

The background of the slide features a stylized, light blue illustration of two hands shaking. The hands are rendered in a simple, clean style with soft shading to suggest depth. The handshake is positioned horizontally across the lower half of the slide, with the hands meeting in the center. The overall color palette is a monochromatic light blue, creating a professional and collaborative atmosphere.

# **NACAA Model Rule for Industrial, Commercial and Institutional Boilers**

July 14, 2009

## EPA's MACT standard for ICI Boilers is vacated

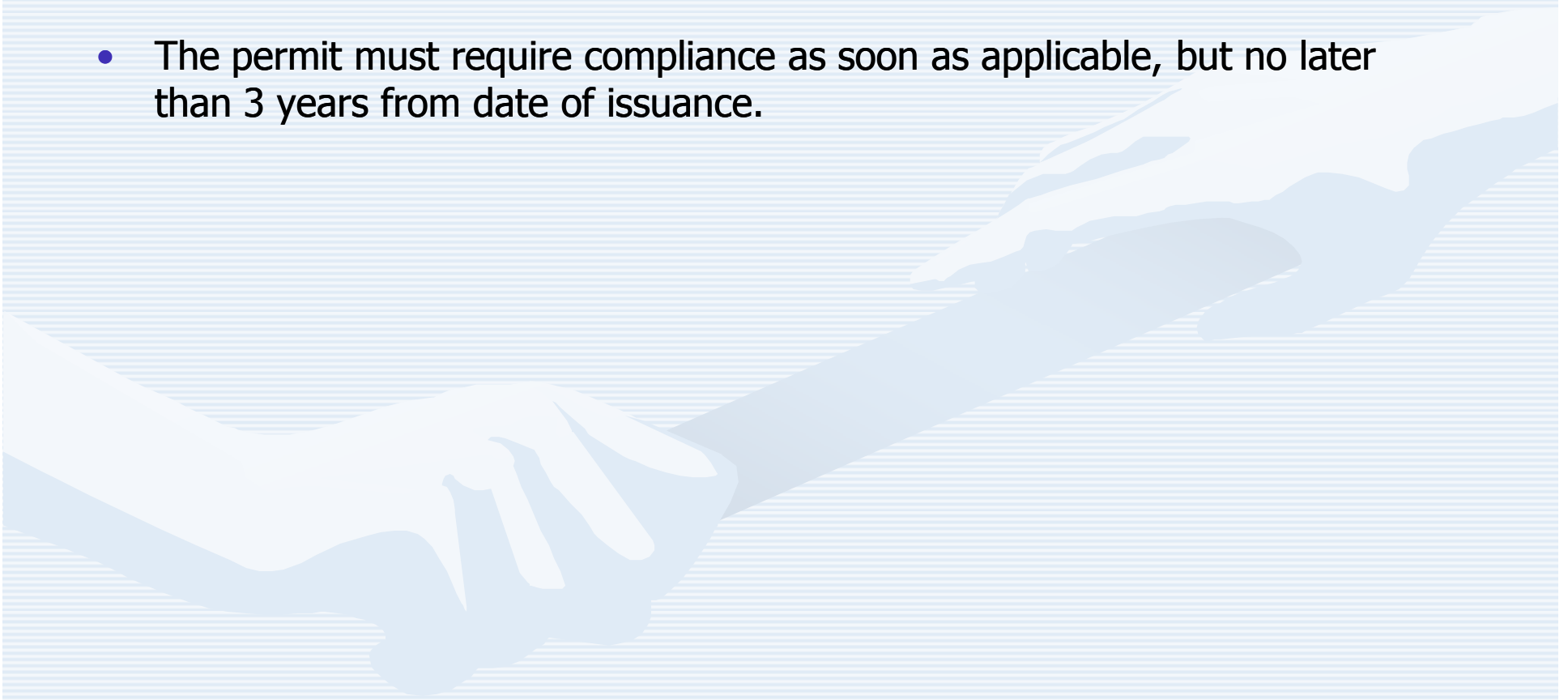
- In *Natural Resource Defense Council v. EPA*, No. 04-1385, June 8, 2007, the Court overturned and vacated EPA's MACT standard for Industrial, Commercial and Institutional Boilers and Process Heaters ("ICI Boilers").
- As a consequence section 112(j) – the MACT "hammer" applies.
- Because of the unanticipated nature of the event, no specific deadline for permit applications can be cited, however, it is clear that EPA has missed the statutory deadline.
- It is currently unlawful for a source that is within this category to operate without a permit, however, a source may operate if it has submitted a complete application.

## Strict permitting deadlines apply

- Application due within 18 months of statutory deadline (August 13, 2005).
- Analogous regulatory provisions would suggest 30 days after date of court decision. Applications clearly due within 30 days of notice from the permitting authority.
- Most extreme argument for a deadline would suggest December, 2008 (18 months after court decision).
- Once an application is received the permitting authority has 60 days to determine whether the application is complete (application form requires minimal information).
- The permitting authority may provide up to 6 months to rectify any deficiencies in the initial application.

## Strict permitting deadlines apply

- The permit must be issued within 18 months of receipt of complete permit application.
- The permit must require compliance as soon as applicable, but no later than 3 years from date of issuance.



