

EPA Rules for Fossil Fuel-Fired Power Plants

Introduction

President Obama's first term in office saw much activity in tackling air quality issues, particularly involving the coal-fired electricity generation industry, in a campaign with both environmental and energy policy objectives. The campaign was particularly controversial politically, and led to a number of regulatory actions being deferred until after the Presidential election. With Obama's second term now confirmed, a number of the deferred actions are set for further attention, and EPA is poised to spring into action. Here is a look at federal regulations that will most likely be proposed, finalized, implemented, and litigated in the next four years.

I. Cross-State Air Pollution Rule: EPA Keeps Trying to Control Interstate Transport of NO_x and SO₂ Emissions

A. The Quick Post-Election Takeaway

EPA's Cross-State Air Pollution Rule (CSAPR) attempts to limit air emissions from electric generating units (EGUs) in upwind Midwestern and Eastern states that significantly cause or contribute to excessive ambient pollutant concentrations in downwind states. EPA is appealing the D.C. Circuit Court's decision to vacate and remand the agency's second attempt at establishing a limited cap-and-trade program for controlling nitrogen oxides (NO_x) and sulfur dioxide (SO₂) emissions, even while the earlier iteration of this program remains in place pending correction of its defects. At this point, it appears increasingly less likely that this program will ultimately be so stringent as to force older, coal-fired EGUs to choose between installing major new controls and shutting down. If the D.C. Circuit Court's decision is reversed, unit operators will have to decide whether and how to operate existing controls, or in some cases whether to acquire emissions allowances as a compliance strategy.

B. Further Details

The Clean Air Act's "good neighbor" provision requires that each state's implementation plan (SIP) contain adequate provisions prohibiting that state from "contribut[ing] significantly" to nonattainment in, or interfering with maintenance by, any other state of a national ambient air quality standard (NAAQS). 42 U.S.C. § 7410(a)(2)(D). Finding SIPs inadequate to comply with the statutory mandate, EPA promulgated CSAPR to address the requirements of the good neighbor provision. 76 *Fed. Reg.* 48,208 (Aug. 8, 2011). As part of CSAPR, EPA invoked its federal implementation plan (FIP) authority to regulate emissions of NO_x and SO₂ that cross state lines and significantly contribute to atmospheric formation of ozone and fine particulates in downwind states. CSAPR requires states in the eastern half of the country to reduce emissions from power plants within their state. At a basic level, EPA employed a two-step process to develop CSAPR. First, to determine which states to include in the program, EPA used air quality modeling to identify

upwind states whose EGUs contribute more than 1 percent of the 1997 8-hour ozone NAAQS, the 1997 annual NAAQS for fine particulates (PM_{2.5}), and the 2006 24-hour PM_{2.5} NAAQS, to NAAQS nonattainment problems in at least one downwind area. Then, in step two, EPA determined what emissions from each state could be eliminated through use of “highly cost-effective” controls. In CSAPR, EPA created a trading program of NO_x and SO₂ allowances, where it allocated allowances to each state in the program in amounts equal to the total aggregate annual tons of these pollutants that the state’s EGUs would emit based on emission reductions that could be achieved through use of cost-effective controls, then further allocated those allowances on a unit-level basis to EGUs. Beginning in 2014, states would be permitted to replace the FIPs with SIPs that could be different if they still achieved similar results.

Two days before CSAPR was scheduled to go into effect on January 1, 2012, the U.S. Court of Appeals for the District of Columbia Circuit, in a rare move, stayed the rule’s implementation. *EME Homer City Generation, L.P. et al. v. EPA*, No. 11-1302 (D.C. Cir. order issued Dec. 30, 2011). Then, in a 2-1 decision, the court vacated CSAPR and remanded the rule to EPA for reconsideration. *EME Homer City Generation, L.P. et al. v. EPA*, No. 11-1302 (D.C. Cir. Aug. 21, 2012). The court ordered that CSAPR’s cap-and-trade predecessor, the Clean Air Interstate Rule (CAIR), remain temporarily in effect until EPA promulgates an acceptable substitution, even though the court previously concluded that CAIR needed to be reworked for failure to comply with statutory requirements. *See North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008).

The court held that CSAPR exceeded EPA’s statutory authority because that rule may require upwind states to reduce their downwind impacts below the level that EPA defined to be “significant.” That possibility was created, according to the court, by employing the two-step process. Next, the court held that EPA may not require reductions beyond the level at which the downwind state achieves attainment, and that each upwind state may only be required to reduce its proportional share of contribution compared with other upwind states and with the downwind state itself. The court also held that EPA upset the Clean Air Act’s cooperative federalism structure when it issued FIPs instead of quantifying states’ good neighbor obligations and allowing states the initial opportunity to develop SIPs.

