

July 6, 2017

Mr. Ronald Jordan U.S. Environmental Protection Agency Engineering and Analysis Division 1200 Pennsylvania Ave., N.W. Washington, D.C. 20004

Submitted electronically via <a href="http://www.regulations.gov">http://www.regulations.gov</a>

Docket I.D. No.: EPA-HQ-OW-2009-0819

In Re: Comments of the National Mining Association on the Environmental Protection Agency's Proposed Postponement of Certain Compliance Dates for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category

Dear Mr. Jordan:

The National Mining Association (NMA) appreciates the opportunity to comment on the U.S. Environmental Protection Agency's (EPA) proposal, "Postponement of Certain Compliance Dates for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category." 82 Fed. Reg. 26,017 (June 6, 2017). NMA is a national trade association whose members include 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 final 2015 Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category (ELG Rule) will unjustifiably impose substantial burdens on the coal industry and communities that rely on coal-generated electricity, force plant closures, and cause significant job losses. NMA strongly supports Administrator Pruitt's decision to reconsider the ELG Rule in light of its underlying flaws and the economic and operational impacts it and other costly rulemakings, including EPA's "Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals" rule (CCR Rule), will have on the coal industry.

NMA likewise supports EPA's proposed postponement of the Nov. 2018 deadlines for certain new, more stringent limitations and pretreatment standards contained in the ELG Rule. The proposed postponement is both appropriate and necessary because: (1) the record demonstrates that EPA did not set limits for existing sources in the final ELG

Rule in compliance with the requirements of the Clean Water Act (CWA); (2) new data further calls into question several of the ELG Rule's underlying assumptions related to the requirements EPA is now proposing to postpone; (3) the current deadlines will require plants to almost immediately incur significant capital expenditures and costs – or undergo closure – to comply with these flawed requirements; (4) postponement of the impending deadlines will not impact the attainment of water quality standards; (5) EPA grossly underestimated the costs of the ELG Rule and failed to fully consider the impacts of the ELG Rule in conjunction with other major rulemakings impacting the coal industry; (6) the current deadlines do not allow time for EPA to coordinate the requirements and impacts of the ELG Rule with the CCR Rule, which is currently also the subject of both ongoing litigation and a petition for reconsideration; and (7) the current deadlines impede implementation of the Water Infrastructure Improvements for the Nation Act (WIIN Act).

NMA therefore requests that EPA postpone the Nov. 2018 compliance deadlines indefinitely pending the agency's reconsideration of the ELG Rule. NMA also requests that EPA include clarification to permit writers outlining the substantial flexibility regulatory agencies have in applying the "as soon as possible" factors in the ELG Rule found at 40 C.F.R. 423.11(t).

### The ELG Rule is Fundamentally Flawed

As EPA notes in the proposed deadline postponement, the petitions for reconsideration of the ELG Rule from both industry and the Small Business Administration raised "wideranging and sweeping objections" to the ELG Rule that warrant "careful and considerate review." 82 Fed. Reg. at 26,017-18. Importantly, those objections detail the extent to which the limits contained in the final ELG Rule were based on a fatally incomplete record and faulty assumptions, and provide additional new information further underscoring EPA's failure to set the "best available technology economically achievable" in a manner consistent with the requirements of the CWA. These significant flaws in the ELG Rule clearly warrant remand for further rulemaking proceedings to ensure that all limitations and requirements comport with the requirements of the CWA. Postponing the impending deadlines to meet these inappropriate requirements is therefore likewise necessary.

#### Flue Gas Desulfurization Wastewater Limits

Some of the most problematic aspects of the ELG Rule are its flue gas desulfurization wastewater (FGDW) limits. In the final ELG Rule, EPA set limits for arsenic, mercury, selenium, and nitrate/nitrite based on the application of a combination of chemical precipitation and biological treatment as the model technology, stating that "biological treatment [is] well-demonstrated" technology for FGDW. 80 Fed. Reg. at 67,850. However, EPA did not gather any data on the treatability via biological treatment of selenium and nitrates in FGDW produced by plants burning lignite or subbituminous

coals, such as Powder River Basin coal, despite the fact that such plants comprise nearly 25% of the industry.

