



Water and Coal Combustion Residuals Update

CIBO Annual Meeting

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WATER

- NEXUS – Definition of Waters of the United States
- Electronic Reporting
- NPDES – Administrative Changes
- Section 316(b) –Water Withdrawal Rule
- ELG for Steam Electric Generation Facilities
- Stormwater Management
- Climate Change and Water



EPA WOTUS Rule Defining: Waters of the United States

- The Rule was published in the Federal Register on June 29, 2015 and became effective August 28, 2015, but considered issued for purpose of judicial review at 1:00PM on July 13, 2015.
- The DOD defined Waters of the United States (33 CFR Part 328) and EPA defined both Waters of the United States or Navigable Water which included WOTUS (40 CFR Parts 110, 112, 116, 117, 122, 239, 232, 300, 302, and 401).
- The rule has been stayed nationwide by the 6th Circuit. In the meantime, EPA and ACOE are using their prior guidance for permit and enforcement decisions.



NPDES Electronic Reporting

- Final Electronic Reporting Rule published in Federal Register on October 22, 2015 with an **effective date of December 21, 2015**.
 - This final rule requires that NPDES regulated entities electronically submit the following permit and compliance monitoring information instead of using paper reports:
 - Discharge Monitoring Reports (DMRs);
 - Notices of Intent to discharge in compliance with a general permit; and
 - Program reports.



Phase 1 – One year after effective date of final rule

- EPA will begin to electronically receive information from states, tribes, and territories regarding inspections, violation determinations, and enforcement actions.
- EPA, states, tribes, and territories will electronically receive Discharge Monitoring Report (DMR) information from NPDES permittees – the largest volume of data for the NPDES program.
- Also included in Phase 1 are the Sewage Sludge/Biosolids Annual Program Reports for the 42 states where EPA implements the Federal Biosolids Program.



Phase 2—Five years after effective date of final rule

- EPA and authorized state NPDES programs have five years to begin electronically collecting, managing, and sharing the remaining set of NPDES program information.
- This information includes: general permit reports (e.g. Notice of Intent to be covered (NOI); Notice of Termination (NOT); No Exposure Certification (NOE); Low Erosivity Waiver and Other Waivers from Stormwater Controls (LEW)); Sewage Sludge/Biosolids Annual Program Report (where the state is the authorized NPDES biosolids program); and all other remaining NPDES program reports.



Phase 2—Five years after effective date of final rule

- These program reports include:
 - Sewage Sludge/Biosolids Annual Program Reports [40 CFR 503] (for the 8 states that implement the Federal Biosolids Program)
 - Concentrated Animal Feeding Operation (CAFO) Annual Program Reports [40 CFR 122.42(e)(4)]
 - Municipal Separate Storm Sewer System (MS4) Program Reports [40 CFR 122.34(g)(3) and 122.42(c)]
 - Pretreatment Program Reports [40 CFR 403.12(i)]
 - Significant Industrial User Compliance Reports in Municipalities Without Approved Pretreatment Programs [40 CFR 403.12(e) and (h)]
 - Sewer Overflow/Bypass Event Reports [40 CFR 122.41 (l)(4), (l)(6) and (7), (m)(3)]
 - CWA Section 316(b) Annual Reports [40 CFR 125 Subpart J]



NPDES -- Proposed Administrative Changes

- EPA proposed changes to the NPDES rules
- The propose changes were published in The Federal Register on May 18, 2016 (Vol. 81, No. 96, pp 33134-331374)
- Entitled: 40 CFR Parts 122, 123, 124, et al. National Pollutant Discharge Elimination System (NPDES): Applications and Program Updates; Proposed Rule
- Public Comment Period Ended: August 2, 2016
- Waiting for Final Regulatory Action!



