 80,623 (Dec. 23, 2011).[14] The EPA claims that these reductions will eliminate 3,100 to 8,000 premature deaths and 390,000 work loss days, and produce $67 million in benefits. *Id.* As these examples demonstrate, many of the EPA's ongoing regulatory initiatives are projected to produce significant reductions in $PM_{2.5}$ emissions and result in significant health benefits. Other regulatory initiatives, such as the proposed New Source Performance Standards for GHG emissions from Electricity Generating Units ("GHG NSPS") and the recently vacated Cross-State Air Pollution Rule,[15] as well as the Clean Air Interstate Rule that continues to operate, also involved projections of significant $PM_{2.5}$ reductions.

In addition declining due to the EPA's other regulations, $PM_{2.5}$ emissions are expected to decline in response to anticipated changes in energy markets. According to a recent study by the EPA, "existing and anticipated economic conditions" will cause electricity generators to transition from coal- to natural gas-fired power plants.[16] But even this study fails to fully incorporate the recent reductions in natural gas prices that are likely to further advantage natural gas as compared to coal. In fact, recent private estimate suggest that, due to the combination of regulatory and market forces, coal usage will drop by 100 million tons by 2020.[17]

---

[13] In addition, EPA projects that SO_2 emissions will be reduced by 1.4 million tons per year. *Id.*
[14] In addition, EPA projects that SO_2 emissions will be reduced by 558,000 tons per year. *Id.*
[15] This rule, because it was vacated, will obviously not be reducing PM concentrations. However, the Clean Air Interstate Rule remains in place, and will presumably make measurable reductions that function as co-benefits in place of CSAPR.
[16] EPA, Regulatory Impact Analysis for the Proposed Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Generating Units at ES-3 (March 2012).
[17] Moody's Investor Service, Announcement: Moody's: U.S. coal industry outlook turns negative on weak power demand (May 8, 2012), *available at* http://www.moodys.com/research/Moodys-US-coal-industry-outlook-turns-negative-on-weak-power--PR_245222 (last visited Aug. 30, 2012).

Thus, even in the absence of additional regulations, such as a revised NAAQS, $PM_{2.5}$ would decline over time as coal-fired power plants are replaced with lower-emission gas-fired plants. This outcome is even more certain, as the EPA regulations, such as the proposed GHG NSPS, promote, if not mandate, that all new facilities combust natural gas rather than coal.

In its assessment of the costs and benefits of the proposed PM NAAQS rule, the EPA fails to consider the $PM_{2.5}$ emissions reductions that may occur anyway as a result of related regulatory programs that have been recently issued or proposed.[18] As a result, it is likely that the EPA's projections here double-count the benefits associated with reducing emissions of $PM_{2.5}$. In the event that the expected reductions in $PM_{2.5}$ would occur anyway, as a result of different regulatory programs, they should not be attributed to the EPA's proposed actions here. Thus, before issuing a final rule, the EPA must reassess the costs and benefits of a revised PM NAAQS, eliminating the benefits that will occur anyway as a result of different regulatory programs. Only by isolating the incremental benefits that a revised NAAQS would provide can the EPA determine whether such a proposal is requisite to protect the public health. If instead, the EPA concludes that the PM reduction benefits would occur anyway as a result of other regulatory programs, then a revised NAAQS would offer no additional health benefits and cannot be requisite to protect the public. This will almost certainly be the result here.

Furthermore, issuing a revised lower PM NAAQS that is both complicated and legally infirm will produce regulatory delay and uncertainty that could result in adverse rather than beneficial health impacts. After the D.C. Circuit's remand of the 2006 PM NAAQS revision in 2009, it has taken the EPA more than three years to issue another proposed rule and resulted in more than six years of regulatory uncertainty. Under such conditions, members of the regulated community face considerable uncertainty about the future regulations and are less likely to invest in new facilities or pollution control equipment until this regulatory uncertainty is settled. Thus, issuing a final rule that promotes regulatory and legal uncertainty may delay or even foreclose investments that could reduce overall PM emissions from the manufacturing sector.

C. Should the EPA decline to maintain the annual $PM_{2.5}$ standard, there is no basis for the EPA selecting a standard lower than 13 µg/ m^3 because of the utter lack of any demonstrated health benefits at lower levels.

As explained above, a downward revision of the annual PM 2.5 standard would be arbitrary and capricious because it not supported by the latest scientific knowledge or requisite to protect human health. However, in the event that the EPA declines to maintain the existing annual $PM_{2.5}$ standard, it should not select a standard that is lower than 13 µg/m^3 because there are no demonstrated health benefits at lower levels. Neither the EPA's analysis, the CASAC's review, nor relevant case law provides any support for a value below 13 µg/m^3. In addition, the uncertainty in the scientific literature and conservative assumption incorporated into the EPA's own assessment assures that a standard of 13 µg/m^3 will provide a more than adequate margin of safety.

First, the EPA offers no direct evidence to support an annual standard lower than 13 µg/m^3. The EPA acknowledges in the proposed rule that even this upper limit of its proposal is below the long-term mean concentrations in the primary reports on which it relies. In fact, the EPA only cites one study which suggests a mean ambient $PM_{2.5}$ concentration lower than 13 µg/m^3—the 12.9 µg/m^3 reported by Cynthia Curl via personal communication in 2009. 77 Fed. Reg. at 38,918 n.62. But the results of that study are inconclusive, and the EPA acknowledges

[18] EPA should also now consider how vacatur of the Cross-State Air Pollution Rule affects its attainment projections.

that the initial peer reviewed study calculated an ambient $PM_{2.5}$ concentration of 13.5 $\mu g/m^3$. *Id.* (citing Miller (2007)). Given the dearth of direct evidence to support the EPA's proposed range for the annual standard, it is not surprising that the CASAC did not express any support or preference for a specific level within the 11-13 $\mu g/m^3$ range suggested by the EPA staff. *Id.* at 38,939. Thus, neither the scientific literature nor the EPA's independent advisors offer support for a standard below 13 $\mu g/m^3$.

Second, a standard lower than 13 $\mu g/m^3$ may not be considered requisite to protect public health. To be requisite, a standard must be "sufficient, but no more than necessary" to protect the public health. *American Trucking Ass'n*, 531 U.S. at 473. In the past, courts have affirmed the EPA's reliance on mean concentration values in establishing or revising NAAQS. *See, e.g.*, *American Trucking Ass'ns*, 283 F.3d at 367, 72. If a NAAQS based on mean values is sufficient to protect the public health, there is no basis for the EPA to apply a standard based on the 10^{th} and 25^{th} percentile distribution of $PM_{2.5}$ concentrations in a select group of four multi-city studies. *See, e.g.*, 77 Fed. Reg. at 38,940. Thus, it would be arbitrary and capricious for the EPA to ignore the mean concentration values from the studies on which it relies and instead adopt a standard based on concentrations a full standard deviation lower.

Third, the EPA has acknowledged the extreme uncertainty observed in the data on which it relies. For example, the EPA acknowledged that "the potential for confounding by co-pollutants" is an "important uncertainty" when interpreting epidemiological studies for $PM_{2.5}$. 77 Fed. Reg. at 38,951. By the same token, the EPA has noted the heterogeneity in potential health impacts of $PM_{2.5}$, based on geography, $PM_{2.5}$ constituents, and other factors, *id.* at 38,905, 909, 922, makes risk estimates uncertain. These uncertainties are exacerbated when data from existing studies are projected downward to lower concentrations, especially when there is a potential for threshold effects that could not be predicted based on higher concentrations. *See supra* p. 24. The scope and severity of these uncertainties far outweigh any potential health benefits from lowering the annual $PM_{2.5}$ standard. To ignore this uncertainty and adopt lower standards would, therefore, be arbitrary and capricious.

Fourth, a lower standard is not necessary to achieve an adequate margin of safety. *See* 42 U.S.C. § 7409(b)(1). As noted above, even an annual standard of 13 $\mu g/m^3$ is at the extreme low end of the $PM_{2.5}$ concentrations observed in the studies on which the EPA relies. *See* 77 Fed. Reg. at 38,918-19. And, as the EPA explained, it placed "greatest weight on those studies that reported positive and statistically significant associations" with respect to mortality and morbidity. 77 Fed. Reg. at 38,927. Thus, whether compared to the full range of scientific literature regarding $PM_{2.5}$, or the smaller selection upon which the relied, it is evident that the 13 $\mu g/m^3$ standard already incorporates a series of very conservative assumptions that are more than adequate to provide the margin of safety required by the Clean Air Act. Again, providing an additional margin of safety by arbitrarily lowering the annual $PM_{2.5}$ standard further would be contrary to the purpose of the Clean Air Act.

D. The EPA's proposed secondary standard focused on visibility has not been adequately explained or justified, and is based on an improper CASAC policy recommendation.

In the 2006 revision, the EPA characterized the evidence regarding visibility impacts as "'uncertain' because the studies could not identify the precise level or percentage of days of visibility impairment at which there is an adverse effect on public welfare." *Am. Farm Bureau Fed'n*, 559 F.3d at 529. Although the EPA has now proposed a specific secondary standard of 28 to 30 deciviews, based on the 90^{th} percentile of 24-hour average $PM_{2.5}$ measurements over a

three-year period, 77 Fed. Reg. at 39,988, the Agency's analysis shows that the uncertainty remains. As a result, the complex standard proposed by the EPA will prove highly uncertain in producing any measurable public health benefit.

Although the EPA asserts that "people are emotionally affected by low visual air quality, that the perception of pollution is correlated with stress, annoyance, and symptoms of depression, and that visual air quality is deeply intertwined with a 'sense of place' affecting people's sense of the desirability of a neighborhood," 77 Fed. Reg. at 28,973, it offers little scientific support for this assertion. More importantly, the EPA fails to provide a scientific basis to demonstrate that the proposed visibility standard is requisite to protect the public from these risks. Lacking the necessary scientific data to support its proposal, the EPA instead is forced to rely on a series of assumptions it believes are logical. *E.g.*, 77 Fed. Reg. at 38,973, 38,978, 38,988.

Further, in an effort to provide some empirical support for a secondary visibility standard, the EPA engages in a reanalysis of several unpublished and unreviewed urban preference studies. In four separate studies, a small group of people were shown several pictures and asked whether the level of visual impairment was "acceptable." 77 Fed. Reg. at 38,975. Critically, none of the studies defined the term "acceptable," leaving each subject to make his or her own determination. *Id.* By choosing to rely on these studies, the EPA also overlooked a number of deficiencies in the underlying data. First, these studies were based on a very small sample size of only 852 people in only four urban areas. *Id.* The EPA made no effort to ensure that this small sample was representative of the nation as a whole. Second, the EPA noted that there was insufficient evidence to determine whether there were regional distinctions in the results and suggested that several prominent features in the western study cities may not be applicable in the eastern United States. Thus, the EPA largely ignored whether the sample size or geographic location resulted in any systemic bias in the underlying data. Third, the EPA noted that aggregating the four studies posed a series of problems due to differences in word choices and survey methodologies. *Id.* ("variations in the specific materials and methods used in each study introduce uncertainties"). Fourth, even within each study, the failure to precisely define an objective "acceptable" visual impairment produces considerable uncertainty. *See id.* at 38974 ("'acceptable' was not defined"); *id.* at 38975 n. 143 (noting a repeated image was found acceptable by 56% of respondents the first time and 11% the second time). Given these data deficiencies and the unreliability they create, it would be arbitrary and capricious for the EPA to rely on the data to establish secondary visibility standards.