Judge Rogers’ dissenting opinion accompanying the court’s majority ruling in this case has been described by many as “scathing.” It laid the groundwork for EPA’s and respondent-intervenors’ petitions for *en banc* review, i.e., review by all active judges who serve on this court of appeals. Judge Rogers would have found that several issues underlying the majority opinion were not properly before the court, including a challenge to the two-step process. That approach was not raised during the public comment period on the rule, and thus was not preserved for judicial review, according to the dissent. *See* 42 U.S.C. § 7607(d)(7)(B). In addition, Judge Rogers would have found that challenges to EPA’s determinations of inadequate SIP submissions were waived when they were not brought within 60 days of those determinations. *See* 42 U.S.C. § 7607(b)(1). Turning to the merits, the dissent accused the majority of ignoring its own precedent in *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008) and *Michigan v. EPA*, 213 F.3d 663 (D.C. Cir. 2000). On the

cooperative federalism issue, the dissent would have held that the statute obligated EPA to impose FIPs.

Though rehearings *en banc* are rare, some commentators have opined that the likelihood of *en banc* review in this case is perhaps as high as it gets. The dissent accused the majority of reaching for jurisdiction, which well-settled principles of administrative exhaustion and finality would have required the court to decline, of “tramp[ing]” on its own precedent, and of ignoring the statutory text. With issues such as these, and a rule and a court ruling that have received much national attention, the court might be tempted to rehear the case. Petitioners did not have a right to respond to EPA’s and respondent-intervenors’ petitions for rehearing; instead, they had to await the court’s request for responses. Responses were filed on November 16.

At this point, even if the petitions for rehearing succeed, it would take many months before the court would decide whether to uphold or reverse the three-judge panel’s decision to vacate and remand CSAPR to EPA. If the petitions do not succeed, it is not at all clear what EPA would choose to do next, or how long that would take. Uncertainty in this area will persist for some time.

II. Mercury and Air Toxics Standards: Will Uncontrolled Electric Generating Units Have To Choose Between Scrubbers or Shutting Down?

A. The Quick Post-Election Takeaway

The Mercury and Air Toxics Standards (MATS), while under appeal and EPA reconsideration in part, may present the potential for the most significant impact on existing, under-controlled coal-fired electric generating units. As presently formulated, the control limitations for hazardous acid gas emissions may be stringent enough to force those units to decide whether to comply by installing expensive scrubbers, or to shut down. Dry sorbent injection may be a less-expensive alternative control technology that could enable some units to avoid the scrub-or-shut-down decision. Mercury emission controls, while imposing additional costs, appear to be not so costly as to pose the same difficult choices. Existing units must demonstrate compliance by 2015, assuming the rule survives a pending set of appeals. By March 2013, EPA intends to finalize a reconsideration of the MATS limits for new sources.

B. Further Details

Section 112(n)(1) of the Clean Air Act directed EPA to conduct and submit to Congress “a study of the hazards to public health reasonably anticipated to occur as a result of” hazardous air pollutant (HAP) emissions by electric utility steam generating units “after imposition of the requirements of this chapter.” 42 U.S.C. § 7412(n)(1)(A). This study has come to be known as the Utility Study. Congress required that EPA regulate EGUs “under this section, if the Administrator finds such regulation is appropriate and necessary after considering the results of [the Utility Study].” *Id.* On December 20, 2000, EPA published in the *Federal Register* its finding that regulation of HAP emissions from coal-fired and oil-fired EGUs under section 112 is appropriate and necessary (the Finding). 65 *Fed. Reg.*

79,825 (Dec. 20, 2000). As a result of the Finding, EPA added coal-fired and oil-fired EGUs to the list of source categories to be regulated for HAP emissions under section 112(c)(1) of the Clean Air Act. *Id.* EPA rescinded the Finding in 2005, when it promulgated the Clean Air Mercury Rule (CAMR), which purported to de-list EGUs and to regulate EGUs through categorical standards under different criteria established under section 111 of the Clean Air Act. In connection with CAMR, EPA made a number of findings and prepared technical support documents that contradicted EPA's 2000 Finding. In *New Jersey v. EPA*, 517 F.3d 574 (D.C. Cir. 2008), the D.C. Circuit reversed EPA's de-listing decision and vacated CAMR, holding that EPA may only de-list EGUs by following the procedures established by section 112(c)(9), which the agency had not done.

In the 2012 MATS, EPA (i) reaffirmed that it remains appropriate and necessary to regulate EGUs under section 112, based both on the original Finding and new evidence accumulated since that Finding, and (ii) proceeded to develop hazardous pollutant emission limits under section 112(d). 77 *Fed. Reg.* 9304 (Feb. 16, 2012). Section 112(d) instructs EPA to set limits for existing sources based on "maximum achievable control technology" (MACT). For existing sources, MACT cannot be "less stringent" than "the average emission limitation achieved by the best performing 12 percent of the existing sources" for which EPA has emissions information. 42 U.S.C. § 7412(d)(3). This is known as the MACT floor. The statute also gives examples of "measures" that can be considered in a "beyond-the-floor" emission standard. *Id.* § 7412(d)(2).