## Requirements for 112(j) permits

- No less stringent than the “MACT floor” – the average emission limitation achieved by the best performing 12 per cent of the existing sources in the United States (for which the Administrator [permitting authority] has emissions information).
- MACT – the emissions limitation which reflects the maximum degree of reduction in emissions of hazardous air pollutants (including a prohibition on such emissions where achievable) that the Administrator [permitting authority] ... determines is achievable by sources in the category or subcategory to which such emission standard applies...
- ...taking into consideration the cost of achieving such emission reductions, and any non-air quality, health and environmental impacts and energy requirements...

## NACAA decides to develop model rule

- Several thousand large and potentially complex facilities will require permitting over the next 12-24 months.
- Second largest emitting category (after electric generating units).
- EPA data is limited and up to 20 years old.
- NACAA retains consultant and forms technical committee.
- NACAA solicits additional HAP and HAP surrogate data from all NACAA members.
- NACAA comments on two EPA proposed “information collection requests.”

## NACAA ICI Boiler MACT Review Committee

- Vincent Hellwig (Toxics co-chair, MI)
- Praveen Amar (NESCAUM)
- Elizabeth Basil (SC)
- Andrew Bodnarik (NH)
- Patricia Buonviri (VA)
- Daniel Donohoue, Lance Ericksen, Michelle Komlenic, Michael Mills, Mohsen Nazemi (CA)
- Gerald Ebersole (OR)
- Roger Fritz (WI)
- David Riddle (MI)
- Robert Colby (Toxics co-chair, Chattanooga, TN)
- James Hodina (Cedar Rapids, IA)
- William O'Sullivan, Sunila Agrawal, Olga Boyko, Yogesh Doshi, John Jenks, Ray Papalski, Erica Snyder, John Walsh (NJ)
- John Paul, Jennifer Marsee, Chris Clinefelter (Dayton, OH)
- Brad Reid (NE)
- James Snead, William Harris (DE)
- Christine Weaver (MT)
- Mary Sullivan Douglas (NACAA)

## NACAA Process – Open, Objective, Inclusive

- Consulted with EPA, industry and environmental organizations on several occasions throughout the process
- Emissions data is publicly available and based on reference method testing approved by permit authorities
- Relied on judgment of permitting authority responsible for the source
- Technical committee open to all NACAA members
- Technical committee met by conference call approximately once every two weeks from November to May
- Regular updates provided to NACAA air toxics committee