Finally, the EPA makes no effort to tie the results of these urban preference studies to the question at hand: what level of visibility is requisite to protect the public health? The EPA offers no objective scientific principle on which to determine whether public health will be protected. Instead, it essentially abdicates that responsibility to 852 anonymous survey participants who, without any guidance, determined whether the view in several photographs were, in their opinion, "acceptable." The EPA offers no reason to suggest that "acceptability" is somehow the same standard as "requisite to protect public health." Thus, even assuming *arguendo*, that the four urban preference studies and the EPA's reanalysis produce accurate scientific results, there is simply no rational connection between the views that a few survey subjects find "acceptable" and the health impacts that the EPA identified. *See Motor Vehicles Mfrs. Ass'n v. State Farm Mut. Ins. Co.*, 463 U.S. 29, 43 (1983) (requiring a "'rational connection between the facts found and the choice made.'" (citation omitted)). The EPA's proposed standards must be requisite to protect the public health. The EPA simply cannot rely on the personal preferences of a few subjects in lieu of a scientific assessment of the actual "effects on

public health and welfare," *Whitman v. American Trucking Ass'n*, 531 U.S. 457, 469 (2001), to derive a secondary visibility standard that is requisite to protect public health.

After the Court remanded the 2006 visibility standard, the EPA appears to have focused solely on identifying a target level for the secondary visibility standard. *See Am. Farm Bureau Fed'n*, 599 F.3d at 530. As a result, the EPA lost sight of the larger picture and failed to determine whether a secondary visibility standard could be supported at all. Given the potentially significant costs and lack of discernable public health benefits from the proposed secondary standard, the EPA should not adopt a secondary visibility standard at this time. Instead, it should reassess the state of the science during its next review cycle and determine whether sufficient scientific improvement has been made to justify a secondary visibility standard.

IV. The EPA Must Ensure That Its Final Rule Is Capable of Efficient Implementation and Does Not Impose Unnecessary Costs on the Regulated Community.

A. Implementation and Use of Air Dispersion Modeling.

The EPA must ensure the modeling tools and guidance used to implement the NAAQS are appropriate and based on sound science and offer clear and timely guidance on NAAQS implementation that minimizes the uncertainty that can compound unnecessary burdens on the economy with no corresponding environmental benefit. While the EPA is permitted to use predictive models, it has an obligation to "explain the assumptions and methodology used in preparing the model" and "provide a complete analytic defense" if the model is challenged. *Small Ref. Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 535 (D.C. Cir. 1983). Furthermore, a model must have a "rational relationship" to the real world. It is arbitrary and capricious for the Agency to rely on a model that exhibits "stark disparities between its projections and real world observations." *Appalachian Power Co. v. EPA*, 249 F.3d 1032, 1053-54. Other courts have cautioned that "[a]n agency that clings to predictions rather than performing readily available tests may run into trouble." *Natural Resources Defense Council v. Jackson*, 650 F.3d 662, 666 (7th Cir. 2011).

The EPA has made it clear that the Agency is committed to utilizing the most accurate information available in its decision making. For NAAQS implementation, this commitment requires that the EPA use actual ambient air measurements and reliable methods for predicting ambient impacts that can be verified with measured ambient monitor data. Air models and modeling guidance that apply layer upon layer of conservative assumption substantially over-predict ambient impacts and distort the assessment of actual contributions to ambient air quality standards. These conservative and flawed air models should not be used to make regulatory decisions that impose costs and burdens beyond what is necessary to meet the NAAQS.

The following issues have been identified as contributing to the uncertainty or inaccuracy of the EPA's implementation of the $PM_{2.5}$ NAAQS that must be corrected prior to implementing the new $PM_{2.5}$ NAAQS, and for the existing 24-hour $PM_{2.5}$ and PM_{10} NAAQS. The EPA must address these issues to ensure the efficient, accurate implementation of the NAAQS:

1. The EPA should issue the implementation guidance for peer review prior to making the new NAAQS effective and no later than the date the areas are initially designated as attainment/unclassified/nonattainment. Recent experience has shown that the EPA has waited months or even years after the designations to issue guidance, which contributes to uncertainty. The initial guidance should

allow states to set Significant Impact Levels ("SILs") based on their evaluation of air modeling as applied to the source to be permitted. States are in a better position to assess the margin of safety needed to ensure protection of the NAAQS.

2. The EPA should use only monitoring data to determine nonattainment areas, so that the over-prediction bias of air models will not create nonattainment areas where the ambient air quality actually meets the standard. The non-air quality factors historically used by the EPA have needlessly expanded the number of nonattainment areas and should not be used here. Air models should be used only as a screening tool to assess attainment designations in areas without adequate monitors. In any event, such use should be limited because "[m]onitoring data are currently available from numerous existing $PM_{2.5}$ speciation sites to determine compliance with the proposed revised primary annual $PM_{2.5}$ NAAQS and with the proposed $PM_{2.5}$ visibility index NAAQS." 77 Fed. Reg. at 39,017. The EPA should designate any areas that currently lack monitoring sites as unclassifiable until they can be monitored nonattainment or accurately modeled for attainment. The Associations also urge the EPA to clarify that the nine-factor analysis included in the EPA's *Guidance on the Area Designations for the 2006 24 Hour $PM_{2.5}$ NAAQS*, is not binding on the states and should be considered one possible option for states that choose to use this analysis.

3. The EPA should adjust the air model inputs to improve accuracy by:

    - Not assuming simultaneous maximum allowable emissions when a reasonable "worst case" actual emissions scenario is available.

    - Eliminating the inputs for non-stack sources (e.g., haul roads, pits, roof monitors) until adequate studies of source-specific test data are conducted to establish a discount factor to offset over-prediction bias in the model results.

4. The EPA should refine the model outputs to address known over-prediction bias by:

    - Eliminating downwash assumptions during low wind speed events that are contrary to the observed plume rise under these meteorological conditions.

    - Foregoing the modeling of secondary formation of $PM_{2.5}$ until there is a clear understanding of when and where it will affect ambient air quality. Compounds that form in the atmosphere after leaving the stack will affect different receptors at greater distances from the stack as compared with those compounds directly emitted from the stack.

    - Modifying the model to account for observed dust plume depletion (for both PM_{10} and $PM_{2.5}$) due to particle electrostatic agglomeration, enhanced gravitational settling and deposition near the point of release, all enhanced under low winds. *See* June 12, 2012 paper prepared by Chatten Cowherd, Ph.D., of MRI Global, "Follow-up to 10th EPA Modeling Conference."

    - Modifying the model to account for pit trapping of emissions released below grade.

5. The EPA should encourage the use of available monitored data to “ground truth” the air model results and, where appropriate, use the monitor data to establish calibration factors for adjusting the model results.

The Associations understand that the EPA held its 10th Modeling Conference in March 2012 and organized stakeholder meetings in June 2012 to receive input on NAAQS modeling issues. We understand these meetings further revealed insight into some of the modeling and NAAQS implementation issues which have surfaced after promulgating the 2010 1-hr SO_2 and NO_2 NAAQS. We encourage the EPA to avoid creating similar implementation issues going forward as the Agency prepares to implement the revised $PM_{2.5}$ NAAQS scheduled for December 2012. Several presenters identified multiple specific problems in regard to modeling PM_{10} and $PM_{2.5}$ that need to be addressed by the EPA. We encourage the EPA to use the most accurate and reliable data and methods to measure ambient air quality and to predict impacts on ambient air quality. This requires an open process with peer review opportunities to improve the data upon which regulatory decisions are made. The EPA should fix and verify the accuracy of the air quality models and modeling guidance prior to finalizing the NAAQS. As explained above, conservative models may appropriately be used to designate attainment areas, but they must not be used to designate areas of nonattainment. Air model refinements must remain a priority, however, because inaccurate model results can unnecessarily interfere with investments that create jobs under a permitting context. Ultimately, the integrity of these standards depends on the use of accurate methods and tools to implement the NAAQS. Thus, it is imperative that The EPA refine the modeling tools and guidance to remove elements that contribute to known over-prediction bias to avoid stalling economic recovery. Considering the importance of a smooth implementation of the new $PM_{2.5}$ NAAQS, does the EPA have accurate air modeling tools necessary to implement the new $PM_{2.5}$ NAAQS with respect to PSD permitting, especially for emission sources emitting fugitive $PM_{2.5}$ or secondary $PM_{2.5}$? We believe not, and, urge the EPA to fix and verify the accuracy of the air quality models and modeling guidance prior to finalizing any revisions to the PM NAAQS so that manufacturers who must rely on modeling for permitting purposes can avoid the implementation challenges created by inaccurate and overly conservative models. We look forward to the EPA’s prompt response outlining a strategy for improving the implementation of the 2010 NAAQS standards as well as the proposed revised $PM_{2.5}$ NAAQS consistent with the recommendations noted above.

B. No new guidance is necessary on section 110 infrastructure SIP requirements for a revised $PM_{2.5}$ NAAQS.

The EPA has indicated that it intends to issue guidance on section 110 infrastructure SIP requirements for a revised $PM_{2.5}$ NAAQS, and "invites preliminary comment on all aspects of infrastructure SIPs at this time, which the Agency will consider in developing future guidance." 77 Fed. Reg. at 39,019.

The EPA need not issue new guidance on $PM_{2.5}$ SIP requirements. The requirements for infrastructure SIPs are stated expressly in the Clean Air Act. It would be inappropriate for the EPA to issue guidance that had the effect of supplementing or modifying the statute's requirements in this context, for example by prescribing new requirements for infrastructure SIPs that are not stated in section 110(a).

Section 110(a) includes a schedule and a comprehensive list of "infrastructure" requirements to be included in each SIP following the promulgation or revision of a NAAQS. 42 U.S.C. § 7410(a). These requirements are "basic" and "relatively self explanatory." Memorandum from William T. Harnett, Director, Air Quality Policy Division (C539-01), Office of

Air Quality Planning and Standards, EPA, to Air Division Directors, Regions I-X, Subject: Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 1997 8-hour Ozone and $PM_{2.5}$ National Ambient Air Quality Standards (Oct. 2, 2007), at 2, 4. The statute also gives states three years to submit their infrastructure SIPs to the EPA. This is a sufficient framework for states to develop infrastructure SIPs, and EPA guidance is unnecessary.

The EPA should not attempt to supplant the states' and districts' discretion in applying the basic infrastructure requirements. If the EPA determines in the future that nonattainment areas cannot attain because of emissions outside of the area in question, out of state, or outside the United States, then the EPA can employ any of its statutory powers to address the situation. *See, e.g.,* 42 U.S.C. §§ 7426(b), 7509a. Such a determination likely cannot be made unless and until nonattainment areas fail to meet their attainment dates. If it were clear that infrastructure SIPs needed to be changed, such a change would only properly be required through a future notice and comment rulemaking action. However, the need for any such change has not yet been established.

C. Designations and Classifications Issues

1. There is no need to accelerate the statutory timeline for designating areas under a revised NAAQS.

The EPA has indicated that it intends to promulgate area designations for the revised $PM_{2.5}$ NAAQS "follow[ing] the standard 2-year process," referring to the statutory schedule by which states submit recommended designations within one year of the NAAQS revision, and the EPA promulgates designations within two years of the NAAQS revision (or three years, if the EPA determines that it has insufficient information to meet the two-year schedule). 77 Fed. Reg. at 39,017.