EPA divided the EGU source category into the following subcategories: coal-fired units designed to burn coal with a heat input value greater than 8,300 Btu/lb, coal-fired units designed to burn low-rank virgin coal, integrated gasification combined-cycle units, units that burn solid oil-derived fuel, units that burn liquid oil, and non-continental liquid oil units. For each subcategory, EPA established emission limits for mercury, for filterable particulate matter as a "surrogate" pollutant for metal HAPs other than mercury, and for hydrochloric acid as a surrogate pollutant for non-metal HAPs. EPA also developed limits for certain individual HAPs as an alternative compliance option for units. For organic HAPs and for a "limited use" liquid oil-fired subcategory, EPA developed work practice standards instead of emission limits. Existing units must demonstrate compliance with MATS by April 2015, though there are some opportunities for a one-year and even a two-year extension.

Needless to say, the rule is being vigorously litigated in the U.S. Court of Appeals for the District of Columbia Circuit. *See White Stallion Energy Center, et al. v. EPA*, No. 12-1100 (D.C. Cir.). Petitions challenging the MATS limits that apply to new sources have been severed, and that case is being held in abeyance while EPA is reconsidering those new source limits. *See White Stallion Energy Center, et al. v. EPA*, No. 12-1272 (D.C. Cir.). EPA granted petitions for reconsideration of MATS for new units because, among other reasons, it determined, as the petitioners alleged, that EPA did not use all the data in the record in establishing the new source emission limits for particulate matter and hydrochloric acid applicable to new coal-fired units. EPA signed a proposed reconsideration rule on November 16, and intends to complete the reconsideration process by March 2013. Meanwhile, briefing is proceeding in Case No. 12-1100. Petitioners have aggressively attacked the validity of the Finding and EPA's interpretation of section 112(n)(1)(A), from all angles. These arguments, if successful, would undermine the basis for

the rule and could result in elimination of the rule in its entirety. Petitioners also attacked the emission standards and other substantive aspects of MATS itself. EPA's brief is due January 22, 2013, and oral argument likely will not be held until September 2013 at the earliest.

III. Greenhouse Gas New Source Performance Standards: Does EPA Plan To Phase Out New Coal-Fired Units? Will Congress Decide To Step In?

A. The Quick Post-Election Takeaway

EPA has proposed greenhouse gas (GHG) emission limits for new coal- and natural gas-fired electric generating units that are largely based on emission levels achievable by natural gas-fired combined cycle turbine generators. These proposed regulations also offer an alternative standard averaged over 30 years, which accounts for the introduction of carbon capture and storage technology within about 10 years. Since carbon capture technology has not been clearly demonstrated in use, one of the key points of controversy surrounding this proposal is whether the stringency of the proposed standards would effectively preclude the introduction of new coal-fired generating units, which generate higher levels of GHGs than do natural gas-fired units. EPA now faces the tasks of evaluating a large pile of public comments on the proposed regulation and coming forward with a final regulation, and then defending the final rule against inevitable appeals. While this area of controversy continues to evolve for new sources, EPA has deferred setting uniform GHG emission limits for existing EGUs or for "modified" EGUs.

B. Further Details

EPA proposed standards of performance for greenhouse gas emissions from new EGUs under section 111(b) of the Clean Air Act in April 2012. *See Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units*, 77 *Fed. Reg.* 22,392 (Apr. 13, 2012) (GHG NSPS). Though the April 2012 notice is couched as a “proposed” rule, this did not stop Las Brisas Energy Center, LLC, Power4Georgians, LLC, Tri-State Generation and Transmission Association, Inc., Sunflower Electric Power Corporation, White Stallion Energy Center, LLC, and Utility Air Regulatory Group (UARG) from petitioning for judicial review of that notice. *See Las Brisas Energy Center, LLC v. EPA*, No. 12-1248 (D.C. Cir. docketed June 11, 2012). The GHG NSPS applies to coal- and natural gas-fired EGUs that commence construction after April 13, 2012. However, EGUs that received a complete Prevention of Significant Deterioration permit prior to that date and that commence construction by April 13, 2013, are not subject to the rule. These are so-called transitional sources. The GHG NSPS would establish an emission limit for carbon dioxide (CO₂) of 1,000 lb/MWh, based on the demonstrated performance of natural gas combined cycle (NGCC) units. Alternatively, there would be a 30-year averaging compliance option for coal-fired EGUs that is designed to allow installation and operation of a carbon capture and storage system. Under the averaging option, new coal-fired EGUs would need to be carbon-capture ready and would need to meet an 1,800 lb/MWh standard for the first 10 years, and then implement carbon capture and storage to achieve a limit of 600 lb/MWh thereafter.

The petitioners appealing the regulation are at various stages of developing new power plants. The gravamen of the petitioners’ complaint, as reflected in their responses to EPA’s motion to dismiss and in UARG’s motion for a declaratory judgment, is that EPA proposed a new source performance standard applicable to an entire “source category” rather than to sources within the source category. In other words, the standards apply to coal-fired EGUs, but they are based on the level of CO₂ emission reduction achievable only by NGCC units. But before the court will address the merits, the petitioners will have to survive EPA’s motion to dismiss, currently pending. In its motion, EPA argued that the court does not have jurisdiction to hear the case because the April 2012 notice is not a “final agency action” subject to judicial review. Indeed, the petitioners will be faced with the burden of showing why a federal appellate court should entertain an appeal of a proposed rule before it is finalized.