EPA Proposes Rule to Make Targeted Updates to NPDES Regulations

- There are several regulatory revisions and updates to the NPDES Program being proposed:
- EPA is proposing several key fixes, including:
 - Clarifying NPDES definitions and application requirements;
 - Improving permit decision documentation in fact sheets;
 - Allowing permitting authorities to issue public notice of certain permit actions online rather than in a newspaper; and
 - **Ensuring issuance of environmentally significant permits in a timelier manner.**
 - This proposal would not reopen the regulations for other specific or comprehensive revisions.



Public Notice Component

- Permit Objection, Documentation and Process Efficiencies
 - Objection to Administratively Continued Permits (40 CFR 123.44);
 - Public Notice Requirements (40 CFR 124.10(c));
 - Fact Sheet Requirements (40 CFR 124.56); and
 - Deletion of 40 CFR 125.3(a)(1)(ii).



Items to be aware

- **If the State is unable to complete its review of a permit renewal within 24 months, EPA can take over the review of the permit renewal. (Note-This issue was a point the Environmental Community was pushing! It should be noted that EPA has this right already via the delegation of the NPDES permitting program documents.)**
- The NPDES Permit Renewal Application information is expanded.
 - Includes questions on cooling water intake
- The Permit Fact Sheet which will include specific information and why decisions were made. If we be available as part of the public review and most likely included in the permit itself.



SUMMARY OF EPA'S FINAL 316(B) RULE FOR COOLING WATER INTAKE STRUCTURES

- The rule is “40 CFR Parts 122 and 125”
- Effective Date: October 14, 2014



The 316(b) Rule

- Affects 1,065 existing facilities, including 544 electric generators and 509 manufacturers
- Applies to existing facilities that withdraw more than 2 million gallons per day of water and uses at least 25 percent of this water for cooling purposes



Seven Options for Existing facilities that withdraw more than 2 million gallons per day of water

- 1. Operate a closed-cycle recirculating system;
- 2. Operate a CWIS that has a maximum through-screen design intake velocity of 0.5 foot per second (fps);
- 3. Operate a CWIS that has a maximum through-screen intake velocity of 0.5 fps;
- 4. Operate an offshore velocity cap, an open intake designed to change the direction of water withdrawal from vertical to horizontal and located a minimum of 800 feet from the shoreline;
- 5. Operate a modified traveling screen that the EPA or state permitting authorities determine meets the Final Rule standard and is the BTA for impingement reduction;
- 6. Implement another combination of technologies, management practices and operation measures that the EPA or state permitting authorities determine is BTA for impingement reduction; or
- 7. Achieve the specified impingement mortality performance standard set forth in the Final Rule.



Summary of Options

- Options 1, 2 and 4 are preapproved technologies, minimal if any demonstration of flow reduction is required
- Options 3, 5 and 6 require detailed permitting information to be submitted to the permitting agency and approved before the technology is accepted as BTA to control impingement mortality
- Option 7 requires a facility to achieve a 12-month impingement mortality performance of 24 percent mortality or less, including latent mortality (18 to 96 hours), for all nonfragile species.



List of Reports to Prepared and Submitted

- Source Water Physical Data Report
- Cooling Water Intake Structure Data Report
- Source Water Baseline Biological Characterization Data Report
- Cooling Water System Data Report
- Chosen Method for Impingement Compliance Report
- Performance Studies



List of Reports to Prepared and Submitted

- Operational Status
- Entrainment Characterization Study
- Comprehensive Technical Feasibility and Cost
- Benefits Valuation Study
- Non-Water Quality Impacts Assessment
- Endangered Species and Critical Habitat Conditions



The Implementation Schedule

- 1. Existing permit expires after 45 months following the effective date of the rule – Submit applicable permit application reports when applying for a subsequent permit.
- 2. Existing permit expires prior to or at 45 months after the effective date of the rule – Applicant may ask for an alternative schedule for submission of the permit application reports.
- 3. For new units, the permit application reports must be submitted at least 180 days before the planned commencement of cooling water withdrawal.