The Associations support the EPA's stated intent to use the full two-year process provided by the Clean Air Act to designate areas for a revised $PM_{2.5}$ NAAQS, 77 Fed. Reg. at 39,017. The statute allows states up to one year to recommend area designations, and the EPA a total of two years to promulgate initial designations. 42 U.S.C. § 7407(d)(1)(A), (B)(i). The EPA may take a total of three years if necessary. 42 U.S.C. § 7407(d)(1)(B)(i). It would not be reasonable to accelerate the statutory schedule for designations.

First, acceleration would make it difficult for states to provide an opportunity for careful planning and meaningful public input on states' recommended designations. Determining designations and area boundaries is a data-intensive, lengthy, and complex process. For example, the EPA's recent actions designating areas under the 2008 ozone NAAQS resulted in numerous Technical Support Documents and a 103-page "Response to Significant Comments." *See* EPA Docket EPA-HQ-OAR-2008-0476. Even with this seemingly comprehensive process, consensus was not reached: at least 14 lawsuits have been filed to challenge the designations. *See Mississippi Commission on Environmental Quality v. EPA*, No. 12-1309 & consolidated cases (D.C. Cir.).

Second, acceleration would make it difficult for states to develop and the EPA to process exceptional events claims (under 40 C.F.R. § 50.14) that would be relevant to the designation process, because states must develop a technical demonstration to support each exceptional events claim and provide public notice and an opportunity for comments, 40 C.F.R. § 50.14(c)(3)(i). The EPA is also reported to have a backlog of unprocessed exceptional events claims. *See, e.g.,* States May Concede Nonattainment Due to Exceptional Events Doubts,

Inside EPA (Aug. 8, 2012) ("EPA is struggling to clear a large backlog of exceptional events requests amid confusion among states about how to comply with the rule and claim events as exceptional and exempt from the agency's standards.").

For these reasons, the Associations support the EPA's stated plan to follow the standard two-year designation schedule and encourages the use of the third-year flexibility, recognizing the year-to-year improvements in air quality, continuing emissions reductions, and the likelihood that for many areas, using the third year will result in an attainment designation. For instance, an “extension year” could be used in the case of an area where the most recent two years of air quality data, when averaged, would result in an attainment designation.

2. The EPA should establish two nonattainment classifications, with the higher classification given 10 years to attain.

The EPA notes in its preamble that:

> [T]he EPA also does not intend to establish classifications for nonattainment areas for the proposed revised primary annual $PM_{2.5}$ standard (or for a revised primary 24-hour standard if one is promulgated). However, the EPA solicits comment on whether a classification system would be appropriate and how a classification system could be designed.

77 Fed. Reg. at 39,019.

The Associations believe that the EPA should issue two classifications to distinguish between nonattainment areas that have relatively low and relatively high $PM_{2.5}$ levels, and assign 10-year attainment dates to areas with the higher nonattainment classification. This could be similar to the EPA's classification approach for the 2008 ozone NAAQS. *See* 77 Fed. Reg. 30,160 (May 21, 2012). Any classification approach should be established by consensus between the EPA and state and local regulators.

This concept is expressly authorized by the Clean Air Act. First, the 1990 Clean Air Act amendments created two classifications (moderate and serious) for PM_{10}, with an 11-year attainment deadline for serious PM_{10} nonattainment areas. 42 U.S.C. § 7513(c). Second, the statute's general framework for nonattainment areas contemplates assigning a higher classification and a 10-year attainment deadline for areas with higher levels of pollution:

> [(a)(1)(A)] On or after the date the Administrator promulgates the designation of an area pursuant to section 7407(d) of this title with respect to any national ambient air quality standard (or any revised standard, including a revision of any standard in effect on November 15, 1990), ***the Administrator may classify the area for the purpose of applying an attainment date*** pursuant to paragraph (2), and for other purposes. In determining the appropriate classification, if any, for a nonattainment area, ***the Administrator may consider such factors as the severity of nonattainment*** in such area and the availability and feasibility of the pollution control measures that the Administrator believes may be necessary to provide for attainment of such standard in such area.

> . . . .
>
> [(a)(2)(A)] The attainment date for an area designated nonattainment with respect to a national primary ambient air quality standard shall be the date by which attainment can be achieved as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment under section 7407(d) of this title, except that ***the Administrator may extend the attainment date to the extent the Administrator determines appropriate, for a period no greater than 10 years from the date of designations as nonattainment, considering the severity of nonattainment*** and the availability and feasibility of pollution control measures.

42 U.S.C. § 7502(a)(1)(A), (a)(2)(A) (emphasis added).

Thus, the EPA should issue two classifications for $PM_{2.5}$ nonattainment areas, because it would be fully consistent with the statute and would simplify attainment planning. Given the EPA's projections that, due to on-the-books measures, most of the United States will achieve attainment designations, the Associations believe that it would be appropriate for virtually all of the United States to have a 10-year attainment deadline, thus allowing for the full benefits of federal fuels and vehicle measures and rules addressing interstate transport.

3. The EPA should not classify or set a maximum attainment date for secondary NAAQS nonattainment areas.

The EPA has indicated that it "does not intend to establish classifications for nonattainment areas for the proposed secondary $PM_{2.5}$ visibility index standard." 77 Fed. Reg. at 39,021. The EPA has also recognized that there is no maximum attainment date for a secondary NAAQS:

> For secondary NAAQS, however, section 172(a)(2)(B) defines the attainment date for an area designated nonattainment as "the date by which attainment can be achieved as expeditiously as practicable" but with no maximum limitation. Thus, it is possible for the EPA to approve an implementation plan that provides for attainment of the secondary standards by a date more than 10 years after the date of designation with an appropriate demonstration.

77 Fed. Reg. at 39,021.

The Associations support the EPA's stated intent to avoid establishing classifications or a fixed attainment date for secondary NAAQS nonattainment areas. Establishing classifications or a fixed attainment deadline would not serve a useful purpose in connection with a secondary $PM_{2.5}$ NAAQS. States will already be required to implement "all reasonably available control measures as expeditiously as practicable" for primary NAAQS nonattainment areas. 42 U.S.C. § 7502(c)(1). If the same or similar measures are also adopted by states for secondary NAAQS nonattainment areas, there should be no further inquiry as to whether attainment could happen any more or less expeditiously.

In addition, in contrast to the Clean Air Act's provisions for primary NAAQS nonattainment areas, the statute does not require a fixed or maximum attainment date for secondary NAAQS nonattainment areas:

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

42 U.S.C. § 7502(a)(2)(B). Any question whether a SIP provides for secondary NAAQS attainment "as expeditiously as practicable" should not be resolved through the setting of a fixed (and potentially arbitrary) attainment date. Rather, any such questions can and should be resolved through an evaluation of that SIP through the SIP approval process or in a future data analysis showing that the SIP is not leading to reduced $PM_{2.5}$ levels.

D. SIP Planning Issues

1. The EPA should allow states the full three-year statutory time for submitting primary NAAQS infrastructure SIPs.

The EPA has indicated that it intends to allow the full three-year statutory time for states to submit infrastructure SIPs for a revised primary $PM_{2.5}$ NAAQS:

> The CAA directs states to address basic SIP requirements to implement, maintain, and enforce the standards. States are to develop and maintain an air quality management infrastructure that includes enforceable emission limitations, a permitting program, an ambient monitoring program, and enforcement program, air quality modeling capabilities, and adequate personnel, resources, and legal authority. Under CAA sections 110(a)(1) and 110(a)(2), states are to submit these SIPs within 3 years after promulgation of a new or revised primary standard. ***While the CAA allows the EPA to set a shorter time for submission of these SIPs, the EPA does not currently intend to do so***.

77 Fed. Reg. at 39,018 (emphasis added).[19]

The Associations support the EPA's plan not to modify the statutory schedule for submitting primary NAAQS infrastructure SIPs, which is three years after the date the standard is promulgated or revised. 42 U.S.C. § 7410(a)(1). The EPA first established NAAQS for $PM_{2.5}$ in 1997. 40 C.F.R. § 50.7; 62 Fed. Reg. 38,711 (Jul. 18, 1997). Thus, existing SIPs may satisfy infrastructure requirements for a revised $PM_{2.5}$ NAAQS. However, if changes need to be made,

[19] The D.C. Circuit's recent CSAPR decision strongly supports the argument that States should have time to implement the NAAQS. The court held that EPA violated the Clean Air Act by issuing a federal implementation plan simultaneously with the standards took from the States "the initial opportunity to implement" the standards. *EME Homer City Generation v. EPA*, No. 11-1302, Slip Op. at p. 7 (D.C. Cir. 2012). As the opinion acknowledges, the Clean Air Act "reserves the first-implementer role for the States." *Id*. at p. 41. While the federal government establishes air quality standards, the states have "primary responsibility for attaining those standards." *Id*. at p. 42. This statutory division of authority is "strict." *Id*. As the comment notes, EPA has indicated they will provide states time to implement the new standards. The CSAPR decision supports this approach.

states should have the full three years to identify the necessary changes, go through the statutorily-required public notice and hearing (42 U.S.C. § 7410(a)(1), (*l*)), and submit the infrastructure SIP to the EPA.

2. The EPA should allow states the full statutory time for submitting secondary NAAQS infrastructure SIPs, and should allow but not require states to submit a single infrastructure SIP for both a primary and secondary NAAQS.

The EPA has sought comment on whether states should be directed to submit a single infrastructure SIP for the combined primary and secondary $PM_{2.5}$ NAAQS:

> If both the revised primary annual $PM_{2.5}$ NAAQS and the distinct secondary $PM_{2.5}$ visibility index NAAQS are finalized, the EPA currently believes it would be more efficient for states and the EPA if each affected state submits a single section 110 infrastructure SIP that addresses both standards at the same time (i.e., within 3 years of promulgation of any revisions to the NAAQS for PM), because the EPA does not at present discern any need for there to be any substantive difference in the infrastructure SIPs for the two standards. However, the EPA also recognizes that states may prefer the flexibility to submit the secondary NAAQS infrastructure SIP at a later date. ***The EPA solicits comment on these infrastructure SIP submittal timing considerations***.

77 Fed. Reg. at 39,018 (emphasis added).

The Associations request that the EPA not call upon states and districts to submit a secondary $PM_{2.5}$ NAAQS infrastructure SIP at the same time as they submit primary NAAQS infrastructure SIPs. A combined infrastructure SIP may be logical for many states and districts, and the EPA should allow such submissions. However, states or districts may determine that the unusual nature of the proposed secondary NAAQS calls for additional statewide programs that should be included in an infrastructure SIP. In this case, states and districts should remain able to take advantage of a possible additional 18 months to submit the secondary NAAQS infrastructure SIP. *See* 42 U.S.C. § 7410(b).

3. The EPA should not call for anything more than a traditional infrastructure SIP to satisfy Clean Air Act section 110 requirements for the $PM_{2.5}$ NAAQS.

The EPA has indicated that it will call for only the traditional elements of infrastructure SIPs and will not purport to require specific emission control strategies as part of infrastructure SIPs:

> The EPA does not expect infrastructure SIP submittals to include regulations or emission limits developed specifically for attaining the relevant standard in areas designated nonattainment for the proposed revised $PM_{2.5}$ NAAQS. Infrastructure SIPs for any final revised $PM_{2.5}$ NAAQS will be due before $PM_{2.5}$ SIPs are due to demonstrate attainment with the same NAAQS. (New emissions limitations and other control measures to attain a revised $PM_{2.5}$

> NAAQS will be due 3 years from the effective date of nonattainment area designation as required under CAA section 172(c) and will be reviewed and acted upon through a separate process.) For this reason, the EPA does not expect infrastructure SIP submissions to identify new nonattainment area emissions controls.