Setting a standard for GHG emissions from new power plants under section 111(b) triggers a requirement that EPA set standards for GHG emissions from existing power plants under section 111(d). Further, the same settlement agreement that required EPA to develop the GHG NSPS also required EPA to develop standards of performance for GHG emissions for existing EGUs under section 111(d) of the Clean Air Act by September 30, 2011. That deadline has come and gone without a proposed rule for existing EGUs. At a November 13, 2012, meeting of the National Association of Regulatory Utility Commissions, EPA’s assistant administrator for air and radiation, Gina McCarthy, reportedly said that a rule regulating GHG emissions from existing power plants is at least several years away.

Update as of December 13, 2012: The court granted EPA's motion to dismiss, concluding that the proposed GHG NSPS is not a final agency action subject to judicial review. *See Las Brisas Energy Center, LLC v. EPA*, No. 12-1248 (D.C. Cir. order Dec. 13, 2012). Further appeals presumably await promulgation of the final regulation.

IV. National Ambient Air Quality Standards

To date, EPA has promulgated NAAQS for carbon monoxide, lead, coarse particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), nitrogen dioxide (NO₂), ozone, and SO₂. Background on the Clean Air Act's NAAQS provisions is provided in [Getting the NAAQS: Parallel D.C. Circuit Rulings Clear the Way for EPA To Continue Implementing Stricter Ambient Air Quality Standards](#), a Ballard Spahr alert from July 27, 2012. Before President Obama leaves office in 2016, EPA is expected to take final action on numerous NAAQS, including promulgation of revised standards, attainment and nonattainment area designations, and review of SIPs. Here is a summary of the most significant upcoming actions.

A. Implementing the 2010 SO₂ NAAQS: Could Modeling As Well As Monitoring Lead to a Scrub-or-Shut-Down Decision for All Coal-Fired Units by 2017?

1. The Quick Post-Election Takeaway

EPA has been implementing a substantially tighter SO₂ NAAQS promulgated in 2010, even while it has successfully defended against appeals of these standards. EPA guidance memoranda to states indicate that the agency is considering using monitoring as well as modeling in assessing attainment. If modeling is used, many areas are expected to be in nonattainment. This could translate into substantial new SO₂ control requirements for major sources of SO₂ by 2017, and could likely serve as another reason why larger sources, particularly existing coal-fired EGUs, may have to choose between the substantial expense of installing scrubbers or shutting down.

2. Further Details

In 2010, EPA set the primary one-hour SO₂ NAAQS at 0.075 ppm and a secondary annual standard at 0.5 ppm. *75 Fed. Reg.* 35,520 (Aug. 23, 2010). In July 2012, the U.S. Court of Appeals for the District of Columbia rejected petitions for review of the new primary NAAQS. *Montana Sulfur & Chemical Co. v. EPA*, No. 11-1080 (D.C. Cir. July 20, 2012). In June 2013, EPA expects to finalize initial area designations for the 2010 SO₂ NAAQS. EPA initially gave strong signals that it would determine whether regions were not attaining the 2010 NAAQS based not only on monitored ambient SO₂ levels, but also on predicted SO₂ levels based on highly conservative modeling protocols, particularly where monitors were not available to measure ambient SO₂ concentrations directly. EPA is considering further the use of modeling for this expanded purpose, even while EPA and the states deal with Clean Air Act deadlines to designate nonattainment areas and to develop SIPs that arguably must demonstrate attainment with the 2010 SO₂ NAAQS by requiring that new source controls be in place by 2017. Based on modeling in particular, virtually all

regions with large coal-fired units can be expected to project nonattainment with the 2010 SO₂ NAAQS. Under those circumstances, scrubbers for all those units continuing in operation may be required.

B. The Ozone NAAQS: How Far, How Fast for New NO_x and VOC Controls Across Numerous Industries?

1. The Quick Post-Election Takeaway

EPA's ozone NAAQS has been particularly controversial because it affects so many sources even beyond the electric generating sector. During the first Obama term, EPA proposed tightening the ozone NAAQS it most recently promulgated in 2008 on the grounds that scientific evidence supported a tighter standard. Before reaching a final decision, however, EPA decided (by presidential directive) to defer further action until its next statutorily-scheduled update in 2014. These actions are now the subject of ongoing challenges in court, with some objecting that the 2008 standards are too stringent, and others that the 2008 NAAQS is not stringent enough. Meanwhile, EPA proceeds to implement the 2008 NAAQS by requiring updated SIPs. The outcome of this muddled situation presumably will have a significant impact on further control requirements for NO_x and volatile organic compounds, the two primary precursors for atmospheric ozone formation.