Importantly, the effectiveness of biological treatment for FGDW, particularly for the removal of selenium, is highly dependent on the makeup and chemistry of FGDW, both of which vary significantly depending, in part, on the type of coal used. As such, because none of the subbituminous- or lignite-burning coal plants in EPA's underlying data used biological treatment as part of their FGDW systems, EPA failed to demonstrate the feasibility of its model technology for nearly 25% of plants subject to the new limits based on that very technology. Those underlying limits therefore were clearly not developed in accordance with CWA Sec. 304(b)(2), and do not represent the "best available technology economically achievable." Indeed, as noted in the industry reconsideration petition, a new pilot study of biological treatment at a subbituminous-burning plant appears likely to demonstrate that the plant in fact cannot meet the FGDW limits using EPA's model technology, further illustrating the need to revisit EPA's faulty assumptions and incomplete dataset. Utility Water Act Group Petition for Reconsideration at p. 34. Postponing the upcoming deadlines pertaining to the ELG Rule's FGDW limits is therefore necessary given the flaws in their development.

#### Bottom Ash Transport Water

The final ELG Rule also establishes, except under narrow circumstances, a zero-discharge limit for bottom ash transport water (BATW) based on a model technology of either a mechanical drag system or remote mechanical drag system. However, despite the fact that many facilities have already been retrofitted to comply with a zero-discharge requirement, it may nevertheless be impossible for facilities in certain regions to maintain zero discharges under all weather or other events. EPA should postpone the compliance deadlines of this requirement until it determines the feasibility of the BATW limits in such situations.

Additionally, in setting its zero-discharge limit, EPA relied on unsound analytical methods that produced overestimations of pollutant loadings for BATW, as well as 27 samples of 40-year old data from unidentified sources that were of questionable quality and were obtained prior to 1974 and 1982 regulations that drastically changed how industry handled BATW. In fact, the only current BATW data collected by EPA amounted to one sample from a plant obtained in 2007. Yet EPA nevertheless used this outdated and questionable data to identify 37 pollutants of concern for BATW, estimate current industry-wide pollutant loadings, estimate the amount of pollutants removed by the model technology, and calculate toxic weighted pounds equivalents (TWPEs). As described in further detail below, this in turn led to unsupported cost estimates for BATW that should be revisited by EPA.

#### <u>Additional Problematic Provisions</u>

While the FGDW and BATW limits in the final ELG Rule clearly warrant revision, a number of other provisions in the rule also merit reconsideration. For example, for

gasification wastewater, EPA established stringent arsenic, mercury, selenium, and total dissolved solids limits based on the model technology of a one-stage vapor compression evaporation (VCE) treatment system despite the fact that the record includes highly limited VCE data, and no crystallizer effluent data from facilities utilizing two-stage treatment systems. In setting a zero-discharge limit for fly ash transport water, EPA likewise significantly underestimated the costs of retrofitting to EPA's model technology – dry vacuum fly ash handling systems. The limits set for modern Integrated Gasification Combined-Cycle (IGCC) plants were also developed using an insufficient and unrepresentative dataset and cannot be reliably met, even through application of EPA's chosen model technology. These as well as certain other issues related to combustion residual leachate and flue gas mercury control wastewater all warrant revision during EPA's reconsideration of the ELG Rule, and justify EPA's proposed postponement of the impending compliance deadlines.

### **EPA Significantly Underestimated the Costs Associated with the ELG Rule**

Data supplied by the utility industry shows that EPA grossly underestimated the costs associated with several of the requirements contained in the ELG Rule. For example, comments submitted by Southern Company estimated costs nearly seven times higher than EPA's estimates for installing biological treatment for FGDW. With respect to BATW, the Electric Power Research Institute (EPRI) estimated that the costs of conversion from wet to dry bottom ash handling for plants with a generating capacity above 400 megawatts were over \$6 billion, with an additional \$452 million in annual operation and maintenance costs – more than double EPA's estimate. Similarly, one small community-owned utility alone – City Utilities of Springfield, Missouri – has already expended \$4 million in capital costs, and will need to spend an additional \$3 million if the BATW zero-discharge requirement is applied, which does not even account for additional annual operating costs.