77 Fed. Reg. at 39,019.

The Associations support the EPA's plan to call for only traditional infrastructure SIP elements for revised $PM_{2.5}$ NAAQS.

Infrastructure SIPs are basic, statewide air quality programs (such as permit programs) that provide the framework within which a state can work to bring all areas into compliance with the NAAQS. By contrast, the Clean Air Act only requires SIPs that ensure progress to attainment (often referred to as nonattainment SIPs or attainment demonstration SIPs) for specific areas that are designated nonattainment. *See* 42 U.S.C. § 7502(c)(6) (providing that nonattainment area SIPs "shall include enforceable emission limitations, and such other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emission rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment of such standard in such area by the applicable attainment date specified in this part."). The statute also specifies that the obligation to submit a nonattainment SIP is not triggered until an area is designated nonattainment, and even then the nonattainment SIP is not due until "3 years from the date of the nonattainment designation." 42 U.S.C. § 7502(b). Thus, the Associations agree with the EPA that attainment planning features should be considered as part of a "separate process" (77 Fed. Reg. at 39,019) from infrastructure SIPs.

4. The EPA should not call for nonattainment area SIPs any sooner than required by the statute.

The EPA has indicated that it believes that nonattainment area SIPs are due "3 years from the effective date of nonattainment area designation as required under CAA section 172(c)." 77 Fed. Reg. at 39,019. The EPA has not expressed any intent to establish a shorter deadline, nor has the EPA taken the position that a shorter deadline would apply, such as the 18-month deadline that applied to certain areas previously designated nonattainment for PM_{10}. *See* 42 U.S.C. §§ 7513a(a)(2)(B), (b)(2).

The Associations support the EPA's plan to require nonattainment area SIPs three years after the effective date of a nonattainment area designation. This is consistent with the schedule in the Clean Air Act. The statute provides that a nonattainment SIP is due "no later than 3 years from the date of the nonattainment designation." 42 U.S.C. § 7502(b). The three-year deadline will allow states the maximum time to develop control strategies, perform modeling simulations if desired, and go through the necessary public notice and comment processes. Numerous controls have already been deployed that are expected to reduce $PM_{2.5}$ levels— the EPA projects significant improvements in $PM_{2.5}$ concentrations regionally from a number of recently promulgated rules such as the Cross State Air Pollution Rule, 76 Fed. Reg. 48,208 (Aug. 8,

2011)[20] and the Mercury and Air Toxics Standards rule, 77 Fed. Reg. 9,304 (Feb. 16, 2012), that will result in SO_2 and NO_x reductions from many geographically dispersed sources" 77 Fed. Reg. at 39,020—and identifying any additional controls needed to attain the stringent proposed NAAQS is likely to be a difficult process.

5. Any future EPA implementation rule addressing attainment demonstration SIPs should allow but not require reliance in part on VOC and ammonia controls.

The EPA has indicated that it intends to propose a revised $PM_{2.5}$ NAAQS implementation rule, modeled on the EPA's implementation rule for the 1997 $PM_{2.5}$ NAAQS. 77 Fed. Reg. at 39,020. Under the rule for the 1997 standard,

> [T]he sources for consideration [of controls] would be those emitting SO_2, direct $PM_{2.5}$, and presumptively NO_x. Sources of the other $PM_{2.5}$ precursors, VOC and ammonia, presumptively do not need to be evaluated for control measures unless demonstrated by the state or the EPA as significant contributors to $PM_{2.5}$ concentrations in the relevant nonattainment area[.]

77 Fed. Reg. at 39,020.

If the EPA develops an implementation rule, the rule should allow states maximum flexibility in developing a control strategy to demonstrate attainment. At the same time, the EPA should not require states to regulate emissions such as ammonia and VOC that are likely of marginal relevance to high $PM_{2.5}$ levels. The Associations support the EPA's apparent intention to presume that states need not evaluate VOC or ammonia control measures as part of their attainment demonstration SIPs.

To accommodate these competing interests, any implementation rule should allow (but not require) an attainment demonstration to rely in part on VOC and ammonia control strategies, in lieu of reductions in recognized $PM_{2.5}$ precursors, without requiring a burdensome demonstration of VOC or ammonia emissions' relationship to $PM_{2.5}$ in the area. This would allow states with relatively high VOC or ammonia emissions to evaluate a broader range of potential control strategies, without burdening states that can more readily reduce $PM_{2.5}$ levels by focusing only on other precursors.

6. Any future the EPA implementation rule should not require "generally linear" progress in emission reductions over the attainment period. Such a requirement could prevent states from being able to provide reasonable compliance periods for individual control strategies.

Under the Clean Air Act, states that contain areas designated as nonattainment areas must ensure that each nonattainment area makes “reasonable further progress” toward attainment. 42 U.S.C. § 7502(c)(2). The EPA proposes that any area that can “demonstrate it will attain the standard within the presumptive five-year period from designation” will be considered to meet the reasonable further progress requirement. 77 Fed. Reg. at 39,020. However, “[a]n area that cannot demonstrate attainment within the presumptive 5-year period

[20] Although the Cross State Air Pollution Rule has been vacated, the Clean Air Interstate Rule continues to operate and will also result in SO_2 and NO_x reductions. The Associations urge the EPA to clarify that the Clean Air Interstate Rule, along with relevant guidance, remains applicable as the states and districts revise existing SIPs.

would be required to provide a separate RFP plan showing that the area will achieve emission reductions by certain interim milestone dates which provide for "generally linear" progress over the course of the implementation period." *Id.* The adoption of a "generally linear" progress requirement is both contrary to the purpose and structure of the Clean Air Act and would ultimately frustrate states' attempts to achieve attainment.

The concept of "generally linear" progress is not found in the relevant SIP provisions or anywhere else in the Clean Air Act. It is a concept created out of whole cloth by the EPA. But more importantly, the concept is contrary to the organization and purpose of the Clean Air Act. While the EPA bears responsibility for establishing NAAQS for all criteria pollutants, issues related to implementation and attainment of those standards are effectively left to the states through a process of cooperative federalism. Recognizing that diversity of conditions and priorities among the states, Congress established the State Implementation Plan as the primary means for achieving attainment. While some minimum requirements apply, states are given expansive discretion to design a SIP that is consistent with the state's own priorities and development goals as long as the EPA is satisfied that the SIP will achieve or maintain attainment of the various NAAQS. A plan that requires generally linear progress toward attainment would severely restrict the flexibility that the SIP process is designed to achieve and would limit the compliance options available to the states. Such an approach would likely require the states to incorporate costly emissions reductions program in order to achieve intermediate milestones, even if more cost-effective alternatives could achieve attainment over a similar time frame. Thus, by focusing on "generally linear" progress and intermediate milestones rather than the end goal of achieving attainment, the EPA's proposal would likely impose significant and unnecessary compliance costs that would negatively impact the Associations' members as well as the economies of the affected non-attainment areas.

Therefore, the Associations urge the EPA to delete the requirement for "generally linear" progress and focus instead on providing states with the flexibility to design cost-effective plans to achieve attainment by the required deadlines.

7. The EPA should provide a three-year transition period (the same time given by the statute to develop infrastructure SIPs) for updating attainment plans or maintenance plans for the 1997 or the 2006 $PM_{2.5}$ NAAQS as they may relate to any new monitoring requirements.

The Associations agree with the EPA's conclusion that any changes in the monitoring regulations "should not result in any new requirements with respect to attainment plans or maintenance plans for the 1997 or the 2006 $PM_{2.5}$ NAAQS during some specified transition period." 77 Fed. Reg. at 39,021.

The EPA should establish the transition period through rulemaking. The transition period should be at least three years, the same time given to states by the Clean Air Act to develop infrastructure SIPs under 42 U.S.C. § 7410(a)(1). This should also be a sufficient period of time to ensure that the EPA processes any pending SIP submissions that would be subject to the transition period. The EPA is obligated by section 110(k) of the Clean Air Act to process SIP revisions within 18 months of submission. *See* 42 U.S.C. § 7410(k).

The Associations urge the EPA to process these SIP revisions expeditiously and within the EPA's statutory 18-month deadline to give the transition period its intended effect. The EPA should also ensure that it does not penalize states if the EPA cannot meet its SIP-processing deadlines. If necessary, the EPA should extend the transition period further to ensure that SIPs

are judged by the criteria that applied at the time the SIPs were submitted. Such an extension is also consistent with court decisions on earlier Clean Air Act rules. In *NRDC v. EPA*, 22 F.3d 1125 (D.C. Cir. 1994), the court upheld an EPA rule extending statutory deadlines to submit SIPs, where the extended deadlines were necessary to compensate states for the EPA's delay in promulgating standards to be included in the SIPs. In *NRDC v. Thomas*, 805 F.2d 410 (D.C. Cir. 1986), the court directed the EPA to provide statutorily-contemplated "lead time" for manufacturers to comply with heavy-duty vehicle emissions standards despite the fact that the EPA missed its own statutory deadline to promulgate the standards. The EPA should apply this same logic to ensure that pending state SIP submissions for earlier $PM_{2.5}$ NAAQS can take advantage of the anticipated transition period.

E. The EPA should modify the schedule for states to flag and submit demonstrations for exceptional events to ensure that exceptional events can be excluded from 2010-2013 $PM_{2.5}$ data for designation purposes.

The EPA has indicated that it will modify the provisions of the exceptional events rule to allow exclusion of exceptional events from air quality data to be considered in designating areas under a revised $PM_{2.5}$ NAAQS:

> [T]he EPA will revise the final PM exceptional event flagging and documentation submission deadlines . . . to provide states with reasonably adequate opportunity to review, identify, and document exceptional events that may affect an area designation under a revised NAAQS.

77 Fed. Reg. at 39,005.

The Associations support the EPA's proposal to modify the schedules for flagging and submitting demonstrations for exceptional events, to allow exceptional events to be excluded from 2010-2013 $PM_{2.5}$ data for designation purposes. Excluding exceptional events from consideration in NAAQS designations is consistent with the exceptional events rule's basic functions, "to exclude air quality monitoring data from regulatory determinations related to exceedances or violations of the NAAQS and avoid designating an area as nonattainment . . . if a State adequately demonstrates that an exceptional event has caused an exceedance or violation of a NAAQS." 72 Fed. Reg. 13,560 (Mar. 22, 2007). Until the EPA issues a final revised NAAQS, states will be unable to determine which episodes contribute to a NAAQS violation, which is critical to identifying exceptional events to flag and further study.

F. PSD Permitting Issues

1. The EPA should grandfather PSD applications from a revised $PM_{2.5}$ NAAQS by providing a final NAAQS effective date one year after the final revised NAAQS is published.

The EPA has proposed to amend federal air permitting rules to grandfather certain pending Prevention of Significant Deterioration ("PSD") permit applications from compliance with a revised $PM_{2.5}$ NAAQS:

> Longstanding EPA policy interprets the CAA and EPA regulations at 40 CFR 52.21(k)(1) and 51.166(k)(1) to generally require that PSD permit applications must include a demonstration that new

> sources and modifications will not cause or contribute to a violation of any NAAQS that is in effect as of the date the PSD permit is issued . . . .
>
> In order to provide for a reasonable transition into the new PSD permitting requirements that will result from the proposed revision of the primary annual NAAQS, the proposed addition of a distinct secondary NAAQS for visibility protection, and the changes to the monitoring requirements discussed earlier, ***the EPA proposes to add a grandfathering provision to the federal PSD program codified at 40 CFR 52.21 that would apply to certain PSD permit applications that are pending on the effective date of the revised PM NAAQS***.