2. Further Details

A new ozone NAAQS went into effect on May 27, 2008, lowering the prior 8-hour primary and secondary standard of 0.08 ppm set in 1997 to 0.075 ppm, but EPA announced its decision to reconsider that rulemaking on September 16, 2009. 73 *Fed. Reg.* 16,436. On January 19, 2010, EPA proposed to replace the 2008 standards with an 8-hour primary standard in the range of 0.060 ppm to 0.070 ppm and a cumulative seasonal secondary ozone standard in the range of 7-15 ppm-hours. 75 *Fed. Reg.* 2938. The ozone NAAQS received heightened attention when, on September 2, 2011, President Obama issued a press statement informing the public that he had requested EPA Administrator Jackson withdraw the proposed revisions. Citing the importance of reducing regulatory burdens and regulatory uncertainty as the economic recovery continues, the President explained he “did not support asking state and local governments to begin implementing a new standard that will soon be reconsidered.” Instead, EPA planned to revisit the ozone NAAQS during its regularly scheduled NAAQS review and update targeted for 2014. EPA's science advisers have since indicated that scientific support exists for tightening the ozone NAAQS further. Since the revised ozone standards have been withdrawn, litigation over the 2008 standards, which had been held in abeyance while EPA reconsidered whether the 2008 standards satisfied the requirements of the Clean Air Act, has resumed. See *Mississippi v. EPA*, No. 08-1200 (D.C. Cir.). In the meantime, EPA began implementing the 2008 standards for the first time in 2012 when it made area nonattainment designations. By the end of 2015, 36 areas in “marginal” nonattainment will be required to demonstrate attainment, and another 10 areas in varying degrees of more significant nonattainment will have longer schedules to make this demonstration. However, this implementation schedule remains subject to the outcome in *Mississippi*. Oral argument in that case was held on November 16, 2012.

C. NAAQS for Particulate Matter: Further Impetus for SO₂ and NO_x Limitations

1. The Post-Election Takeaway

Because EPA has a December 14, 2012, court-ordered deadline to complete its reconsideration of the 2006 annual NAAQS for PM_{2.5} by issuing an updated final regulation, that action may be an initial signal of how aggressively the re-elected Obama administration will be pursuing air quality regulation. The science committees with whom EPA consults in establishing NAAQS have concluded there is scientific support for a more stringent PM_{2.5} NAAQS. If EPA moves in that direction, tighter NAAQS would likely lead to more areas designated nonattainment, and in turn more stringent emission limits not only for PM_{2.5}, but also for SO₂ and NO_x, which both act as precursors to atmospheric formation of fine particulates.

2. Further Details

In the immediate near term, under the terms of a consent decree, EPA is required to finalize revised primary and secondary annual and 24-hour PM_{2.5} and PM₁₀ standards by December 14, 2012. *American Lung Ass'n v. EPA*, No. 1:12-cv-00243 (D.D.C. Sept. 4, 2012). On the same date, states with areas designated as nonattainment for the 2006 24-hour PM_{2.5} NAAQS must submit SIPs outlining how they will reduce ambient concentrations of PM_{2.5}. The 2006 24-hour PM_{2.5} standard is 35 µg/m³, and the annual PM_{2.5} standard is 15 µg/m³. On June 29, 2012, EPA proposed to revise the annual PM_{2.5} NAAQS to between 12-13 µg/m³, but is considering a standard as low as 11 µg/m³. *77 Fed. Reg.* 38,890. EPA also proposed retaining the 24-hour PM_{2.5} NAAQS. Currently, the secondary standards are the same as the primary standards. EPA has proposed a secondary 24-hour PM_{2.5} standard of 28 or 30 deciview. EPA proposed retaining the existing primary and secondary 24-hour PM₁₀ standards at 150 µg/m³.

3. Update as of December 14, 2012

On December 14, 2012, EPA Administrator Lisa Jackson signed a final rule setting the annual PM_{2.5} NAAQS at 12 µg/m³. EPA retained the existing 24-hour PM_{2.5} NAAQS of 35 µg/m³, declining to adopt a secondary standard related to visibility as the agency had proposed. The agency also retained the existing primary and secondary 24-hour standards for PM₁₀ at 150 µg/m³, as the agency had proposed. EPA estimates the annual costs of implementing the rule will be between \$53 million and \$350 million, while estimated health benefits will range from \$4 billion to over \$9 billion per year. According to EPA's press release, by 2020, 99 percent of U.S. air quality control regions are projected to meet this standard without any additional actions because of anticipated reductions associated with other regulations. The inevitable appeals of this rule must be filed with the U.S. Court of Appeals for the District of Columbia Circuit within 60 days after the rule is published in the *Federal Register*.