Summary

- If the rule applies to your existing facilities because it withdraws more than 2 million gallons per day of water and uses at least 25 percent of this water for cooling purposes,
 - Than the 2 year period to preparing the required documentation together is coming to an end.
 - The generic schedule described above will be putting the effective facilities in the NPDES Permit renewal proves.



Effluent Limitation Guidelines for Steam Electric Power Generating Point Source Category

- Final ELG was published in the Federal Register on November 3rd with an **effective on January 4, 2016.**
- The issues dealing with managing leachate, runoff, and impoundments for coal combustion residuals is applicable to Steam Electric Power Generating Units, it can be used to support BP J review of coal combustion residuals/by-products at non- EGU Industrials.
- Implementation to be as soon as November 1, 2018 and no later than December 31, 2023 to be fully implemented.




The ELG brings into applicability of the rule on non-EGU facilities.

- Points to remember
 - You need to identify all sources of water from the facility
 - The Permit Writer can use Best Professional Judgement on the approach to addressing CCRs not covered by the Federal CCR rule and establish effluent limitations
 - Water quality standards can impact decisions on non-EGU CCR management
 - Another trigger will be reporting quality of discharges or run-off from CCR related areas!




EPA Stormwater Management

- The NPDES stormwater program regulates some stormwater discharges from three potential sources:
 - municipal separate storm sewer systems (MS4s),
 - construction activities, and
 - industrial activities.
- Operators of these sources might be required to obtain an NPDES permit before they can discharge stormwater.
- This permitting mechanism is designed to prevent stormwater runoff from washing harmful pollutants into local surface waters.
- These General Permits undergo periodic review which can have an impact and need to be monitored




Climate Change and Water

- ***Climate Impacts Assessment Updates***
- ***Climate Impact on Water Cycle***
 - ***Precipitation***
 - ***Evapotranspiration***
 - ***Streamflow and runoff***
 - ***Soil moisture***
 - ***Groundwater***
 - ***Stream temperature***



Climate Change and Water

- Consequences
 - Floods
 - Droughts
 - Water Quality
 - Salt Water Intrusions



Who potentially impacts or controls?

- EPA
- States
- River Basin Commissions



Coal Combustion Residuals Rule

- Rule is being litigated
- The Court has agreed to an EPA motion for remanding certain parts of the rule per EPA Request



One Item of Remand to be aware

- EPA sought and received remand with vacatur of a provision (40 C.F.R. §257.100) that, as written, which exempts an inactive surface impoundment from certain post-closure requirements if it is closed under the rule's required procedures before April 17, 2018.
- The motion results in the vacation of the entire provision except a single sentence: **“Inactive CCR surface impoundments are subject to all of the requirements of this subpart applicable to existing CCR surface impoundments.”**
- There is a stay of the effectiveness of its order for at least 120 days—until after the agency could issue a new final rule revising deadlines affected by the vacatur of the inactive surface impoundment provision in order to provide adequate time to come into compliance



Coal Combustion Residuals - Legislation

- There are multiple legislative initiatives to address the rule with the most recent providing EPA the ability to approve State Programs as a means of limiting civil lawsuits by 3rd parties.
- Legislation
 - House Bill 5788 (Representative McKinley)
 - Senate Bill 2435 (Senators John Hoeven and Joe Manchin)



Legislation – House

- In the 114th Congress, Congressman McKinley introduced H.R.5788 - Improving Coal Combustion Residuals Regulation Act of 2016 on July 14, 2016
 - Referred to the House Committee on Energy and Commerce – July 14, 2016



CCR Legislation – Senate

- **S. 2446: Improving Coal Combustion Residuals Regulation Act of 2016
(Senator Hoeven and Manchin)**



S. 2446

- Sponsored by Senators John Hoeven and Joe Manchin, S. 2446
- would amend Subtitle D of the Solid Waste Disposal Act (42 U.S.C. 6941 et seq.) and takes into account the significant effort that the EPA undertook to develop sound technical standards protective of human health and the environment while also borrowing from previous legislative proposals that would have required states to develop enforceable coal combustion residual permit programs that would administer minimum federal standards.
- States would retain the ability, however, to make their permitting programs more rigorous than the standards set forth in the EPA's final rule. As such, S. 2446 would update the Solid Waste Disposal Act to include as a baseline the requirements set forth in the EPA's final rule while also ensuring that there would be direct enforcement of the EPA's requirements by a regulatory agency through a formal permitting program.
- This approach is consistent with many other regulatory programs that EPA and states administer and enforce.