77 Fed. Reg. at 39,023 (emphasis added).

The Associations support the EPA's proposal to grandfather PSD applications from a revised $PM_{2.5}$ NAAQS.[21]

However, rather than amending the PSD rules, the EPA should establish a final NAAQS effective date one year after the final revised NAAQS is published. Because PSD permits must generally be issued within a year of the application (*see* 42 U.S.C. § 7475(c)), this would give the states time to finalize pending PSD applications.

The delayed effective date approach has the advantage of providing for grandfathering without requiring changes to the underlying SIPs. The EPA's intent to provide for reasonable PSD grandfathering could be frustrated if it cannot be implemented in SIPs. However, the SIP revision process requires notice and comment processes at the federal and state levels (*see* 42 U.S.C. §§ 7410(*l*), 7607(d)) and often takes years. Time is of the essence with pending permit applications, so it would be more logical to achieve the same result without requiring a SIP revision process in each of the many states and districts with SIP-approved PSD programs.

Finally, a delayed NAAQS effective date appears to be permissible under the Clean Air Act and would not impede other NAAQS implementation activities. The Congressional Review Act only restricts the EPA from making a major rule such as a NAAQS effective too quickly after Federal Register publication. *See* 8 U.S.C. § 801(a)(3). Further, as the EPA observes in its proposal, "The term 'promulgation' has been interpreted by the courts with respect to the NAAQS to be signature and widespread dissemination of a rule." 77 Fed. Reg. at 39,017. Thus, a delayed effective date is not inconsistent with the EPA's duty to review and, if necessary, "promulgate" new or revised NAAQS on a schedule. *See* 42 U.S.C. § 7409(d)(1).

Once the EPA has published notice in the Federal Register of the final NAAQS level, that notice will be sufficient for states to develop recommended designations, prepare

[21] EPA should also fix its air quality models and modeling guidance prior to finalizing the NAAQS, because the PSD requirements are effective upon finalization. The overly conservative models and guidance combined with the lower (and nearer to background) NAAQS levels, can delay clean projects that otherwise meet all the PSD requirements because the models cannot correctly demonstrate attainment.

infrastructure SIPs, and design control strategies. A delayed effective date would hinder none of these preparatory activities.[22]

2. The EPA should not view a generally-applicable PSD grandfathering or transition approach as eliminating the discretion to grandfathering individual permits even without an express exemption.

The Associations support grandfathering PSD permit applications from a revised NAAQS, and specifically believe that a delayed NAAQS effective date is the best way to provide for grandfathering.

At the same time, the EPA should not develop a grandfathering rule that would preclude case-by-case grandfathering in appropriate circumstances. The EPA has indicated that it believes case-by-case grandfathering was justified under the circumstances of the Avenal Power Center "without a specific exemption in regulations." 77 Fed. Reg. at 39,024, n.218. The Associations support the EPA's determination that it was appropriate to grandfather the Avenal Power Center PSD permit application without a specific exemption, and believe that the EPA can and should apply a similar rationale where appropriate.

3. The EPA should not establish a sunset clause on any grandfathering provision included with the final rule.

"[T]he EPA is not proposing to include a sunset clause for the proposed grandfathering provision" for PSD permit applications under the new NAAQS. 77 Fed. Reg. at 39,024.

The Associations support the EPA's proposal not to include a sunset clause for PSD grandfathering under the revised NAAQS. Having a sunset clause would defeat the purpose of grandfathering and would be unfair to proposed sources whose permits are not timely forthcoming.

4. The EPA should also provide grandfathering for NNSR permit applications.

The EPA has not proposed to grandfather Nonattainment New Source Review ("NNSR") permits in the same way as PSD permits:

> [P]ermits issued to sources in nonattainment areas must satisfy the applicable NNSR requirements as of the effective date of the nonattainment designation. . . . The EPA is not proposing any type of $PM_{2.5}$ grandfathering provision at this time for purposes of NNSR.

77 Fed. Reg. at 39,029.

[22] While a delayed effective date will solve a number of implementation problems, the fact remains that PSD requirements begin to apply as soon as NAAQS revisions are finalized. Thus, in the event the effective date is delayed, the Associations also urge the EPA to delay issuing a final rule until air modeling problems can be resolved and the regulated community can be assured the that modeling on which it must rely is accurate. *See supra* p. 29-31.

The Associations urge the EPA to take the necessary actions to grandfather NNSR permit applications. This can be best accomplished through a nonattainment area effective date one year after the designations are published in the Federal Register.

Providing grandfathering for both PSD and NNSR permits follows essentially the same logic. Additionally, without any NNSR grandfathering approach, surprise would result for permit applicants in areas that could be unexpectedly designated nonattainment as a result of EPA modifications to states' recommended area designations and boundaries. PSD and NNSR permits can require several months to be issued. Because the Clean Air Act only requires the EPA to give 120 days' notice of its intended designations (*see* 42 U.S.C. § 7407(d)(1)(B)(ii)), a PSD permit application filed (in an area recommended by the state or district to be designated attainment) before the 120-day notice could remain pending even after an unexpected nonattainment designation becomes final.

Using a delayed designation effective date would allow these "surprise" nonattainment area permit applicants to continue to rely on PSD permitting without compromising NAAQS attainment. PSD permit issuance involves a demonstration that the permitted source will not cause or contribute to a NAAQS violation.

At the same time, a delayed nonattainment area effective date need not delay the EPA or the states in attainment planning. Notice of the final designations and boundaries would be sufficient for states to begin developing control strategies and writing regulations to implement them. Further, any state that deemed it necessary could choose to apply its NNSR program during the interim period. The EPA could appraise states of this option in a supplemental notice or proposal to provide for delayed nonattainment designation effective dates.

Finally, a delayed effective date for nonattainment designations is consistent with the EPA's legal obligations. EPA's obligation to "promulgate" (42 U.S.C. § 7407(d)(1)(B)(i)) designations within a time certain after revising the NAAQS is discharged by "signature and widespread dissemination" (77 Fed. Reg. at 39,017) alone, without regard to a particular effective date.

5. The EPA Should Adopt a Surrogate Approach for Secondary $PM_{2.5}$ Standards.

In response to PSD permitting concerns related to the proposed secondary visibility standard, the EPA has also proposed a surrogacy approach that can be applied during the PSD permitting process. 77 Fed. Reg. at 39,025-27. While the Associations do not believe that a secondary visibility standard is warranted, the surrogacy approach proposed by the EPA would be a valuable addition in the event a secondary visibility standard is adopted. As the EPA explains in the proposed rule, developing a separate model to assess visual impairment would prove technically difficult and costly and would likely produce uncertain results. Therefore, the Associations believe it would be reasonable for the EPA to focus instead on developing an accurate and cost-effective model for predicting 24-hour $PM_{2.5}$ concentrations that can be applied in the PSD permitting process. In light of the EPA’s conclusions that, as a practical matter, the 24-hour PM standard serves as an adequate proxy for the proposed secondary visibility standard, it should be used to streamline the PSD permitting process.

The EPA offers three alternatives that could be used to implement a surrogacy approach for addressing a secondary visibility standard in PSD permitting: (1) a case-by-case analysis, (2) a rebuttable presumption that the surrogacy approach is applicable, and (3) a rule establishing

that the surrogacy approach is applicable for all permits. The Associations believe that a combination of the second and third options would best achieve the EPA's goals. As a long-term solution, the Associations believe that a regulation making the surrogacy approach universally applicable is necessary to provide certainty for the regulated community and to avoid unnecessary conflict that could negate many of the streamlining benefits that a surrogacy approach would provide. However, the notice and comment rulemaking process can be very time consuming, especially if litigation ensues. Therefore, the Associations urge the EPA to immediately establish—through guidance—a rebuttable presumption in favor of surrogacy that can remain in place until a permanent regulation can be issued. Such an approach will provide the best combination of intermediate and permanent relief to PSD permit applications who will be subject to the secondary visibility standard.

In addition, the Associations urge the EPA to provide a three-year delay in the effective date of the secondary visibility NAAQS to ensure that states have adequate time to adopt and obtain approval for SIP revisions that incorporate the surrogacy approach. Simply issuing a guidance document or even regulation may not be sufficient to implement a surrogacy approach if it is inconsistent with the state SIP provisions regarding PSD permitting. Past experience has shown that a three-year period is reasonable to allow a state to develop and submit a SIP revision while allowing the EPA the full 18-month statutory period to act on SIP revisions. The Associations note, however, that such a delay would require a modification of the proposed consent decree in *American Lung Ass'n v. EPA*, No. 12-243 (D.D.C.) ¶ 5, which would obligate the EPA to make the new NAAQS effective "on the earliest date that complies with the Congressional Review Act." Given the novelty of the proposed visibility-based standard, the Associations believe that a delay in the effective date of this standard would be justified.

Finally, the Associations agree with the EPA that an end date is not needed for a surrogacy approach. As the EPA acknowledges, the existence of a "technically robust surrogate relationship" can justify the indefinite application of a surrogacy approach. Moreover, the additional costs and complexity associated with adding separate visual-impairment modeling to the PSD application process are unlikely to decrease over time. Thus, the streamlining benefits associated with the surrogacy approach will also remain indefinitely. Finally, in any event, the mandatory five-year review process for NAAQS will provide the EPA with an opportunity to reconsider the surrogacy approach, even if a sunset date is not included.

6. The EPA Should Incorporate Additional Provisions to Avoid a Construction Moratorium.

Although the EPA's proposed NAAQS revision addressed a number of implementation challenges related to NNSR and PSD, it fails to provide a solution to the so called "construction moratorium" that occurs for transition areas that are in attainment under an existing NAAQS, but will be designated nonattainment under the revised NAAQS. As explained above, proposed projects in nonattainment areas are subject to NNSR requirement, while projects in attainment areas are subject to PSD. Under PSD permitting, projects are required to perform an air quality analysis to demonstrate that the project will not cause or contribute to a violation of *any* NAAQS—even those for which final designations have not yet been issued. Thus a proposed project in a transition area is effectively subject to a construction moratorium because its construction would "cause or contribute" to a violation of the revised NAAQS, but is ineligible to obtain the necessary emissions offsets under the NNSR program. The proposed rule fails to address this issue.

In prior revisions to the PM NAAQS, the EPA has recognized the detrimental impact that a construction moratorium would have, and has issued specific provisions to provide relief in these circumstances. In 1987, the EPA issued a revised PM NAAQS that changed the PM indicator from Total Suspended Particulate ("TSP") to PM_{10}. In order to avoid the construction moratorium, the EPA included provisions that allowed states to continue to apply TSP as the sole regulated indicator for PM until the they submitted revised SIPs to the EPA and the states were able to process PSD permits using the PM_{10} standard. However, once a SIP incorporating the PM_{10} standard was approved, the EPA permitted the projects to acquire emissions offsets so that on a net basis, the project would not cause or contribute to a violation of the revised NAAQS. In 1997, the EPA revised the PM NAAQS again, adding a $PM_{2.5}$ standard for the first time. Again, faced with the potential for a construction moratorium, the EPA allowed the states to use the PM 10 standard as a surrogate for $PM_{2.5}$, so that projects in areas that were in attainment for PM_{10}, but would be in nonattainment for $PM_{2.5}$ could still be permitted under PSD until new area designations were made. Thus, although it has employed different mechanisms, the EPA has consistently avoided the risk of a construction moratorium among transition sources.