D. The NO₂ NAAQS: Status Quo Until a New Monitoring Network Is in Place?

1. The Quick Post-Election Takeaway

EPA has been implementing the 2010 NO₂ NAAQS even while successfully defending that standard against legal appeal. There are currently no regions identified as nonattainment with the 2010 NO₂ NAAQS; however, EPA emphasized in its promulgation that it planned to pursue a strategy of installing a more comprehensive ambient NO₂ monitoring network focused on areas with higher populations and greater likelihood of higher ozone levels. EPA recently extended the schedule for accomplishing this network expansion to 2017. Significant impact from this NAAQS appears unlikely unless and until this expanded network becomes functional and produces results showing nonattainment.

2. Further Details

The primary and secondary annual NO₂ NAAQS are set at 0.053 ppm. In 2010, EPA added a primary one-hour NO₂ NAAQS of 0.100 ppm. In July 2012, the U.S. Court of Appeals for the District of Columbia rejected petitions for review of the one-hour standards. *See API v. EPA*, No. 10-1079 (D.C. Cir. July 17, 2012). The standard five-year review is scheduled to be completed for the 2010 NO₂ NAAQS in 2015. Currently, all air quality control regions are designated as in attainment, or unclassifiable. EPA has proposed to extend the deadlines for states to install and operate near-road NO₂ monitors to January 2014, January 2015, or January 2015. *77 Fed. Reg.* 64,244 (Oct. 19, 2012). Until a better monitoring network is in place, many areas will continue to be designated as “unclassifiable,” which essentially means that, unless and until they are redesignated, they are addressed the same way as areas designated in attainment.

V. **Coal Ash: Hazardous Waste, Solid Waste or Something Else? Will Wet Ash Handling Through Surface Impoundments Be Phased Out?**

A. The Quick Post-Election Takeaway

For some time, EPA has been wrestling with the issue of the proper approach to regulating the treatment, storage, and disposal of coal ash from EGUs. EPA’s current proposal essentially asks for comment on multiple alternative regulatory strategies: (a) regulating coal ash as hazardous waste; (b) regulating coal ash like solid waste, and (c) regulating new coal ash disposal units more aggressively than existing disposal units under a solid waste-like regulatory scheme. As proposed, regulating coal ash as hazardous waste would effectively force existing coal-fired units using wet ash handling with surface impoundment disposal to choose in a few years between closing or converting to dry ash handling and disposal in adequately lined landfills. If a significant number of existing coal-fired plants choose to close, these regulations arguably also would achieve reduction of air pollutant emissions, even though the regulations themselves would not directly address air emissions. Using a hazardous waste regulatory regimen also raises the question of whether using coal ash in commercially accepted recycling applications will be unnecessarily discouraged. EPA is being pressed by environmental advocacy groups to finalize regulations

at a faster pace than the additional year the agency now projects to be necessary for that purpose.

B. Further Details

In December 2008, a breach in a surface impoundment at the Tennessee Valley Authority's Kingston, Tennessee, plant caused a release of 1.1 billion gallons of coal ash slurry. In response to that disaster, EPA published a proposed rule to establish national standards under the Resource Conservation and Recovery Act (RCRA) for disposal of coal combustion residuals (CCR) in the *Federal Register* on June 21, 2010. 75 *Fed. Reg.* 35,128. The proposed rule sets forth two alternative approaches for disposal of CCR, whose significant differences include (i) federal enforceability and (ii) anticipated impact on wet handling and disposal of CCR. The first option would regulate CCR as hazardous waste under Subtitle C of RCRA. This option would be federally enforceable. Under EPA's Subtitle C proposed alternative, impoundments that do not meet the minimum design criteria would have to cease receiving CCRs five years after the effective date of the final rule and close the unit within two years after that. It is generally agreed that the Subtitle C option would effectively mandate closure of surface impoundments, which in turn would require operators to convert wet handling operations to dry handling. In addition, coal ash recyclers fear EPA's proposal to treat fly ash as hazardous waste would create, and possibly already has created, a stigma limiting beneficial use applications such as cement.

EPA also proposed an alternative regulating CCR as non-hazardous solid waste under Subtitle D of RCRA. Regulating CCR under Subtitle D would not impose requirements that would directly mandate the phase-out of all surface impoundments, but would likely lead to closure of new or existing surface impoundments by mandating costly compliance requirements if existing surface impoundments continue to be used for CCR disposal. Under EPA's Subtitle D proposal, impoundments that could not demonstrate they meet certain location requirements would have to close within five years, subject to a two-year extension if there is no alternative disposal capacity and no immediate threat to human health or the environment; however, existing impoundments must otherwise meet design criteria within five years of the effective date. EPA also sought public comment on an alternative Subtitle D option called Subtitle "D prime," pursuant to which the agency would allow existing impoundments to continue to operate for the remainder of their useful lives. Generally speaking, EPA does not have the authority to implement or enforce directly its requirements under Subtitle D. Instead, EPA would rely largely on states or citizen suits, and possibly other federal authorities, to enforce the new standards.