Water Legislation and a CCR Component

- **H.R.5303 - Water Resources Development Act of 2016 – Representative Shuster**
 - This Bill was not as expansive and did not include language on coal combustion residuals.
 - This Bill had passed the House and was sent to the Senate.
- **S. 2848 -- S.2848 - Water Resources Development Act of 2016 (Sen. Inhofe)**
 - **Section 8001 (SEC. 8001. APPROVAL OF STATE PROGRAMS FOR CONTROL OF COAL COMBUSTION RESIDUALS)**



S. 2848 --Water Resources Development Act of 2016

INCLUDES LANGUAGE RELATED TO COAL COMBUSTION RESIDUALS


SEC. 8001. APPROVAL OF STATE PROGRAMS FOR CONTROL OF COAL COMBUSTION RESIDUALS”

- **The purpose of Section 8001 is to give EPA approval of a State’s coal combustion residuals program as a means to potentially reduce citizens suits.**




Section 8001

- **Several Questions or Concerns:**
 - **The Bill references Coal Combustion Residual Units but does not define the term.**
 - **Is the language of 40 CFR Part 257.50 consider “applicable criteria” described in Section 8001? If not, language referencing 257.50 should be included in the language in Section 8001.**
 - **Or, does reference in the bill to “applicable criteria” appears more often than not tied to standards related to siting and design (technical standards)?**
 - **If a CCR Unit does not meet the design criteria it is consider an “OPEN DUMP”**
 - **The term “Independ Power Producer” is not defined but has broad implications.**
 - **The language allows EPA to approve a State Program provide said program is the concept of as at least protective as the 40 CFR Part 257.**
 - **If EPA approves a State program that goes beyond the existing Federal Regulation, does this make the State Program (as a whole) subject to Federal Enforcement?**



Reminder of key language §257.50 Scope and purpose

- (d) This subpart does not apply to CCR landfills that have ceased receiving CCR prior to October 19, 2015.
- (e) This subpart does not apply to electric utilities or independent power producers that have ceased producing electricity prior to October 19, 2015.
- (f) **This subpart does not apply to wastes, including fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated at facilities that are not part of an electric utility or independent power producer, such as manufacturing facilities, universities, and hospitals. This subpart also does not apply to fly ash, bottom ash, boiler slag, and flue gas desulfurization materials, generated primarily from the combustion of fuels (including other fossil fuels) other than coal, for the purpose of generating electricity unless the fuel burned consists of more than fifty percent (50%) coal on a total heat input or mass input basis, whichever results in the greater mass feed rate of coal.**



Reminder of key language §257.50 Scope and purpose

- (g) This subpart does not apply to practices that meet the definition of a beneficial use of CCR.
- **(h) This subpart does not apply to CCR placement at active or abandoned underground or surface coal mines.**
- (i) This subpart does not apply to municipal solid waste landfills that receive CCR.



Suggestion

- Since the House would need to have a similar version of language relating to Section 8001 as in S. 2848, it may be useful to have Section 8001 modified as it relates to (d)(1)(B)(i) by deleting the term “applicable” inserting the term “Subpart D of” after the word under can before “Part 257”.
- This would clearly incorporate the limitations to the rule as established in 40 CFR Part 257.50.
- That was it would be clear that is not applicable to non-EGU industrials and the use of CCRs in mine land reclamation.



QUESTIONS