In the proposed rule, however, the EPA fails to include any provisions for projects in areas that are in attainment for the current PM NAAQS, but would be designated as nonattainment for the proposed standards. To avoid the potential for a construction moratorium, the Associations urge the EPA to include a new provision to avoid a construction moratorium. The Associations offer two suggestions:

1. Authorize PSD permit applicants to use compliance with the existing $PM_{2.5}$ NAAQS as a surrogate for the revised standard, or

2. Allow PSD permit applicants to acquire internal or external emissions offsets that meet or exceed the projected emissions from the project and, thereby, demonstrate reasonable progress toward attainment of the revised NAAQS.

While other options may also be available, each of the suggestions above has already proved successful under very similar circumstances and, as a result, could be easily implemented by the states. In the event that the EPA moves forward with revised PM NAAQS, the Associations would welcome the opportunity to work the EPA to develop a solution to the construction moratorium.

G. The EPA should call for $PM_{2.5}$ NNSR permitting only (and not PSD) in any area that is nonattainment for any of the $PM_{2.5}$ NAAQS.

The EPA has indicated that it expects to require only NNSR permitting for $PM_{2.5}$ in any area that is designated nonattainment for at least one of the $PM_{2.5}$ NAAQS:

> [A]n area may be nonattainment for the annual standard and unclassifiable/attainment or attainment for the 24-hour standard. While no formal policy has yet been developed to address this situation, the EPA presently believes that it is reasonable to require that only NNSR (and not PSD) applies for $PM_{2.5}$ in any area that is nonattainment for either averaging period. Looking forward, the EPA proposes that areas would be designated for a proposed secondary $PM_{2.5}$ visibility index NAAQS independently of designations for the mass-based annual and 24-hour $PM_{2.5}$

> NAAQS. ***Accordingly, the EPA intends to address this issue in a future NSR rulemaking, but invites comments now on whether it is appropriate to apply the NNSR program requirements for any pollutant that is designated nonattainment for at least one averaging period or at least one primary or secondary NAAQS for a particular pollutant***.

77 Fed. Reg. at 39,029 (emphasis added).

The Associations support the EPA's determination that it is not reasonable to require compliance with both NNSR and PSD by a single proposed source because of overlapping designations under the various $PM_{2.5}$ NAAQS. NNSR permitting is more stringent overall than PSD. However, combining the two would result in permitting requirements that are burdensome and costly but unnecessary for effective NAAQS implementation. For example, the NNSR requirement to offset emissions should be recognized as obviating the need to model the air quality impacts of a proposed new major source or major modification.

This approach is consistent with the Clean Air Act and existing regulations. PSD requirements apply for a particular criteria pollutant in areas that are designated attainment or unclassifiable for that pollutant. *E.g.,* 40 C.F.R. § 52.21(a)(2)(i). By contrast, NNSR requirements apply for a pollutant in areas that are designated nonattainment for that pollutant. *See* 42 U.S.C. §§ 7502(c)(3), 7503. If an area is designated nonattainment for any of the $PM_{2.5}$ NAAQS, it is properly considered a $PM_{2.5}$ nonattainment area for permitting purposes and therefore subject only to NNSR for $PM_{2.5}$.

In the event that a particular proposed source would have unique air quality implications that would somehow be overlooked by applying only NNSR, states and the EPA have sufficient authority to tailor permit conditions and revise the applicable SIP to ensure that air quality is maintained and improved. In any event, the state or the EPA would be obligated to address the issue as part of the area's nonattainment SIP. However, the likelihood of a source having such unique air quality implications is low in light of the NNSR requirements to offset emissions and to use state of the art emission controls.

CONCLUSION

The proposed PM NAAQS is unlawful, arbitrary, and capricious for the reasons set forth above. Neither the Clean Air Act nor the scientific literature regarding PM exposure justifies a downward revision of existing PM standards or the adoption of new standards. However, in the event that the EPA decides to revise the current PM NAAQS, the Associations urge the EPA to carefully consider the implementation challenges that the revised standard would pose and incorporate provisions to address and mitigate those challenges.

The undersigned Associations appreciate the opportunity to comment on this proposal.

National Association of Manufacturers

Aluminum Association

American Chemistry Council

American Coke & Coal Chemicals Institute

American Forest & Paper Association

American Foundry Society

American Iron & Steel Institute

American Petroleum Institute

American Wood Council

BCCA Appeal Group

Brick Industry Association

Council of Industrial Boiler Owners

Corn Refiners Association

Hardwood Plywood and Veneer Association

Industrial Energy Consumers of America

Motor & Equipment Manufacturers Association

National Association for Surface Finishing

National Federation of Independent Business

National Oilseed Processors Association

National Mining Association

North American Die Casting Association

Rubber Manufacturers Association

The U.S. Chamber of Commerce

Wisconsin Manufacturers & Commerce

ATTACHMENT A

References

Abrahamowicz, M., T. Schopflocher, K. Leffondre, R. du Berger, and D. Krewski. 2003. Flexible modeling of exposure-response relationship between long-term average levels of particulate air pollution and mortality in the American Cancer Society study. J Toxicol Environ Health A 66:1625-1654.

Cowherd, C. 2012. Follow-up to 10th EPA Modeling Conference.

Gamble, J. F. and M. J. Nicolich. 2006. Comments on the updated Harvard Six Cities study. Am J Respir Crit Care Med 174:722; author reply 722-724.

Grahame, T. and R. Schlesinger. 2005. Evaluating the health risk from secondary sulfates in eastern North American regional ambient air particulate matter. Inhal Toxicol 17:15-27.

Greven, S., F. Dominici, and S. Zeger. 2011. An approach to the estimation of chronic pollution effects using spatio-temporal information. JASA 106:396-406.

Ito, K. 2003. Associations of particulate matter components with daily mortality and morbidity in Detroit, Michigan. In: Revised analyses of time-series studies of air pollution and health. Special report., Health Effects Institute, Boston, MA.

Janes, H., F. Dominici, and S. Zeger. 2007b. Partitioning evidence of association between air pollution and mortality. Epidemiology 18:427-428.

Janes, H., F. Dominici, and S. L. Zeger. 2007a. Trends in air pollution and mortality: an approach to the assessment of unmeasured confounding. Epidemiology 18:416-423.

Jerrett, M. and R. T. Burnett. 2007. Air pollution and cardiovascular events. N Engl J Med 356:2104-2105; author reply 2105-2106.

Klemm, R. J. and R. Mason. 2003. Replication of reanalysis of Harvard Six-City Mortality Study. In: Revised analyses of time-series studies of air pollution and health. Special report

Koop, G. and L. Tole. 2003. Measuring the health effects of air pollution: to what extent can we really say that people are dying from bad air? J Environ Econ Manage 47:30-54.

Krewski, D., R. T. Burnett, M. S. Goldberg, K. Hoover, J. Siemiatycki, M. Jerrett, M. Abrahamowicz, and W. H. White. 2000. Reanalysis of the Harvard Six Cities Study and the American Cancer Society study of particulate air pollution and mortality. Health Effects Institute, Cambridge, MA.

Miller, K. A., D. S. Siscovick, L. Sheppard, K. Shepherd, J. H. Sullivan, G. L. Anderson, and J. D. Kaufman. 2007. Long-term exposure to air pollution and incidence of cardiovascular events in women. N Engl J Med 356:447-458.

Moolgavkar, S. H. 2003a. Air pollution and daily mortality in two U.S. counties: season-specific analyses and exposure-response relationships. Inhal Toxicol 15:877-907.

Moolgavkar, S. H. 2003b. Air pollution and daily deaths and hospital admissions in Los Angeles and Cook Counties. In: Revised analyses of time-series studies of air pollution and health. Special report. Health Effects Institute, Boston, MA.

Peters, A., S. Breitner, J. Cyrys, M. Stolzel, M. Pitz, G. Wolke, J. Heinrich, W. Kreyling, H. Kuchenhoff, and H. E. Wichmann. 2009. The influence of improved air quality on mortality risks in Erfurt, Germany. Health Effects Institute Research Report.

Pope, C. A., 3rd, R. T. Burnett, M. J. Thun, E. E. Calle, D. Krewski, K. Ito, and G. D. Thurston. 2002. Lung cancer, cardiopulmonary mortality, and long-term exposure to fine particulate air pollution. JAMA 287:1132-1141.

Smith, A. E.. 2012. Technical Comments on Chapter 2 of EPA's "Policy Assessment fro the Review of the Particulate Matter National Ambient Air Quality Standards" (First External Review Draft)

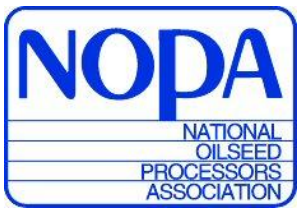
Stylianou, M. and M. J. Nicolich. 2009. Cumulative effects and threshold levels in air pollution mortality: data analysis of nine large US cities using the NMMAPS dataset. Environ Pollut 157:2216-2223.

Vedal, S. and S. J. Dutton. 2006. Wildfire air pollution and daily mortality in a large urban area. Environ Res 102:29-35.

Villeneuve, P. J., M. S. Goldberg, D. Krewski, R. T. Burnett, and Y. Chen. 2002. Fine particulate air pollution and all-cause mortality within the Harvard Six-Cities Study: variations in risk by period of exposure. Ann Epidemiol 12:568-576.

Wittmaack, K. 2007. The big ban on bituminous coal sales revisited: serious epidemics and pronounced trends feign excess mortality previously attributed to heavy black-smoke exposure. Inhal Toxicol 19:343-350.

ATTACHMENT B



July 26, 2012

EPA Docket Center
Environmental Protection Agency
Mail Code: 2822T
1200 Pennsylvania Ave., NW
Washington, DC 20460-0001

Attn: Docket No. EPA-HQ-OGC-2012-0474

Re: Comments of the Associations Regarding Proposed Consent Decree for National Ambient Air Quality Standards for Particulate Matter, Docket ID No. EPA-HQ-OGC-2012-0474.

To Whom It May Concern:

The National Association of Manufacturers, American Chemistry Council, American Foundry Society, American Iron and Steel Institute, Brick Industry Association, Corn Refiners Association, Council of Industrial Boiler Owners, Industrial Energy Consumers of America, National Federation of Independent Business, National Mining Association, National Oilseed Processors Association, North American Die Casting Association, and The Fertilizer Institute (collectively, "the Associations") submit these comments on the proposed consent decree between state and environmental plaintiffs and the U.S. Environmental Protection Agency ("EPA" or the "Agency"), notice of which the EPA provided in the *Federal Register* on June 26, 2012, pursuant to section 113(g) of the Clean Air Act ("CAA or Act"), 42 U.S.C. § 7413(g). For the reasons below, the Associations urge the EPA to withdraw and withhold its consent to the proposed consent decree.

In the proposed consent decree, the parties purport to settle consolidated United States District Court for the District of Columbia cases Nos. 12-00243 and 12-00531 in exchange for a commitment by the EPA to sign, by December 14, 2012, a final rulemaking concluding its review of the National Ambient Air Quality Standards for particulate matter ("PM NAAQS"), and promulgating revisions to the NAAQS as the EPA may determine appropriate. Notice of Proposed Consent Decree, 77 Fed. Reg. 38060 (June 26, 2012).

The consent decree would dramatically and unrealistically shorten the time allowed for the EPA to consider and evaluate public comments on the proposed PM NAAQS revisions, in comparison to the amount of time the EPA historically has taken to consider the voluminous and technically detailed public comments on NAAQS rulemakings as well as the amount of time the EPA has said is needed on this particular rule making. As a result, the consent decree saddles the EPA with an infeasible regulatory deadline, and gives it a strong incentive to provide only a passing and perfunctory review of comments that do not support the EPA's proposed modifications to the PM NAAQS.