On April 5, 2012, a coalition of environmental groups filed suit to compel EPA to finalize its proposed rulemaking. *Appalachian Voices et al. v. Jackson*, No. 1:12-cv-00523 (D.D.C. complaint filed April 5, 2012). Similar lawsuits have been filed by coal ash recyclers, including Boral Material Technologies, Inc., and Headwaters Resources, Inc. *See Boral Material Technologies Inc. v. Jackson*, No. 1:12-cv-00629 (D.D.C. complaint filed April 20, 2012); *Headwaters Resources, Inc. v. Jackson*, No. 1:12-cv-00585 (D.D.C. complaint filed April 13, 2012). In an October 2012 filing, EPA took the position that it will need at least a year to finalize the rule. Motions and cross-motions for summary judgment are currently pending before the court.

VI. Effluent Limitation Guidelines: Will Coal-Fired Units Relying on Wet Ash Handling Have To Close or Convert to Dry Ash Handling by 2019?

A. The Quick Post-Election Takeaway

As with regulation of the handling and disposal of coal ash, regulation of wastewater discharges from electric generating units, including on-site coal ash disposal facilities, could result in the effective phase-out of surface impoundments through technology-based surface impoundment effluent discharge limits. EPA is under court order to propose these effluent limitations in December, and has indicated it is considering effluent limitations that could force existing coal-fired units to choose between the substantial expense of switching to landfill disposal or ceasing operations over the next five-plus years. It appears possible that this choice is more likely to be forced by the revised effluent limitations than by the coal ash rule, but more will be known about EPA's likely approach within the coming weeks if the present schedule holds.

B. Further Details

The federal Clean Water Act, 33 U.S.C. §§ 1251-1387, regulates industrial wastewater discharges into surface waters using two main tools, water quality standards and technology-based effluent limitations. In-stream water quality standards are set by the states (subject to EPA guidance, oversight, and review), and different standards may apply to different classes of waters. Technology-based effluent guidelines providing quantitative, "end-of-pipe" limitations on specific levels of pollutants in wastewater discharges are developed by EPA through regulations for a given industry category. For direct dischargers to waterways, the effluent limitations are implemented through National Pollutant Discharge Elimination System (NPDES) permits, administered by EPA or, more often, by states EPA has authorized to act in the place of EPA. 33 U.S.C. §§ 1311(a), (b), and 1342.

EPA is subject to a consent decree deadline to propose revised effluent limitation guidelines establishing technology-based wastewater pollution discharge limitations for EGUs by December 14, 2012,¹ and to finalize the rule by May 22, 2014. *See Defenders of Wildlife, et al. v. Jackson*, No. 1:10-cv-01915 (D.D.C. Sept. 20, 2012). Compliance with the revised effluent standards for certain toxic pollutants is required one year from the date of the rule's promulgation. 33 U.S.C. § 1317(a)(6). The timeline for compliance with new effluent standards for conventional and nonconventional pollutants depends on when a source's permit is renewed. A renewed permit must incorporate the revised effluent guidelines in the form of effluent limitations. 40 C.F.R. §§ 122.44(l), 122.62(a)(3). The maximum duration of a permit is five years, although this duration is extended if a timely-filed renewal application is awaiting action by the permitting agency. *Id.* § 122.46(a). Although the Clean Water Act requires compliance with effluent limitations

¹ Update as of December 13, 2012: By written agreement, EPA extended the deadline for proposing the revised effluent limitation guidelines to April 19, 2013. *See Defenders of Wildlife, et al. v. Jackson*, No. 1:10-cv-01915 (D.D.C. Dec. 10, 2012). EPA did not extend the deadline for finalizing the rule.

in a permit “as expeditiously as practicable, but in no case later than three years after the date such limitations are promulgated,” 33 U.S.C. § 1311(b), if a permit is obtained immediately before revised effluent guidelines are developed, it could be up to five years or more before compliance with the new guidelines is required by that permittee.

EPA has indicated that it expects the revised standards to target metals and other toxic, bioaccumulative pollutants in high-volume wastewater streams originating from fly ash and bottom ash handling activities, and in wastewater streams originating from scrubber-related operations, which generate flue gas desulfurization (FGD) wastes, and which are projected to grow in response to new air pollution control regulations as they take effect. EPA is actively evaluating the possibility of eliminating the discharge of these wastewater streams altogether by requiring conversion of wet handling systems for fly ash and bottom ash wastes to dry handling operations. These conversions would involve changes to equipment and operating practices affecting boilers and ash handling systems, as well as a switch in disposal techniques from surface impoundments to landfills. FGD treatment methodologies under consideration include chemical precipitation, biological treatment, evaporation-oriented techniques, or combinations of the above. Other wastewater streams EPA is considering addressing include leachate from ash and FGD waste disposal sites, coal pile and mercury treatment waste run-off, and cooling tower discharges occurring in connection with non-coal-fired as well as coal-fired generating facilities.

On the litigation front, the U.S. Court of Appeals for the District of Columbia Circuit scheduled oral argument on December 5 on the Utility Water Advocacy Group’s appeal from the district court’s denial of its motion to intervene in *Defenders of Wildlife*.

