National Mining Association Proposed Revisions to the 2015 Steam Electric Effluent Limitations Guidelines

Background

The National Mining Association (NMA) is requesting that the U.S. Environmental Protection Agency (EPA) consider adopting as soon as possible the following modifications to the 2015 Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category (2015 ELGs). These modifications are necessary to ensure that any final rule setting standards for coal-fired electric generating units properly accounts for the cost of achieving effluent reductions, as well as engineering and operational considerations regarding control technologies. Quickly adopting ELGs based on sound science and economic feasibility will achieve the goals of the Clean Water Act while helping to prevent premature plant closures, job losses, and the imposition of substantial financial burdens on the coal industry and communities that rely on coal-generated electricity.

Bottom Ash Transport Water (BATW)

In setting an overly stringent zero-discharge dry handling/closed loop standard, the 2015 ELGs did not properly take into account several key operational considerations with respect to BATW. EPA should therefore adopt a modified version of alternative "4a" from the June 7, 2013 proposed ELG rule (78 Fed. Reg. 34,432, 34,458). Specifically, EPA should adopt **best available technology economically achievable (BAT) limits based on a closed loop system, with the following necessary exceptions**:

- ***10% daily de minimus discharge allowance for periodic "blow down"*** – necessary to accommodate operational concerns including scaling and corrosion. Should be based on a rolling 30-day average. Higher percentage should be permitted on a site-specific basis.
- ***Pass-through allowance for exceptional storm events*** – because these systems are often open to the elements, this is necessary to account for excessive water resulting from flooding or stormwater that can overwhelm them.
- ***Maintenance exceptions*** – EPA should allow plans to account for major and minor maintenance events, including both scheduled and unanticipated outages. Plans should detail expected maintenance events based on the system configuration.
- ***Small and reduced capacity units*** – based on economic, technological, and operational considerations, standards for units smaller than 400 MW or with a reduced capacity factor (e.g., 15%) should be set equal to the current best practicable control technology currently available (BPT) limitations (i.e., gravity settling in surface impoundments).
- ***Retired units being decommissioned*** – standards for end of life closure operations should be set on a site-specific basis using best professional judgement (BPJ).

Flue Gas Desulfurization (FGD) Wastewater

General

EPA based BAT limits for FGD wastewater on physical/chemical plus biological treatment in the 2015 ELGs. However, not only is biological treatment an undemonstrated technology for units burning

subbituminous coal, it has not been proven across the entire range of FGD water quality at bituminous plants. Biological treatment is also prohibitively expensive to install, operate, and maintain. Physical/chemical treatment (i.e., chemical precipitation) systems have been proven to remove multiple pollutants from FGD wastewater streams, and, if set as the model technology for establishing BAT limits, would constitute a significant advancement from the pre-2015 ELGs, which did not establish BAT limits for FGD wastewater. Additionally, the incremental pollutant removal gained by adding biological treatment to physical/chemical treatment does not justify its significant additional costs. EPA should therefore **base BAT limits for FGD wastewater on physical/chemical treatment, subject to the following:**

- ***Selenium Limits*** – because of the variability of selenium removal in physical/chemical systems caused by multiple factors, EPA should not set a selenium limit on FGD wastewater. Rather, EPA should rely on state permitting authorities to include water quality-based selenium effluent limits in individual National Pollutant Discharge Elimination System (NPDES) permits where necessary. This is especially so in light of the fact that the FGD wastewater limitations will be applied to internal waste streams.
- ***Biological Treatment*** – should EPA nevertheless continue to utilize biological treatment as the model technology, at a minimum EPA must reevaluate cost-effectiveness, technological limitations, and operational considerations and adjust the long-term, daily-maximum, and monthly-average limitations set in the 2015 ELGs, including for selenium. EPA should set limitations that account for the significant variation in FGD water quality and allow the biological systems to be designed in a more cost-effective manner.

Bromides

In the final 2015 ELGs, EPA appropriately declined to promulgate technology-based effluent limitations for bromides. EPA should expressly re-affirm its 2015 decision, and should instead rely on state permitting authorities to determine whether water quality-based effluent limitations are appropriate in specific NPDES permits. There is currently no nationwide technically feasible and economically achievable treatment technology for bromides that would justify the imposition of effluent limitations. More importantly, there is no direct correlation between bromide concentrations at power plants and the downstream formation of trihalomethanes (THM), as a multitude of factors dictate the formation of THM or other disinfectant by-products within a drinking water system. There are also multiple anthropogenic sources that contribute bromides to drinking water systems. Additionally, even if bromide discharges from certain power plants may potentially impact downstream waters, data does not suggest that this is a nationwide problem that would necessitate the establishment of a national technology-based standard, particularly in light of the fact that appropriate control technologies for bromide discharges have not been identified or demonstrated. Imposition of technology-based limitations for bromides in FGD wastewater would therefore impose significant unjustified burdens on coal-fired electric power generation.

Compliance Deadlines

Consistent with the way EPA determined compliance deadlines in the 2015 ELGs, EPA should reset the compliance deadlines for BATW and FGD wastewater requirements to five years from the date EPA finalizes a revised ELG rule. This will provide utilities with the time needed to design, plan, and install additional pollution control equipment as required.