In addition, the EPA is required to complete extensive work and analysis for each NAAQS revision process consistent with both the Clean Air Act and the precedents of the U.S. Supreme Court and the D.C. Circuit. A schedule for the EPA to review comments and sign a final rulemaking that is both truncated *and* preordained even before the EPA sees the volume or type of comments it will receive, is a recipe for a rulemaking process that the U.S. Court of Appeals will find inadequate. The EPA should not agree to a consent order that sows the seeds of reversal by the U.S. Court of Appeals and which is unrealistic given the scope of this rulemaking and other regulatory obligations. The Agency should withdraw from the consent decree because consenting to it would be "inappropriate, improper, inadequate, or inconsistent" with the Clean Air Act.

A. Summary

The **National Association of Manufacturers** ("NAM") is the largest industrial trade organization in the United States, representing over 13,000 small, medium, and large manufacturers in all 50 states. The NAM is the leading voice in Washington, D.C. for the manufacturing economy, which provides millions of high-wage jobs in the U.S. and generates more than $1.7 trillion in GDP. Its mission is to enhance the competitiveness of manufacturers and improve American living standards by shaping a legislative and regulatory environment conducive to U.S. economic growth.

The **American Chemistry Council** ("ACC") is a nonprofit trade association whose member companies represent the majority of the productive capacity of basic industrial chemicals within the United States. The business of chemistry is a $720 billion enterprise and a key element of the nation's economy.

The **American Foundry Society** ("AFS") is the major trade and technical association for the North American metalcasting industry, with over 7,000 members, representing 2,100 metalcasters in America. U.S. foundries produce a wide range of metal castings and provide employment for over 200,000 workers and support thousands of other jobs indirectly. Ninety percent of all manufactured goods and capital equipment incorporate engineered castings into their makeup.

The **American Iron and Steel Institute** ("AISI") serves as the voice of the North American steel industry and represents member companies accounting for over three quarters of U.S. steelmaking capacity with facilities located in forty-three states.

The **Brick Industry Association** ("BIA"), founded in 1934, is the recognized national authority on clay brick manufacturing and construction, representing approximately 250 manufacturers, distributors, and suppliers that historically provide jobs for 200,000 Americans in 45 states.

The **Corn Refiners Association** ("CRA") is the national trade association representing the corn refining (wet milling) industry of the United States. CRA and its predecessors have served this important segment of American agribusiness since 1913. Corn refiners manufacture sweeteners, ethanol, starch, bioproducts, corn oil and feed products from corn components such as starch, oil, protein and fiber.

The **Council of Industrial Boiler Owners** ("CIBO") is a broad-based association of industrial boiler owners, architect-engineers, related equipment manufacturers, and university affiliates with members representing 20 major industrial sectors. CIBO was formed in 1978 to promote the exchange of information within the industry and between industry and government relating to energy and environmental equipment, technology, operations, policies, law and regulations affecting industrial boilers.

The **Industrial Energy Consumers of America** ("IECA") is a nonpartisan association of leading manufacturing companies with $700 billion in annual sales and with more than 650,000 employees nationwide. It is an organization created to promote the interests of manufacturing companies through research, advocacy, and collaboration for which the availability, use and cost of energy, power or feedstock play a significant role in their ability to compete in domestic and world markets.

The **National Federation of Independent Business** ("NFIB") is the nation's leading small-business advocacy association, representing members in Washington, D.C., and all 50 state capitals. Founded in 1943 as a nonprofit, nonpartisan organization, NFIB's mission is to promote and protect the right of its members to own, operate, and grow their businesses. NFIB represents about 350,000 independent-business owners who are located throughout the United States.

The **National Mining Association** ("NMA") is a national trade association of mining and mineral processing companies whose membership includes the producers of most of the nation's coal, metals, industrial and agricultural minerals; the manufacturers of mining and mineral processing machinery, equipment and supplies; and the engineering and consulting firms, financial institutions and other firms serving the mining industry.

The **National Oilseed Processors Association** ("NOPA") is a national trade association comprised of 12 companies engaged in the production of vegetable meals and oils from oilseeds, including soybeans. NOPA's 12 member companies process more than 1.6 billion bushels of oilseeds annually at 61 plants located throughout the country, including 56 plants which process soybeans.

The **North American Die Casting Association** ("NADCA") is the sole trade and technical association of the die casting industry representing members from over 350 companies located in every geographic region of the U.S. Die casters manufacture a wide range

of non-ferrous castings: from automobile engine and transmission parts to intricate components for computers and medical devices. In the U.S., die casters contribute over $7 billion to the nation's economy annually and provide over 50,000 jobs directly and indirectly.

The Fertilizer Institute ("TFI") represents the nation's fertilizer industry including producers, importers, retailers, wholesalers and companies that provide services to the fertilizer industry. Its membership is served by a full-time Washington, D.C. staff in various legislative, educational and technical areas as well as with information and public relations programs.

Changes to the PM NAAQS under the Clean Air Act will directly impact the operation of the Associations' members' facilities, plans for future growth and expansions, and the ability of our members to create new American jobs.

The Associations' members and the American economy generally, are attempting to recover from the steepest economic downturn since the 1930s, and to bring back the 2.2 million high-wage jobs lost during the recent recession. Federal policy makers should seek to create conditions that will lead to economic expansion, instead of moving forward with regulatory programs that will be an enormous drag on American manufacturing, economic growth, and job creation.

The proposed consent decree should be rejected because the EPA should not seek to make up for earlier delays in completing its 5-year review of the PM NAAQS by now agreeing to a truncated and impractical time period for consideration of public comments. Agreeing to a timeline for consideration of public comments that is likely to lead to the Agency merely giving a passing glance to anticipated detailed public comments and prejudging the outcome of the notice and comment process is simply not a proper way of remedying whatever delays may have occurred in the past.

The process of reviewing and revising any NAAQS, and particularly the PM NAAQS, is a highly technical and complex scientific and policy matter. Rather than take a reasoned approach providing the needed time for proper consideration of public comments, the proposed consent decree dictates a schedule that will prevent reasoned evaluation of public comments and deliberation within the EPA and with its other colleagues in the Executive Branch on an appropriate scientific and policy outcome. Instead of agreeing to a deadline that the Agency cannot feasibly meet, the EPA should carefully consider the expected very large number of comments (likely in the thousands or tens of thousands) on the proposed PM NAAQS regulations. This process will ensure broad stakeholder input before the Administrator commits to final deadline for completing the rulemaking process, or hurries a decision that invites the U.S. Court of Appeals to conclude that the Agency rulemaking process was too truncated, inadequate and shallow to result in a defensible final rule.

The Associations furthermore note that although they are not a party to the underlying litigation, they represent the very companies who will be charged with complying with any new final rule. The EPA could have consulted with the key stakeholders whose facilities and operations may be directly affected and burdened by compliance obligations resulting from the proposed new regulations, before agreeing to expedited procedures that apparently seek to minimize both the opportunities for our members to provide input, and for the agency to consider that input.

This side-lining of stakeholders conflicts with President Obama's January 2011 executive order mandating that regulations must be based on "the open exchange of

information and perspectives among affected stakeholders in the private sector, and the public as a whole." Executive Order, Improving Regulation and Regulatory Review (Regulatory Review Order) (Jan 18, 2011), *available at* http://www.whitehouse.gov/the-press-office/2011/01/18/improving-regulation-and-regulatory-review-executive-order. To that end, agencies must "provide the public with an opportunity to participate in the regulatory process." *Id.* The executive order states that agencies should "seek the views of those who are likely to be affected" before issuing a notice of proposed rulemaking. *Id.* The Associations would have very limited time to participate before the final rulemaking. This closed process flouts President Obama's executive order.

The Associations have three fundamental objections to the proposed consent decree. First, the proposed schedule for promulgating the final PM NAAQS rule contradicts the EPA's own assessment of the time needed to properly evaluate public comments and develop a legally and technically sound final rule. Second, the proposed schedule is inconsistent with past practice, unreasonably truncated, and based on assumptions about what the EPA will be able to do with comments and analysis that the EPA has not yet seen and could not possibly evaluate yet. As a result, the consent decree risks the EPA inappropriately prejudging key elements of the NAAQS setting process, and denying the Associations and other commenters a fair opportunity to be heard. And third, the effective date provisions in the consent decree go beyond what the law requires, grant the plaintiffs in this lawsuit relief to which they have no legal entitlement, would inappropriately limit the EPA's discretion, and appear to be inconsistent with the NAAQS implementation approach suggested in the EPA's PM NAAQS notice of proposed rulemaking. 77 Fed. Reg. 38890 (June 29, 2012).

B. The Proposed Deadline Contradicts The EPA's Own Assessment Of Time Needed To Properly Conduct The Rulemaking Process

The proposed consent decree requires the EPA to sign a notice of final rulemaking by December 14, 2012. As the EPA itself repeatedly acknowledged during the ongoing litigation, such a short time frame is impracticable and unrealistic, and it is likely impossible for the EPA to fairly and adequately consider public comments, conduct its own analysis, and develop final rulemaking documents required by law on the timeline set forth in the proposed consent decree. The EPA Assistant Administrator for Air and Radiation, Regina McCarthy, provided a detailed declaration outlining how a final rulemaking on **August 15, 2013** was the "most expeditious schedule" the EPA could possibly meet. *Am. Lung Ass'n v. EPA*, Case Nos. 1:12-cv-00243, 1:12-cv-00531, Decl. of Regina McCarthy (D.D.C. May 4, 2012) ("McCarthy Decl."). As the lead air official for the EPA, Assistant Administrator McCarthy clearly has every incentive to aggressively push forward with new air quality regulations and possesses the most detailed on-the-ground knowledge about the time required for the EPA to perform its Clean Air Act rulemaking activities. The consent decree thus flatly contradicts the EPA's own considered and sworn statements about what is necessary in order to complete a fair, adequate, and legally compliant rulemaking process, demonstrating the arbitrariness of the deadlines proposed in the decree.

The EPA has provided numerous reasons why the rulemaking process needs to be more lengthy than what it reflected in the proposed consent decree. Due to increased complexity and depth, the EPA expects "more time and effort are needed to interpret and apply the science . . . compared to the last review, not less." *Id.* at 14; *see also Am. Lung Ass'n v. EPA*, Defs.' Memo. In Opposition to Pl. ALA's Application for Preliminary and Permanent Injunction and in Support of Cross-Mot. for Summ. Judg. as to Remedy at 2, 17 (D.D.C. May 4, 2012) ("Defs.' Memo") ("complexity of the issues EPA must decide[] have expanded, not

narrowed"); *id.* ("No less time or effort will be needed to address comments in this rulemaking."). The EPA estimated that proper consideration would take "approximately one year . . . for the present PM NAAQS rulemaking." *Id.* at 12.

Administrator McCarthy's declaration emphasizes that the current review involves more standards than past PM NAAQS reviews. Unlike the past review, the EPA is proposing a "separate and distinct" $PM_{2.5}$ secondary standard, requiring a different indicator, different form, different averaging time and different level. McCarthy Decl. at 15-16; *see also* Defs.' Memo at 18 ("clearly increas[ing] the range and complexity of issues to address in the current review of the secondary standard, compared to the last review").

