



# Boiler MACT

## Recent Developments

**Vipin Varma, NCASI**  
**Tim Hunt, AF&PA**

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

## Environmental petitioners' challenge

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- ▶ 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

# DC Circuit Court 07/29/16 BMACT Opinion

## Environmental petitioners' challenge

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- ▶ 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% O<sub>2</sub>) 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

# DC Circuit Court 07/29/16 BMACT Opinion

## Environmental petitioners' challenge

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- ▶ 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

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- ▶ 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?

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## ▶ 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

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- ▶ 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

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

# Topics

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- ▶ 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

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- ▶ 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.)

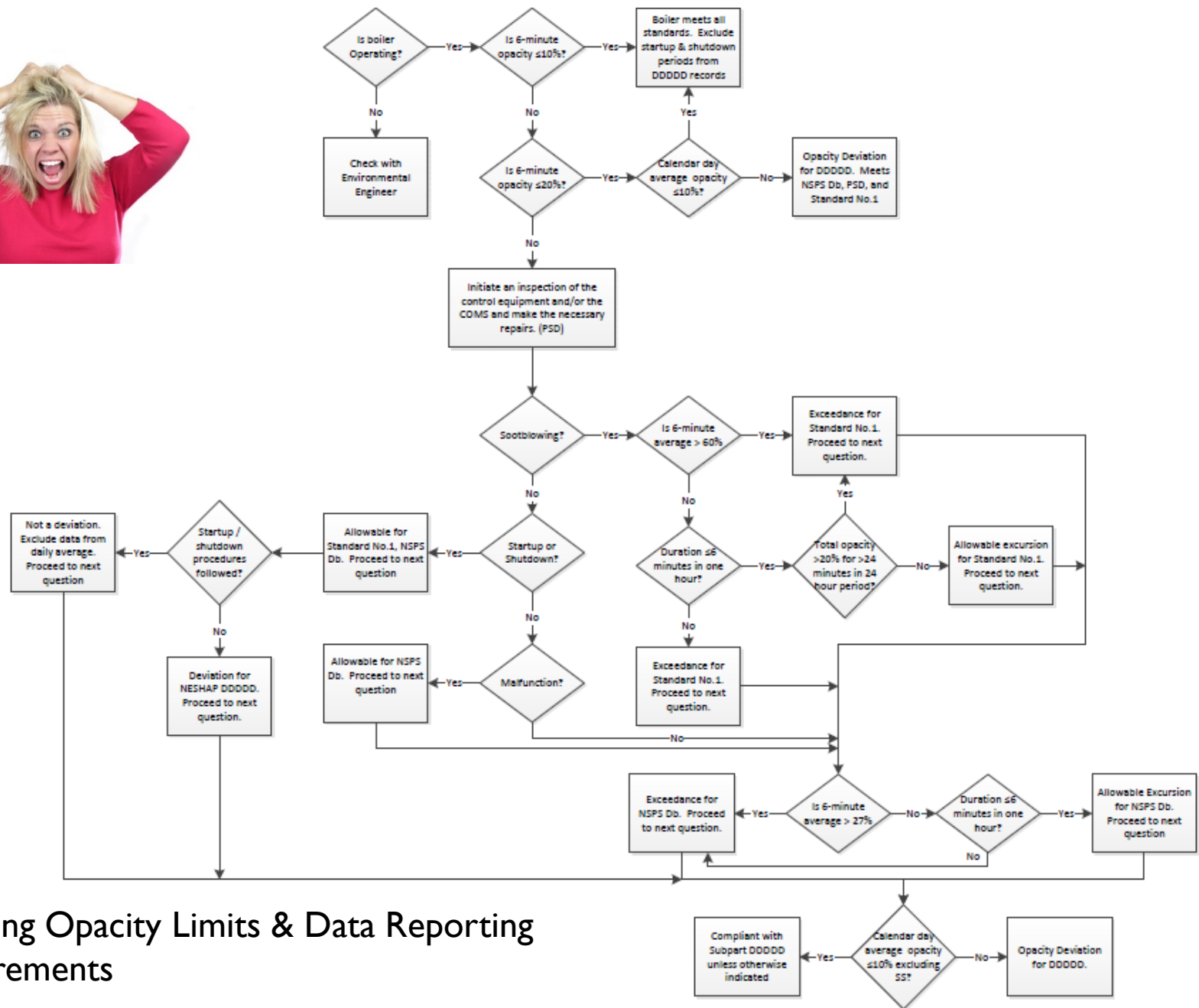
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- ▶ Need for performance tests for NG-only firing scenario on multi-fuel boiler (with ESP and polishing scrubber)
- ▶ Experience with Alternate Monitoring Plan Requests
  - ▶ Instances on establishing a different opacity range (as opposed to the  $\leq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

# Topics (Contd.)

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- ▶ 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?



## Differing Opacity Limits & Data Reporting Requirements

# Topics (Contd.)

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- ▶ 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

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## ▶ 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?