Furthermore, while, as stated above, many plants have already been retrofitted to meet a zero-discharge BATW requirement, 103 plants must still retrofit their BATW systems as a result of the ELG Rule. According to EPA, those retrofits would result in a total industry capital cost of over \$2.5 billion and annual operations and maintenance costs of \$133 million. However, even these staggering numbers represent a gross underestimation of the ELG Rule's true costs: industry has calculated BATW capital costs ranging from \$1,635-\$16,492 per TWPE,¹ whereas EPA estimated that a zero-discharge approach to BATW would cost only \$314-457 per TWPE. UWAG Reconsideration Petition at p. 60.

As outlined in the industry petition for reconsideration, multiple power companies have also estimated excessively high overall compliance costs associated with the ELG Rule.

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<sup>&</sup>lt;sup>1</sup> As EPA explained in its *Technical Development Document for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category (TDD)*, "EPA uses toxic weighting factors to account for differences in toxicity across pollutants...EPA calculated a toxic-weighted pound-equivalent value for each pollutant discharged to compare mass loadings of different pollutants based on their toxicity." TDD at 10-3.

Dynegy Inc. estimated its total compliance costs to be approximately \$308 million, with \$178 million of that to be expended within 3 years. Similarly, NRG has estimated that the costs of the ELG Rule will be approximately \$200 million, and AEP anticipates costs ranging from \$400-\$550 million through 2023.

Pursuant to CWA Sec. 304(b)(2)(B), EPA must take into account "the cost of achieving such effluent reduction" when developing ELGs. The ELG Rule's faulty cost estimates alone therefore justify reconsideration. However, EPA should also consider the costs of the ELG Rule in conjunction with the costs imposed by several other rulemakings that impact coal-fired electric power generation in the U.S. Most notably, the Obama Administration's Oct. 2015 Clean Power Plan (CPP), which establishes limits on carbon dioxide emissions for existing power plants, is alone projected by EPA to impose annual compliance costs of \$1.4-2.5 billion (2020), \$1.0-3.0 billion (2025), and \$5.1-8.4 billion (2050). The agency likewise estimates the total annualized incremental costs of the CCR Rule to be between \$509-735 million (over 100 years). 80 Fed. Reg. at 21,309. Indeed, by EPA's own account, the estimated annual costs of the CCR Rule exceed its purported benefits by a range of at least \$273 to \$441 million per year. 80 Fed. Reg. at 21, 460. While NMA believes that these estimates are considerably lower than what the actual costs of those rulemakings would be, they nevertheless demonstrate the devastating impact these rules will have on the U.S. economy and coal mining industry.

Importantly, such excessive costs, which have never been cumulatively assessed, will inevitably lead to unit and facility closures, which will in turn lead to job losses, many of which are likely to occur in rural and economically distressed parts of the country. Furthermore, even where these regulatory burdens do not lead to directly attributable plant closures, such inappropriately derived burdens can still result in fuel switching and possible asset retirement by increasing the regulatory costs associated with coal-fired electric power generation, causing further damage to the coal industry. The U.S. coal industry directly employs nearly 150,000 people and, by creating over 3 jobs for every one coal mining job, is responsible for more than 500,000 American jobs. In 2015 alone, coal generated \$26 billion in sales and paid \$13 billion in direct wages in salaries. Coal also continues to provide reliable, affordable electricity to U.S. households, businesses, manufacturing facilities, and transportation and communications systems throughout the country. Importantly, coal generates around one-third of the nation's electricity, and electricity costs are generally 30 percent lower in states that rely on coal for more than half of their power generation than in those that rely on other fuels. It is therefore vital that EPA consider the cumulative impacts of its coal-fired electric utility rulemakings on the economy, including any potential negative impacts on jobs and affordable energy access throughout all American communities.