Additionally, the EPA faces a "very large body of new science" that was developed since the last review. *Id.* And comments will cite "numerous new studies." *Id.* at 15. After receiving tens of thousands of separate comments, the EPA must conduct a provisional assessment of the newly-cited studies to ensure the final rule "accurately reflect[s] the latest scientific knowledge." 42 U.S.C. § 7408(a)(2); *see also* National Ambient Air Quality Standards for Particulate Matter, Final Rule, 71 Fed. Reg. 61144, 61148 (Oct. 17, 2006) ("2006 PM NAAQS Final Rule") (finding provisional assessment "provide[d] important insights on the relationship between PM exposure and health effects of PM"). The EPA also expects to expend "more time and effort" than the last review to prepare the provisional assessment. Defs.' Memo at 18.

Indeed, the heavy workload and time that will be required already led the EPA to push back what it called the "most expeditious schedule that EPA reasonably can meet" from an expected final rulemaking in June 2013 to August 15, 2013. *Am. Lung Ass'n v. EPA*, Defs.' Statement of Undisputed Facts ¶ 4 (D.D.C. May 4, 2012); Defs.' Memo at 2, 19; McCarthy Decl. at 17, 16.

The Office of Air and Radiation must also juggle this rulemaking with several other "major rulemakings involving air pollution requirements for a wide variety of stationary and mobile sources, many with court-ordered or settlement agreement deadlines." McCarthy Decl. at 16. Indeed, the Office currently has seven other open rulemakings in which comment periods close in the next few months. *See* Air Docket Comment Period Closings, *available at* http://www.epa.gov/air/docket/comment.html (last visited July 26, 2012).

In short, the EPA has persuasively made the case for why the timelines in the proposed consent decree are improvident, and thus why the consent decree should not receive the EPA's consent and agreement. To engage in a schedule that the Agency itself has said it cannot meet in a way that gives fully and fair vetting to these complex issues is the essence of arbitrary and capricious government action.

C. The Deadline In The Proposed Consent Decree Would Deny The Public A Real Opportunity To Have Their Views And Data Fairly Considered

The consent decree assumes, unreasonably, that the EPA can perform all of its responsibilities in an improperly truncated period of time. The public comment period on the proposed final rule ends August 31, 2012, and the consent decree would give EPA only about 100 days to review and evaluate all of the comments, review all new scientific and technical data discussed in the comments, write a notice of final rulemaking explaining and justifying all its decisions in the final rulemaking, respond to relevant comments and arguments, write a response to comments document, and coordinate as appropriate with the Office of Information

and Regulatory Affairs in order to obtain clearance under the appropriate Executive Orders to issue the final regulations.

Under any perspective, this is simply not enough time for the EPA to do its work fairly, adequately, and in compliance with law. This is demonstrated, first, by the fact that it is dramatically shorter than the time the EPA has taken to evaluate comments and prepare a notice of final rulemaking *in any rulemaking since 1971 that has set new or revised PM or ozone NAAQS*.[1] Indeed, the mere five and a half months from proposal to final rule is "virtually unprecedented for a NAAQS rulemaking." *Am. Lung Ass'n v. EPA*, Defs.' Reply at 2 (D.D.C. May 16, 2012) ("Defs.' Reply"). In most recent NAAQS reviews, the EPA needed 8-9 months between proposal and final rule. *Id.* at 7-8. During the 2006 PM NAAQS review—notably less complicated than the current one—the EPA took nine months between the proposal and final rule. *Id.* at 7. The EPA spent 183, 150 and 756 days just responding to public comments on the last three PM NAAQS reviews;[2] yet here, only expects to spend about 100 days on these tasks. The Associations know of no compelling reason for the EPA to agree to a virtually unprecedented and dramatically truncated period of time for the review and evaluation of public comments, and the preparation of a final rulemaking. There is no reason to think the current rulemaking will draw fewer comments, be less complicated, or involve easier technical or policy judgments than required with the previous NAAQS processes.

Moreover, past PM NAAQS reviews have involved exceedingly large numbers of public comments. For example, during the 2006 review the EPA received more than 120,000 public comments. 2006 PM NAAQS Final Rule at 61148; McCarthy Decl. at 13. Leaving aside the time needed to actually incorporate these into the final rule, the process of merely reading and drafting the statutorily-required "response to each of the significant comments, criticisms, and new data submitted" should take months. *See* 42 U.S.C. § 7607(d)(6)(B). The 2006 review resulted in a 435-page, single-spaced response to comments document. McCarthy Decl. at 13.

Chopping eight months off the most expeditious timetable the EPA believed was attainable, *see* McCarthy Decl. at 17, risks enabling erroneous decisions that do not "accurately reflect the latest scientific knowledge." 42 U.S.C. § 7408(a)(2). The likelihood that the EPA will inadequately consider and evaluate the comments it receives is high—particularly given the Agency is likely to receive more than 100,000 public comments—if the EPA attempts to respond on this abbreviated timeline. Given barely 100 days, the EPA would be reviewing over 1,000 comments and drafting 4-5 pages of responses per day, every day, including weekends. Such a pace is patently unrealistic and defeats the very purpose of notice-and-comment rulemaking to ensure that "public comment will be considered by an agency" before it reaches its decision, and to allow "the agency [to] alter its action in light of those comments." *Hall v. U.S. EPA*, 273 F.3d 1146, 1163 (9th Cir. 2001).

---

[1] The EPA took only 45 days from the close of the comment period to issuance of the final PM and ozone NAAQS rules in 1971, but the scope, complexity and content of Clean Air Act rulemaking in 1971 bears virtually no resemblance to those rulemakings today, as a result of obligations imposed on EPA by the Act itself and by judicial decisions concerning the NAAQS.

[2] The 2006 review lasted from April 17, 2006 until October 17, 2006 (183 days). 71 Fed. Reg. 61144 (Oct. 17, 2006). The 1997 review lasted from February 18, 1997 until July 18, 1997 (150 days). 62 Fed. Reg. 38652 (July 18, 1997). And the 1987 review lasted from June 5, 1985 until July 1, 1987 (756 days). 52 Fed. Reg. 24634 (July 1, 1987). On average, these reviews lasted 363 days, compared to the proposed 105 days here.

An expedited review also increases the likelihood that the D.C. Circuit will find the final rulemaking to be inadequate. It is a virtual certainty—regardless what standards are set forth in the final regulations issued by the EPA—that the PM NAAQS regulations will be challenged in the D.C. Circuit as has been the experience in the past. The short deadline not only increases the chance that the standards derived would not "accurately reflect the latest scientific knowledge," 42 U.S.C. § 7408(a)(2), but also that the D.C. Circuit will find flaws in perfunctory analysis and hurried process of writing the final rule documents. Agency action will generally be found arbitrary and capricious when the Agency has: (1) relied on factors that Congress did not intend it to consider; (2) *failed to consider an important aspect of the issue at hand*; or (3) offered an explanation for its decision that runs counter to the evidence before it. *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962) (emphasis added). The EPA's own sworn statements make clear the Agency cannot actually consider all comments in the proposed time table. Following the proposed schedule means rolling the dice and hoping the Agency does not miss "an important aspect of the issue" contained in an overlooked public comment.

Given the EPA anticipates "voluminous" and "detailed" public comments, heightened complexity, and an "enormous" amount of new science to be considered, the Agency cannot adequately respond and incorporate all public comments in just over 100 days. McCarthy Decl. at 18; Defs.' Reply at 5. The shortest PM NAAQS review since 1971 still required 150 days between the close of the comment period and the final rulemaking. 62 Fed. Reg. 38652 (July 18, 1997); *see infra* n.2. If the EPA does not withdraw the consent decree, the Agency places itself at odds with both history and its own sworn statements concerning its ability to process, review, and respond to the multitude of public comments and new science necessary to ensure a proper rulemaking.

D. The Proposed Decree Goes Beyond What The Law Requires And Improperly Forecloses Options For A Final PM NAAQS Rulemaking

The proposed decree obligates the EPA to multiple commitments not required by the Clean Air Act or any other law. The EPA need not tie its hands, nor should the EPA give preferential treatment to plaintiffs in the ongoing rulemaking process to the detriment of other stakeholders.

The expedited Federal Register notice is not required by law. The consent decree commits the EPA to seeking "expedited publication in the Federal Register," including expedited delivery of the signed final rule. Consent Decree ¶ 4. No provision in the Clean Air Act obligates the EPA to such a rushed process. The Act requires all air quality criteria to "be announced in the Federal Register," 42 U.S.C. § 7408(d), and the EPA must "by regulation promulgate" NAAQS "after a reasonable time for interested persons to submit written comments," 42 U.S.C. § 7409(a)(1)(B). But nowhere is expedited notice in the Federal Register required.

The consent decree's mandate that the EPA provide a signed copy of the notice of final rulemaking to plaintiffs within three days of signing also is not required by law. Consent Decree ¶ 4; *see* CAA, 42 U.S.C. § 7401 *et seq*. Providing preferential treatment to environmental and state plaintiffs over the Associations and other stakeholders is contrary to an open and transparent rulemaking. The plaintiffs are entitled only to the same notice of the final rulemaking as the public generally.

The EPA need not commit itself to any provision not required by law. The underlying lawsuit concerns the five-year review deadline. Negotiated compromises concerning how long a

good faith effort to complete the rulemaking will take cannot enable the EPA to bind itself on other matters while avoiding the normal rulemaking process and public input.

Moreover, the fifth paragraph of the consent decree, which would obligate the EPA to make a revised NAAQS effective as soon as is legally permissible after it is published in the Federal Register, is inconsistent with what the EPA itself has stated is its anticipated approach for implementing a new $PM_{2.5}$ NAAQS. The agency expects to "grandfather" air permit applications from compliance with any new PM NAAQS. *See* 77 Fed. Reg. 38890, 39022 (June 29, 2012). One means of grandfathering could be a delayed NAAQS effective date. By entering into the consent decree, the EPA would foreclose final rule options on an issue that the notice of proposed rulemaking specifically addresses. The EPA's commitment not to delay a Clean Air Act rule's effective date appears unprecedented. For example, the EPA's consent decree setting deadlines to designate ozone nonattainment areas had no such provision. *See* Consent Decree, *WildEarth Guardians v. Jackson*, Case No. 2:11-cv-1661 (D. Ariz. Feb. 11, 2012).

E. Conclusion

The proposed consent decree unreasonably commits the EPA to deadlines that are inconsistent with history, reason, and what will be necessary to produce a fair and legally sound final rulemaking. Moreover, it contains provisions not mandated by law and to which the plaintiffs have no entitlement. Because the schedule in the proposed consent decree "is simply too compressed at this stage to afford any reasonable possibility of compliance," *Sierra Club v. Johnson*, 444 F. Supp. 2d 46, 58-59 (D.D.C. 2006), the EPA must withdraw the agreement as "improper" and "inconsistent" with the Clean Air Act's requirement of deliberative rulemaking, 42 U.S.C. § 7413(g). Rather than commit to promulgate standards under an unworkable deadline, the EPA instead should continue to work toward the "most expeditious schedule that EPA reasonably can meet," culminating with a final rulemaking on August 15, 2013. McCarthy Decl. at 16.

The Associations thank the EPA for the opportunity to comment on the consent decree and appreciate the consideration given to our industries.

Sincerely,

National Association of Manufacturers

American Chemistry Council

American Foundry Society

American Iron and Steel Institute

Brick Industry Association

Corn Refiners Association

Council of Industrial Boiler Owners

Industrial Energy Consumers of America,

National Federation of Independent Business

National Mining Association

National Oilseed Processors Association

North American Die Casting Association

The Fertilizer Institute