VII. Regional Haze and BART: A Source of Confusion

Pursuant to Clean Air Act requirements, EPA and states through the state implementation plan process are required to reduce regional haze adversely affecting national parks and similar “Class I” areas. One such requirement calls for SIPs to require older existing major sources contributing to these regional haze impacts to control relevant emissions through the use of best available retrofit technology (BART). 42 U.S.C. § 7491. Relevant emissions include particulates, NO_x, and SO₂, all of which contribute to the atmospheric formation of fine particulates, which in turn can lead to visibility impairment. BART-based limits could mean application of emission controls like scrubbers for SO₂ or selective catalytic reduction for NO_x.

EPA has a regulatory program in place to introduce BART requirements for relevant sources (largely, but not exclusively, EGUs), and has recently been pressed through lawsuits and in other ways to push states to identify and regulate BART-relevant sources. This has particularly resulted in activity in Western states, where large sources operate in proximity (and in some cases, even not so close) to national parks. This has also resulted in case-by-case BART rulings for individual units that are continuing, and that frequently result in appeals once BART-based emission limits are set.

BART activity has been much less of an issue in Eastern and Midwestern states covered by CSAPR and its predecessor, CAIR. EPA has determined that those

regulations will result in emission controls comparable to BART, and therefore has concluded that EGUs complying with CSAPR (and before CSAPR was promulgated, CAIR) are also in compliance with any BART requirements pertaining to NO_x and SO₂. *77 Fed. Reg.* 33,642 (June 7, 2012). This approach has become the source of considerable confusion, given that (1) the D.C. Circuit Court remanded CAIR and then voided and remanded CSAPR, and (2) environmental advocacy groups have challenged EPA's equivalency approach, whether based on CSAPR or CAIR. In an attempt to alleviate the confusion, EPA told its regional offices in a November 19, 2012, memorandum that the agency finds it appropriate to approve its one pending regional haze SIP proposal based on CAIR emission reductions as satisfying BART requirements. EPA also said, however, that it intends to await a decision on the CSAPR rehearing petitions before revisiting the June 2012 regional haze rule stating that states implementing CSAPR would be deemed to have satisfied BART requirements for their SIPs, or before revisiting any individual SIP approvals or disapprovals based on that approach.

VIII. MACT for Industrial, Commercial and Institutional Boilers, and Emission Limits for Solid Waste Incinerators: How Stringent Will Control Requirements End Up?

EPA is expected to finalize revisions to the national emission standards for hazardous air pollutants for industrial, commercial, and institutional boilers, and for emissions from commercial and industrial solid waste incinerators, in the coming months. The boiler rules can reach not only a broad range of industrial facilities, but also large institutional facilities such as hospitals, educational facilities, and possibly even large office parks or shopping centers with their own generators. The hazardous pollutants regulated and many of the control options at issue are similar to those in MATS. There is a great deal of controversy over the appropriate emission limitations mandated by statutory MACT requirements, and whether and how economic impacts should be taken into account (regardless of whether the Clean Air Act allows EPA to consider costs in this context). This regulatory package also reaches beyond boilers to solid waste incinerators (which can serve the same functional purpose as some boilers) and to the underlying regulatory definition of "non-hazardous solid waste."

For more than a year now, EPA has been reconsidering regulations that it promulgated in March 2011 in response to a U.S. District Court for the District of Columbia order, then subsequently suspended in large part, pending the reconsideration. Reconsideration rules were proposed in December 2011. *76 Fed. Reg.* 80,452 (Dec. 23, 2011); *76 Fed. Reg.* 80,598 (Dec. 23, 2011). Environmental groups appealed the suspension of the rulemaking package, and on January 9, 2012, the U.S. District Court for the District of Columbia vacated the agency-imposed stay. *Sierra Club v. Jackson*, No. 1:11-cv-01278 (D.D.C. Jan. 9, 2012). Until EPA finalizes the rules that were proposed in December 2011, which EPA recently has projected will take a few more months, it remains uncertain whether existing sources will be required to comply with the reinstated March 2011 rules by 2014, or by the date three years after the finalized reconsideration rules are promulgated.

IX. Conclusion

EPA's post-election regulatory agenda is substantial, as a number of actions come due under either statutory or court-ordered deadlines. The more prominent regulations described here have particularly significant implications for both environmental and energy policy. In all likelihood, EPA's regulatory actions will continue to generate controversy in both public forums and in litigation because of the possible economic implications they pose. In any event, businesses in the energy and industrial sectors can expect to continue to face the challenge of managing their operations in the face of considerable uncertainty as to both the outcome and timing of this tide of regulatory activity.

Copyright © 2012 by Ballard Spahr LLP.

www.ballardspahr.com

(No claim to original U.S. government material.)

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, including electronic, mechanical, photocopying, recording, or otherwise, without prior written permission of the author and publisher.

This alert is a periodic publication of Ballard Spahr LLP and is intended to notify recipients of new developments in the law. It should not be construed as legal advice or legal opinion on any specific facts or circumstances. The contents are intended for general informational purposes only, and you are urged to consult your own attorney concerning your situation and specific legal questions you have.