EPA's proposed postponement of the ELG Rule's compliance deadlines is also consistent with the policies expressed in the President's Executive Order 13771, "Reducing Regulation and Controlling Regulatory Costs" (Jan. 30, 2017) (E.O. 13771), and the President's Executive Order 13777, "Enforcing the Regulatory Reform Agenda" (Feb. 24, 2017) (E.O. 13777). E.O. 13777 instructs federal agencies to identify regulations that, among other things, eliminate jobs or inhibit job creation, impose costs

that exceed benefits, are unnecessary or ineffective, or interfere with regulatory reform initiatives and policies. The ELG Rule clearly meets all of those criteria, and the proposed postponement of the compliance deadlines will help alleviate all of those regulatory burdens. E.O. 13771 further directs agencies to achieve a net incremental regulatory cost of zero in fiscal year 2017 by offsetting the costs of new regulations during the current fiscal year with costs eliminated from existing regulations. By postponing the compliance deadlines of the overly stringent limitations contained in the ELG Rule, EPA would be engaging in the regulatory burden reduction contemplated by E.O. 13771.

## Postponement of the Deadlines Will Not Impact the Attainment of Water Quality Standards

Postponement of the ELG Rule's deadlines will have no discernible impact on water quality standards. Under the CWA, National Pollutant Discharge Elimination System (NPDES) permits contain technology-based effluent limitations (TBELs), which are primarily established through the application of ELGs.<sup>2</sup> TBELs require a minimum level of treatment of pollutants for a particular point source. However, when TBELs are insufficient to meet the water quality standards of the receiving water, CWA Sec. 303(b)(1)(c) and EPA's NPDES regulations at 40 C.F.R. 122.44(d) require that permits include more stringent, water quality-based effluent limits (WQBELs). In other words, regardless of whether discharges from power plants include TBELs based on the currently applicable ELGs or the new, more stringent requirements contained in the ELG Rule, they still must meet all applicable water quality standards, which include the designated uses of the receiving water body and the water quality criteria necessary to protect those uses. As such, postponement of the deadlines will have no impact on whether water quality standards – which require the protection of, among other things, human health, aquatic life, and biological integrity – are being achieved.

# Delay is Needed to Provide for Appropriate Coordination with the CCR Rule and Implementation of the WIIN Act

EPA is also currently reviewing a petition for reconsideration from the Utility Solid Waste Activities Group (USWAG) concerning its CCR Rule, which was finalized in Apr. 2015. The CCR Rule regulates the disposal of coal combustion residuals (CCR) at electric utilities as a non-hazardous solid waste under Subtitle D of the Resource Conservation and Recovery Act (RCRA). Among other things, the rule establishes minimum federal criteria for: the siting of CCR units; design standards; operating conditions including inspections and fugitive dust controls; structural integrity; groundwater monitoring and corrective action; closure options; and recordkeeping and reporting.

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<sup>&</sup>lt;sup>2</sup> To the extent that EPA-promulgated ELGs are inapplicable, TBELs are developed on a case-by-case basis using best professional judgement. TBELs may also be based on a combination of ELGs and best professional judgement. 40 C.F.R. 125.3(a),(c).

Importantly, while the ELG Rule and CCR Rule are separate regulations issued under separate federal statutes, both rules directly impact the management of CCR waste streams and the operation of CCR surface impoundments. Because of this overlap, EPA sought to coordinate the final requirements of each rule to "minimize the overall complexity of the two regulatory structures, and facilitate implementation of engineering, financial, and permitting activities." 80 Fed. Reg. at 21,313. Indeed, the ELG Rule requires compliance with the new, more stringent limits "as soon as possible" after Nov. 1, 2018, but no later than the end of 2023, in part to allow for consideration of "regulations that address the disposal of coal combustion residuals as solid waste." 40 C.F.R. 423.11(t).<sup>3</sup>

As outlined in USWAG's petition for reconsideration, not only does the CCR Rule suffer from significant legal flaws, the rule's entire enforcement scheme has also been fundamentally altered by the WIIN Act. When the CCR Rule was originally promulgated in Apr. 2015, EPA did not have statutory authority to enforce it. As such, the rule was written to be self-implementing, which led to a high degree of uncertainty and concern for abuse on the part of EPA. EPA therefore included many of the CCR Rule's inflexible and overly burdensome requirements specifically because of its lack of authority to oversee the rule's implementation through an enforceable permit program. As EPA explained, "the possibility that a state may lack a permit program for CCR units made it impossible to include some of the alternatives available...which establish alternative standards that allow a state, as part of its permit program, to tailor the default requirements to account for site specific conditions at the individual facility." 80 Fed. Reg. at 21,396-97.

