Boiler MACT
Recent Developments

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NCASI West Coast Regional Meeting
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DC Circuit Court 07/29/16 BMACT Opinion

Environmental petitioners’ challenge

- Upper Prediction Limit (UPL) does not represent the average emissions level achieved by best performers
  - EPA explained in July 2014 Memo that three runs on any given source do not account for variability
  - UPL represents future performance over the long-term after accounting for emissions variability
  - The 99 percent UPL provides reasonable assurance that the limit can be met at all times by a source with emissions at the average level achieved by the best performing source
- Court rules that UPL reflects reasonable estimate of emissions achieved in practice and rejects petitioners challenge
Environmental petitioners’ challenge

- Carbon monoxide (CO) as a surrogate
  - EPA did not adequately explain how establishing CO standards accomplish statutory requirement (Organic HAP standards)
  - Petitioners also argue correlation breaks down below 130 ppm (@ 3% O₂) suggesting issues with approach
  - Court’s opinion that EPA did not adequately explain why it did not consider alternate control methods etc.

- Court **remands** issue back to EPA for explanation
  - Why CO is a reasonable surrogate for non-D/F organic HAP
  - Why alternate control methods are not feasible

- Court also opines vacatur would be disruptive
Exclusion of certain units from MACT Analysis

- Although EPA allowed sources that combust at least 10 percent of subcategory-defining fuel to be in the subcategory
- ...EPA only considered emissions from sources that predominantly burned that fuel during floor analysis

Court vacates MACT standards for all major boiler subcategories affected had EPA considered all sources included in those subcategories

Opinion has the potential to change standards for several biomass and solid-fuel subcategories
Background on Subcategories

- 10% fuel use threshold used to define non-Gas1 units
- PM and CO limits
  - Biomass unit burns at least 10% biomass
  - Coal unit burns at least 10% coal but less than 10% biomass
  - Heavy liquid unit burns at least 10% heavy liquid but less than 10% coal and less than 10% biomass
- HCl and Hg limits
  - Solid fuel unit burns at least 10% solid fuel
What has Transpired Since 07/29/16?

- **09/12/16**
  - Earth Justice and Sierra Club file petition for *En Banc* rehearing of the UPL issue
  - EPA files petition for panel rehearing of the remedy – requesting the Court to remand (instead of vacate) emission standards “for all major boiler subcategories that would have been affected had the EPA considered all sources included in the subcategories.”

- **What does all this mean?**
  - Court opinion not followed up with a mandate because of the rehearing petitions
  - All BMACT rules remain in effect
Initial Analysis of Affected Subcategories

- EPA estimates 11 *existing source* standards and 9 *new source* standards will be affected by new floor analysis.

- Key existing source standards affected:
  - Solid fuel boilers – Hg and HCl
  - Wet Biomass Stokers – PM and CO
  - Biomass Fluidized Bed – PM and CO

- NCASI carrying out initial analysis of revised floor boiler lists with help from AF&PA/AECOM.
  - Additional boilers (based on burning *at least 10 percent of subcategory defining fuel*) brought in for floor analysis.
Boiler MACT
Implementation Issues

Nathan Pearson, WestRock
Wayne Wooster, Kapstone Kraft Paper
Charleston Ramos, Packaging Corp of America

.....and Audience Participation
Topics

- Permit status of Boiler MACT requirements
  - What happens in the event of a vacature of the standards (or of the rule)?
Topics

- Multi-fuel IPTs
  - Cases needing distinct “operating load” limits for different fuel-firing scenarios
  - Biomass, Coal, NG, No. 6 Fuel Oil
- Scope of annual performance tests
Topics

- Title V testing vs. BMACT Testing
  - Differing frequencies
  - Use BMACT data for Emission Inventory?
  - Higher fee for CO (some states don’t charge for CO) or PM as a result of higher test rate?
- Establishing O2 limit vs. Title V testing
  - Violate CO limit for permit when setting O2 limit?
Topics (Contd.)

- Need for performance tests for NG-only firing scenario on multi-fuel boiler (with ESP and polishing scrubber)
- Experience with Alternate Monitoring Plan Requests
  - Instances on establishing a different opacity range (as opposed to the ≤ 10 percent opacity)?
Topics (Contd.)

- Startup / Shutdown definitions
  - How about a failed startup (boiler trip)?
  - Implications of monitoring if you never provide useful thermal heat or complete startup
  - No “shutdown” if you never complete startup (shutdown in BMACT refers to the process of “shutting down” and not the final outcome)
  - Another startup the next time?
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Differing Opacity Limits & Data Reporting Requirements

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Topics (Contd.)

- PM CPMS use experiences
  - Performance of PM CPMS on biomass HSG unit - impact of fuel variability on PM CPMS performance
- DAHS system programming issues
- New Q&As or clarifications from EPA
Boiler MACT CEDRI/ERT Considerations

- How do I....
  - Register and make sure my facility certifier is properly registered in the Compliance and Emissions Data Reporting Interface (CEDRI)?
  - Prepare and submit Boiler MACT performance test results and RATA and avoid issues with the Electronic Reporting Tool (ERT)?
  - Prepare and submit Boiler MACT compliance reports in CEDRI?
  - Ensure consistency with my regular reports I submit to my state/local agency?