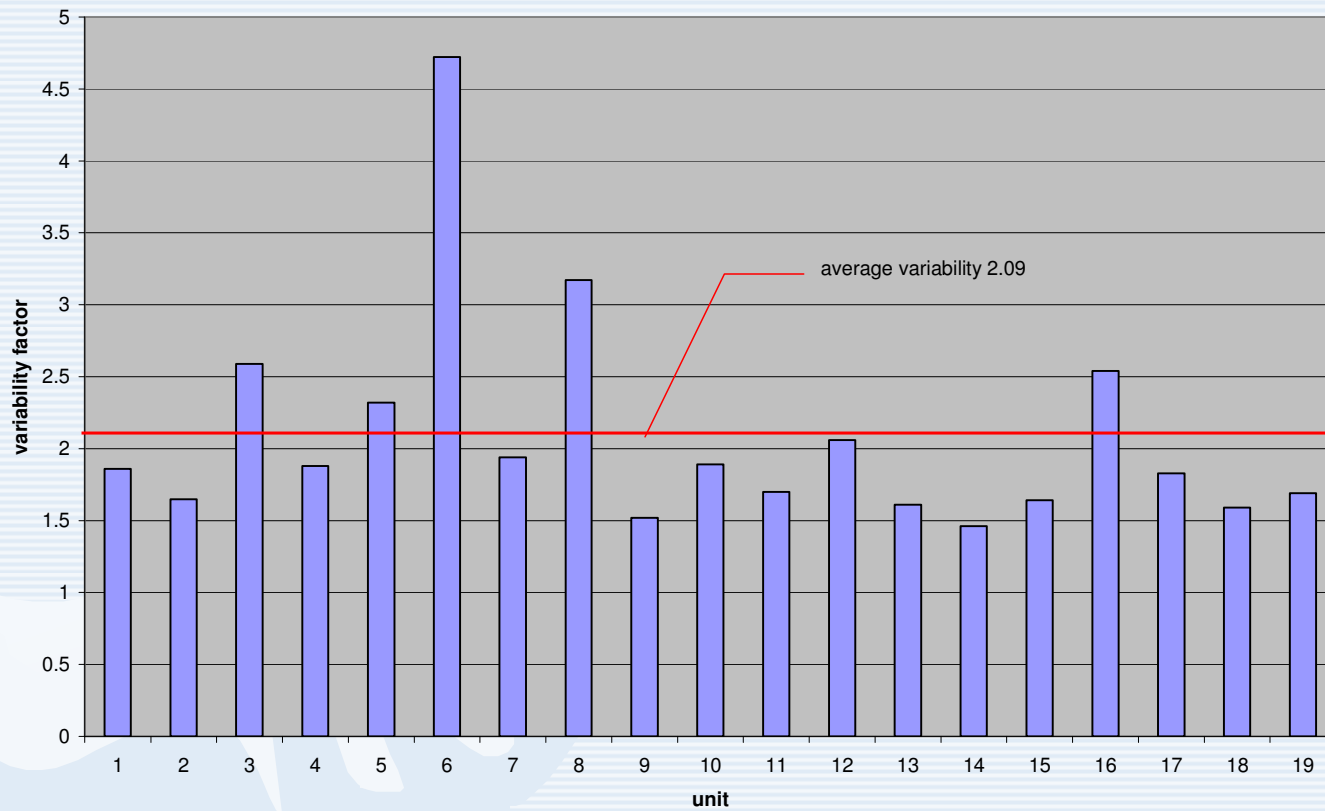


## Data summary and tentative recommendations for MACT floor

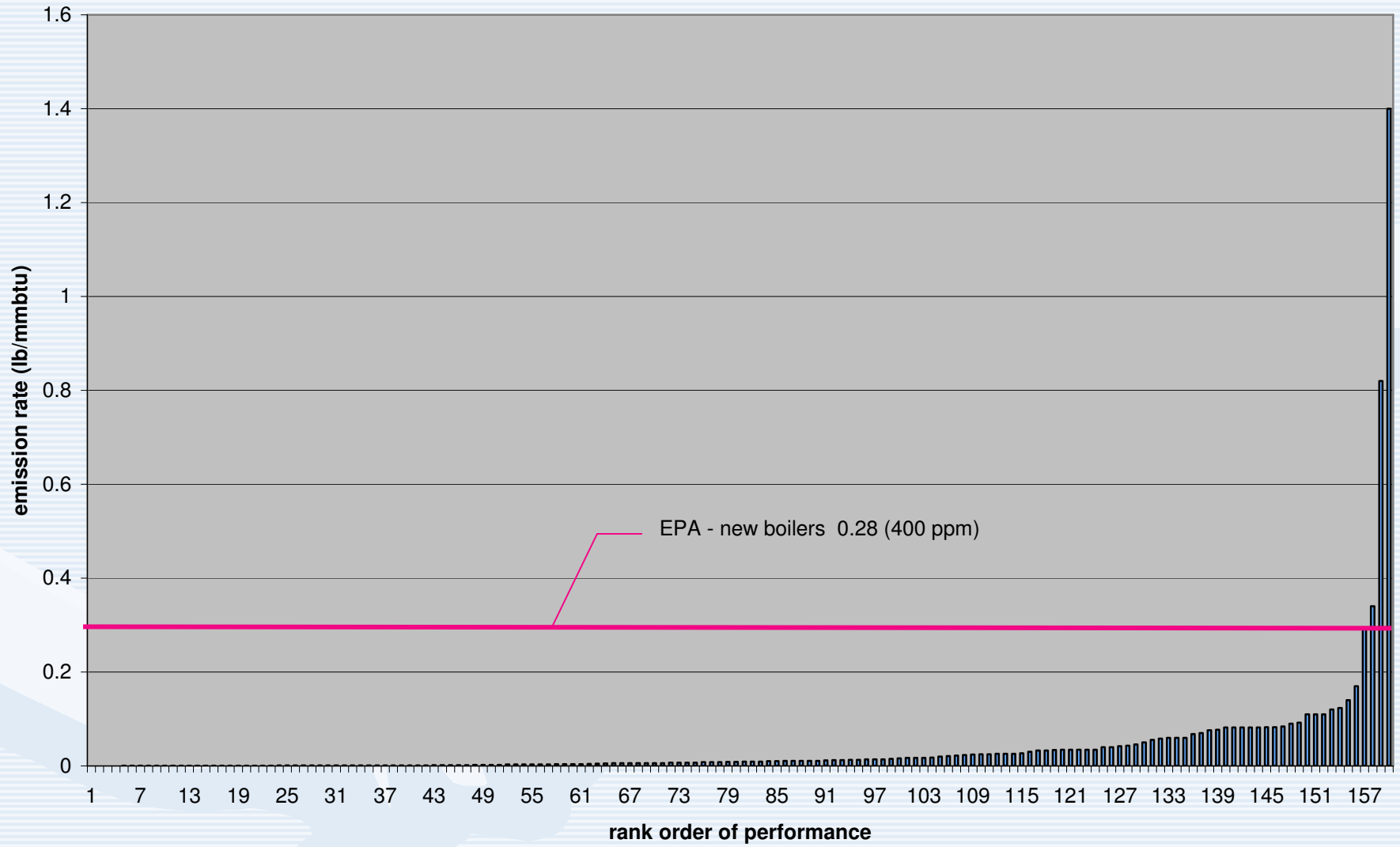
- Received responses from more than 40 state and local agencies
- Several thousand test results were provided. However, many were in a format that did not allow for direct comparison of performance with other facilities (i.e. tons per year or pounds per hour).
- Test results included approximately 750 data points that could be used to evaluate the MACT floor.
- Tentative recommendations for CO (surrogate for organic HAPs) and PM (surrogate for metal HAPs) follow
- Additional work underway on mercury, acid gases and QA/QC of data set.
- Additional review of: wet wood; #2 vs. #4 oil, NO<sub>x</sub> vs. CO tradeoff issues