The WIIN Act, however, fundamentally altered the CCR Rule from a self-implementing program to a more traditional rule that will be implemented through a permit program. Specifically, the WIIN Act amended Subtitle D of RCRA to authorize states to implement the CCR Rule through state permit programs in lieu of the self-implementing CCR Rule. Where states do not seek to administer the rule or where a state's application is denied by EPA, the WIIN Act directs EPA to implement the CCR Rule through a federal permit program.

Now that the CCR Rule will be implemented through a permitting scheme, as industry notes in its petition for review of the rule, EPA's rationale for excluding many key site-specific, risk-based tailoring provisions in the rule no longer exists. USWAG Petition at

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<sup>&</sup>lt;sup>3</sup> Notably, the 40 C.F.R. 423.11(t) factors also allow for the consideration of both new source performance standards for greenhouse gasses from new fossil fuel-fired electric generating units and emission guidelines for greenhouse gases from existing fossil fuel-fired electric generating units. These referenced new standards and guidelines for existing power plants were imposed by the Obama Administration's Clean Power Plan (CPP). 80 Fed. Reg. 64662 (Oct. 21, 2015). However, the CPP is currently also the subject of litigation and reconsideration. The U.S. Supreme Court issued a stay of the CPP in Feb. 2016 which remains in effect pending further judicial review, and litigation before the U.S. Court of Appeals for the District of Columbia Circuit is currently being held in abeyance. Additionally, on June 8, 2017, EPA sent a proposal entitled "Review of the Clean Power Plan (CPP)" to the Office of Management and Budget for interagency review, which reportedly will propose rescission of the CPP. Because the requirements related to the CPP impact both implementation of and costs associated with the ELG Rule, the uncertainty surrounding the CPP's fate likewise justifies postponing the ELG compliance deadlines.

p. 12. Furthermore, time is needed to allow states to develop permit programs with requirements that may differ, yet be equally as protective as, the federal CCR Rule. As such, these fundamental changes to and uncertainty regarding the CCR Rule justify a stay of the ELG's compliance deadlines so that EPA can continue to facilitate coordination between the two rules and allow for the proper implementation of the WIIN Act.

## **EPA Should Provide Guidance to States Regarding the "As Soon As Possible" Factors**

As mentioned above, the ELG Rule authorizes permitting agencies to determine a date when the new effluent limitations apply to any given discharger "as soon as possible beginning November 1, 2018, but no later than December 21, 2023." 40 C.F.R. 423.13(g)(1)(i). The ELG Rule also specifies that, in determining what date is "as soon as possible," state agencies may consider certain factors, including changes being made in response to various regulations including the CCR Rule and CPP; time needed to plan, finance, design, procure, and install necessary equipment; and "other factors as appropriate." 40 C.F.R. 423.11(t) (emphasis added). NMA therefore requests that EPA provide guidance to permit writers clarifying that they have substantial flexibility in applying the "as soon as possible" factors, and that they need not mandate compliance with the new limits on Nov. 1, 2018. Such guidance would help ensure that power plants are not forced to expend significant capital to comply with limitations that were not properly developed pursuant to the requirements of the CWA.

#### Conclusion

For the aforementioned reasons, NMA requests that EPA finalize the proposed indefinite postponement of the Nov. 2018 compliance deadlines in the final ELG Rule pending its reconsideration of the rule. NMA additionally requests that EPA clarify to state permit writers that they have significant flexibility in applying the "as soon as possible" factors found at 40 C.F.R. 423.11(t) to help further prevent the imposition of unwarranted costs on coal-fired electric power generation, premature facility closures, and job losses.

Thank you for your consideration of these comments. Please do not hesitate to contact me at <a href="mailto:aaspatore@nma.org">aaspatore@nma.org</a> or (202) 463-2646 if you need any additional information.

Sincerely,

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Vice President, Water Law & Policy

**National Mining Association** 

Amanda E. Aspatore