# Variability Analysis – 99% confidence margin

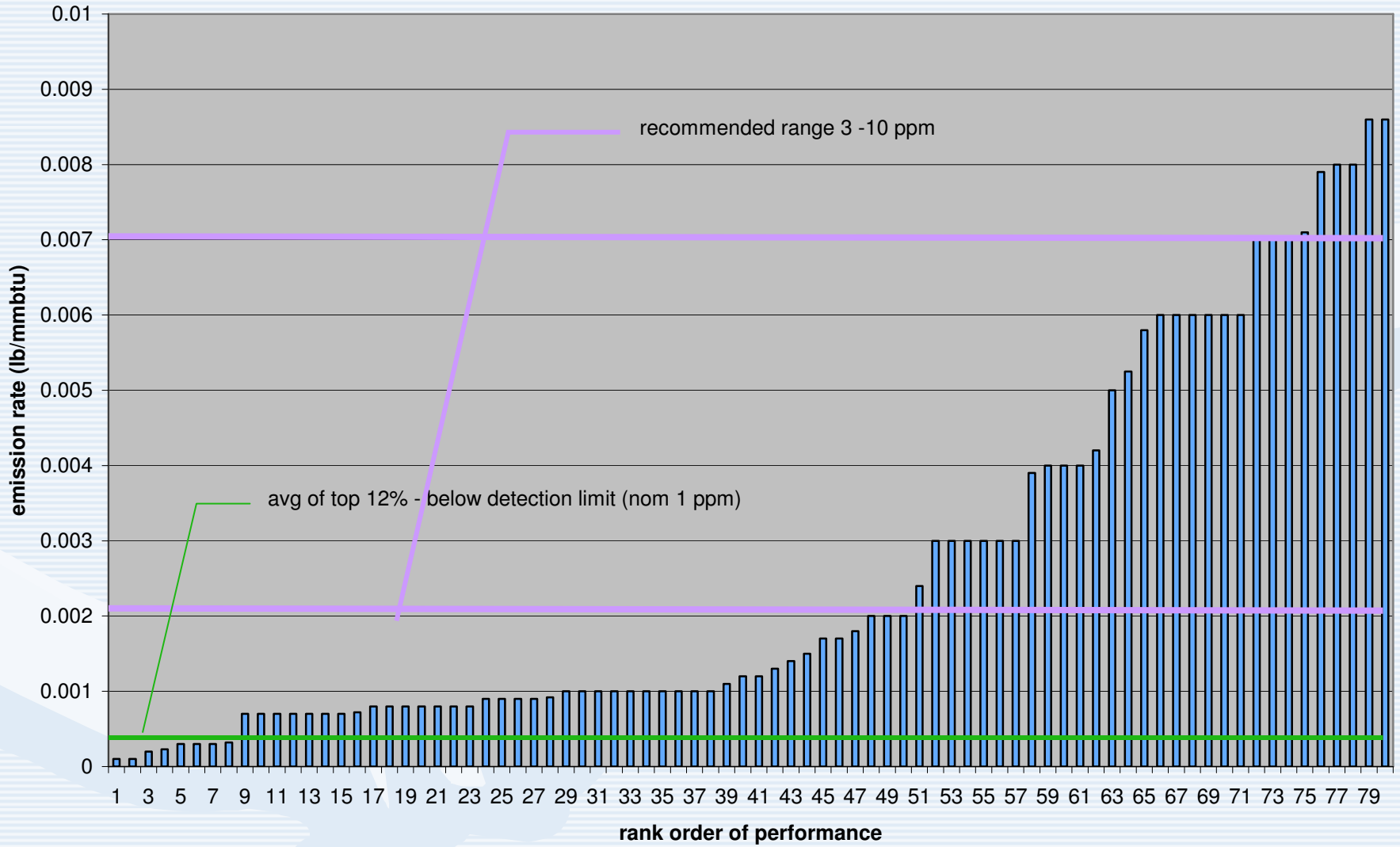
Variability Analysis - 99% confidence margin



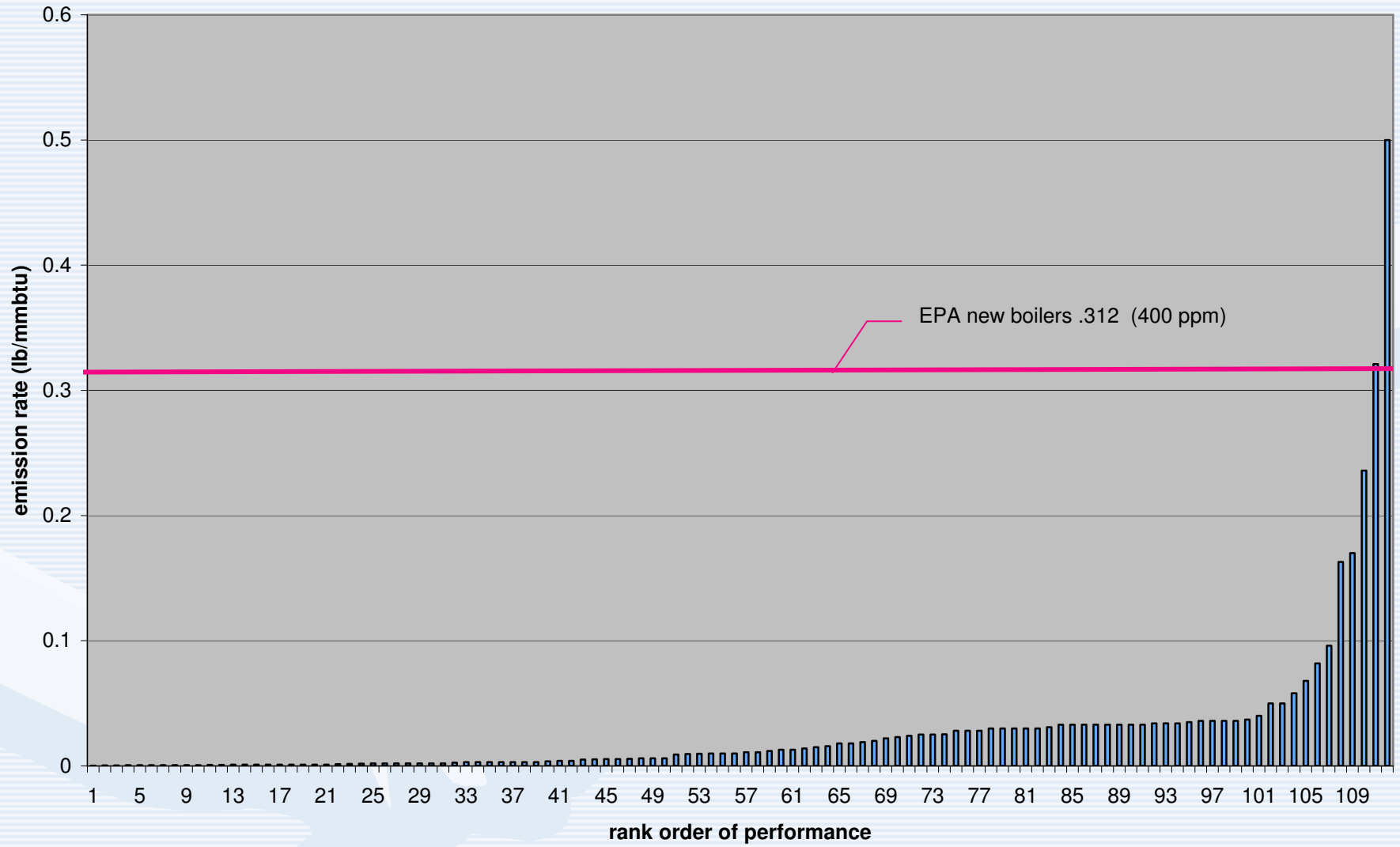
### Gas fired boilers (CO)



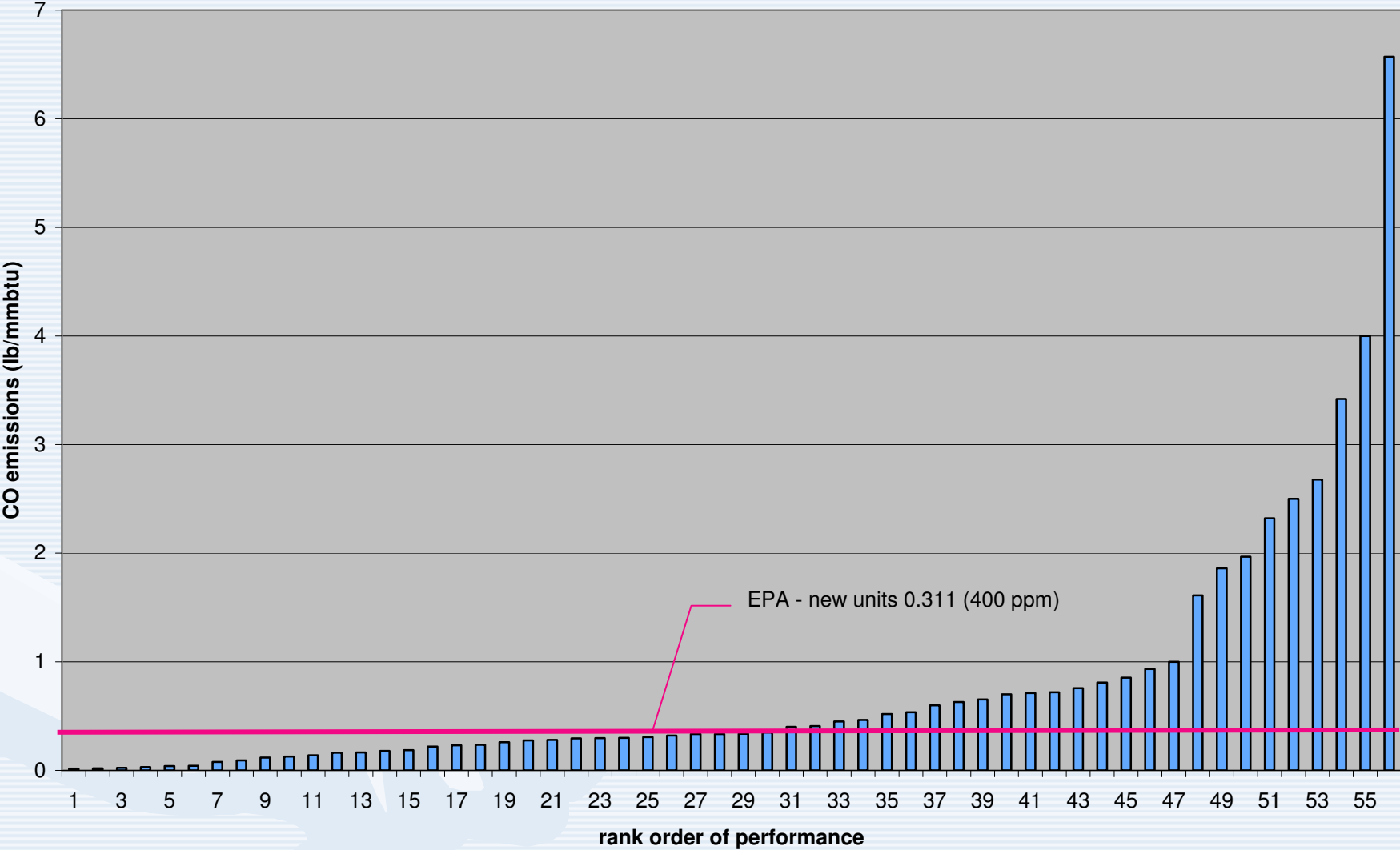
### Gas Fired Boilers (50th percentile) (CO)



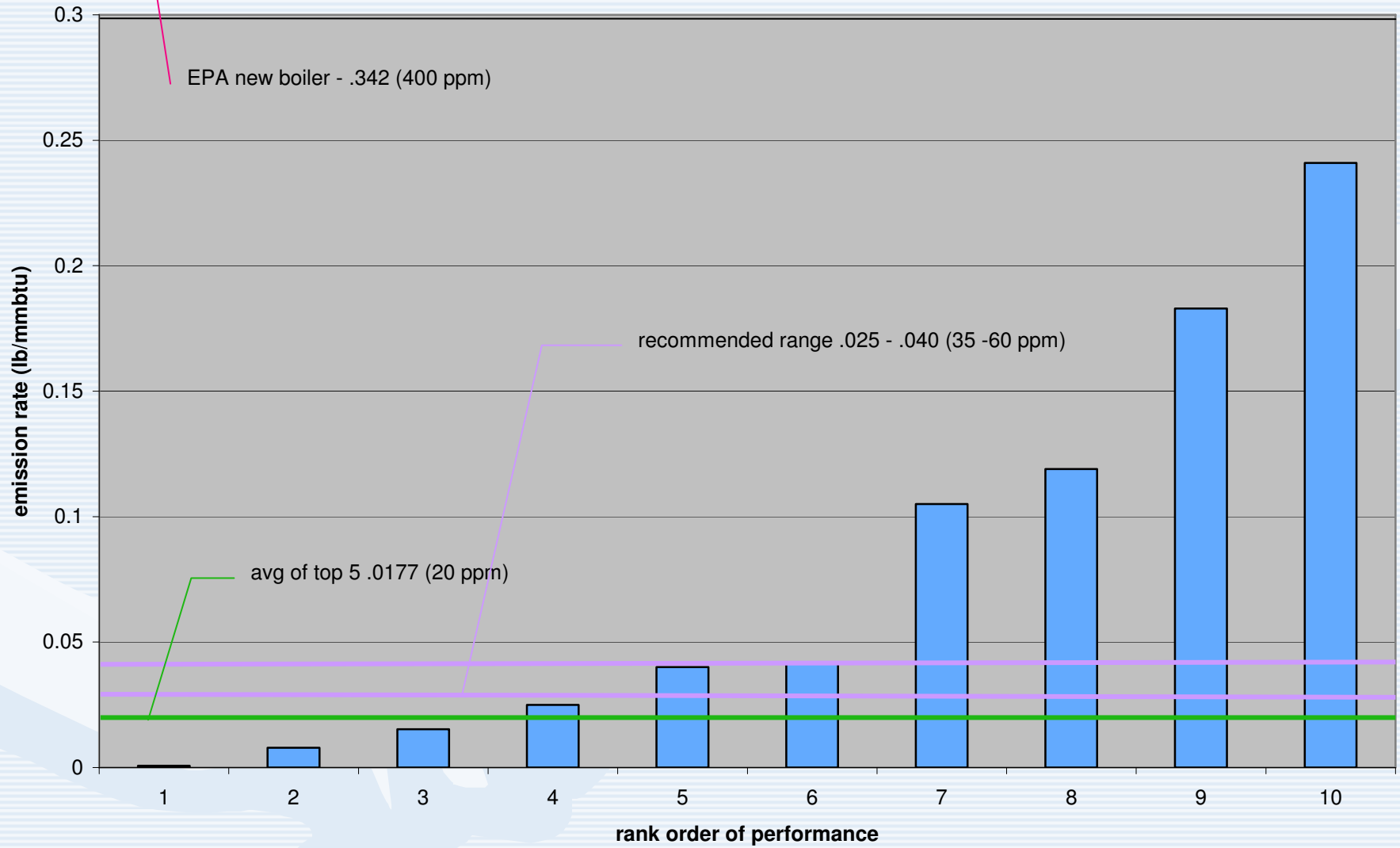
### Oil Fired Boilers (CO)



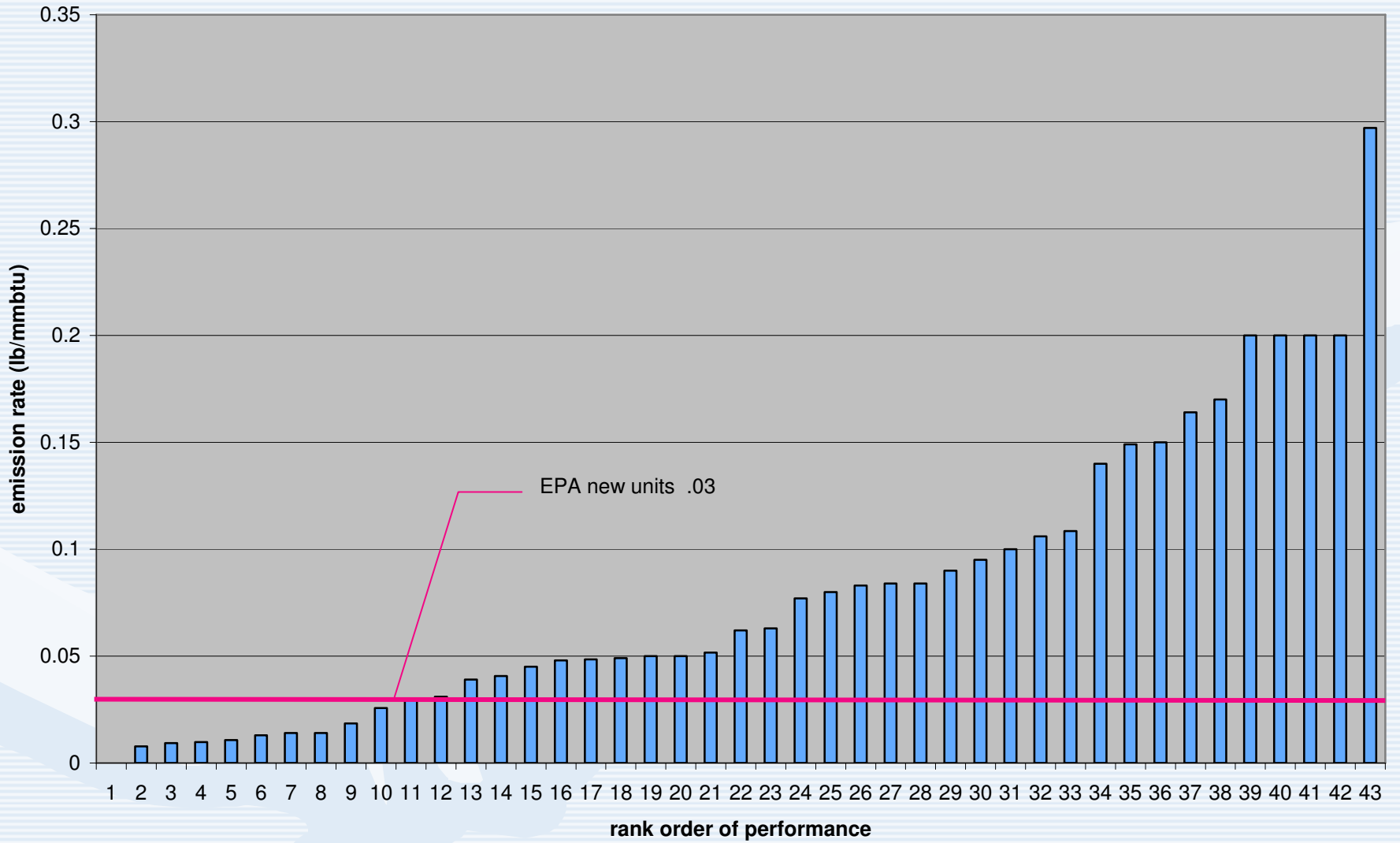
### Wood fired Boilers (CO)



### Coal fired boilers (CO)

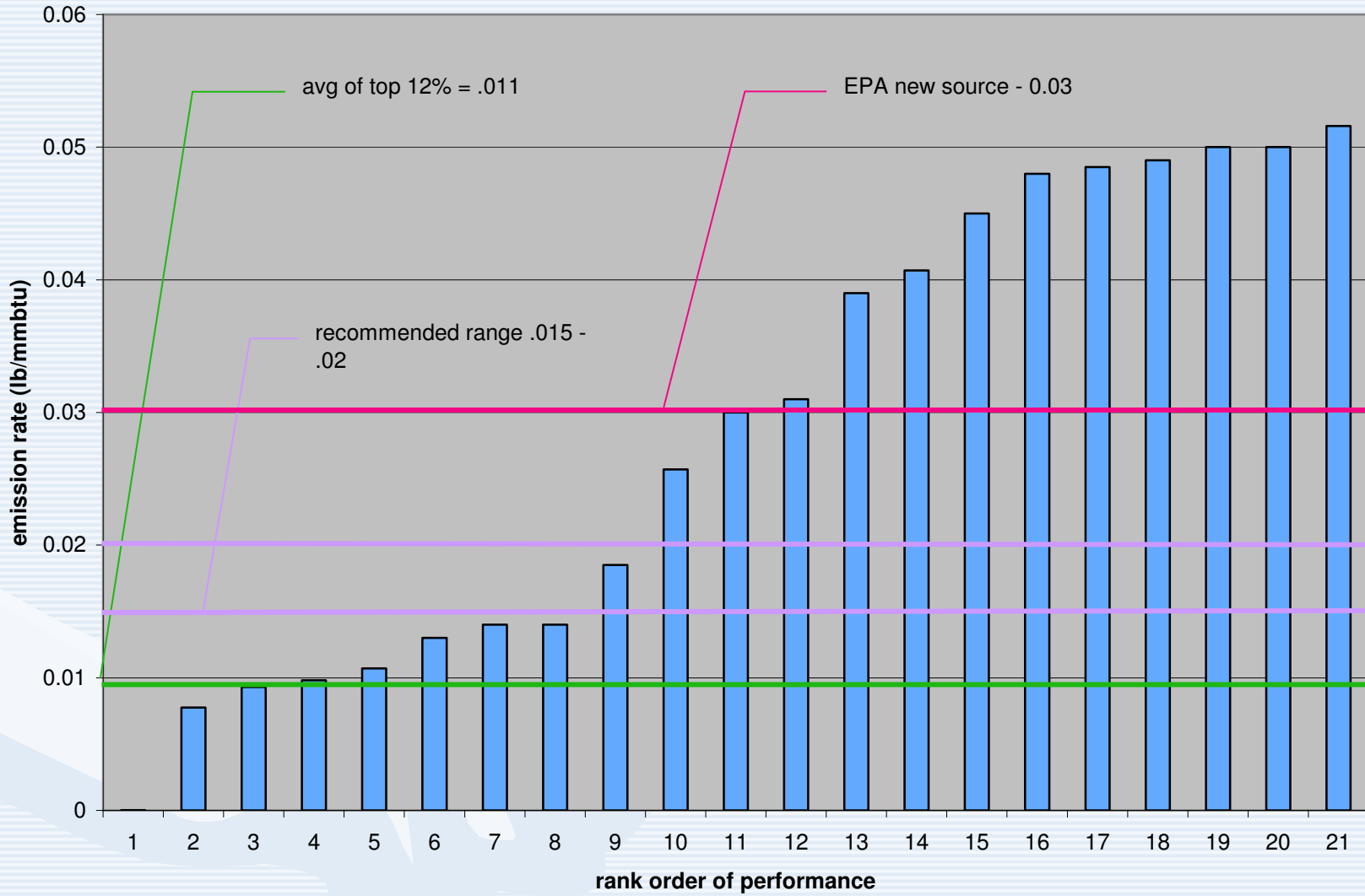


### Oil Fired Boilers (PM)

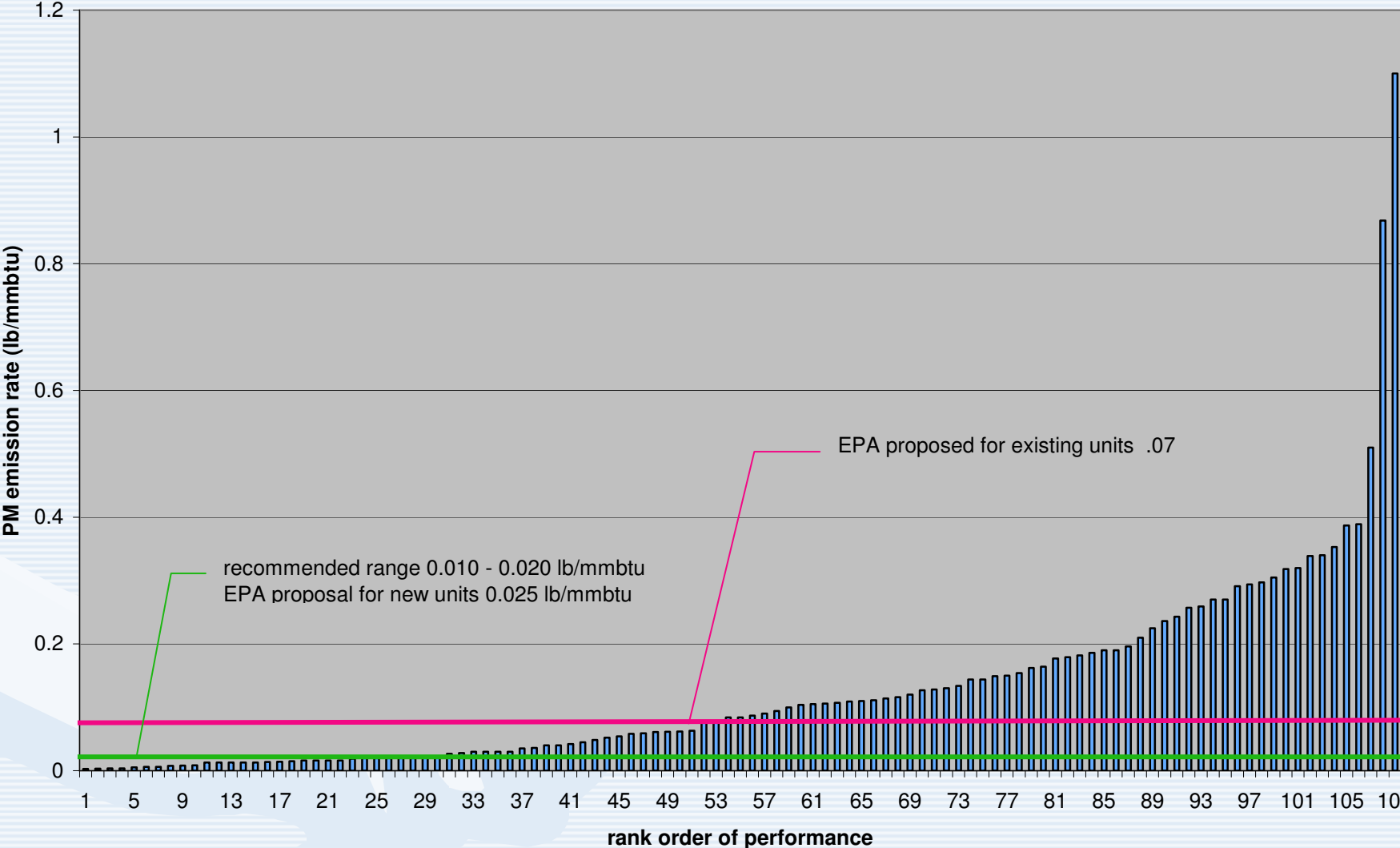




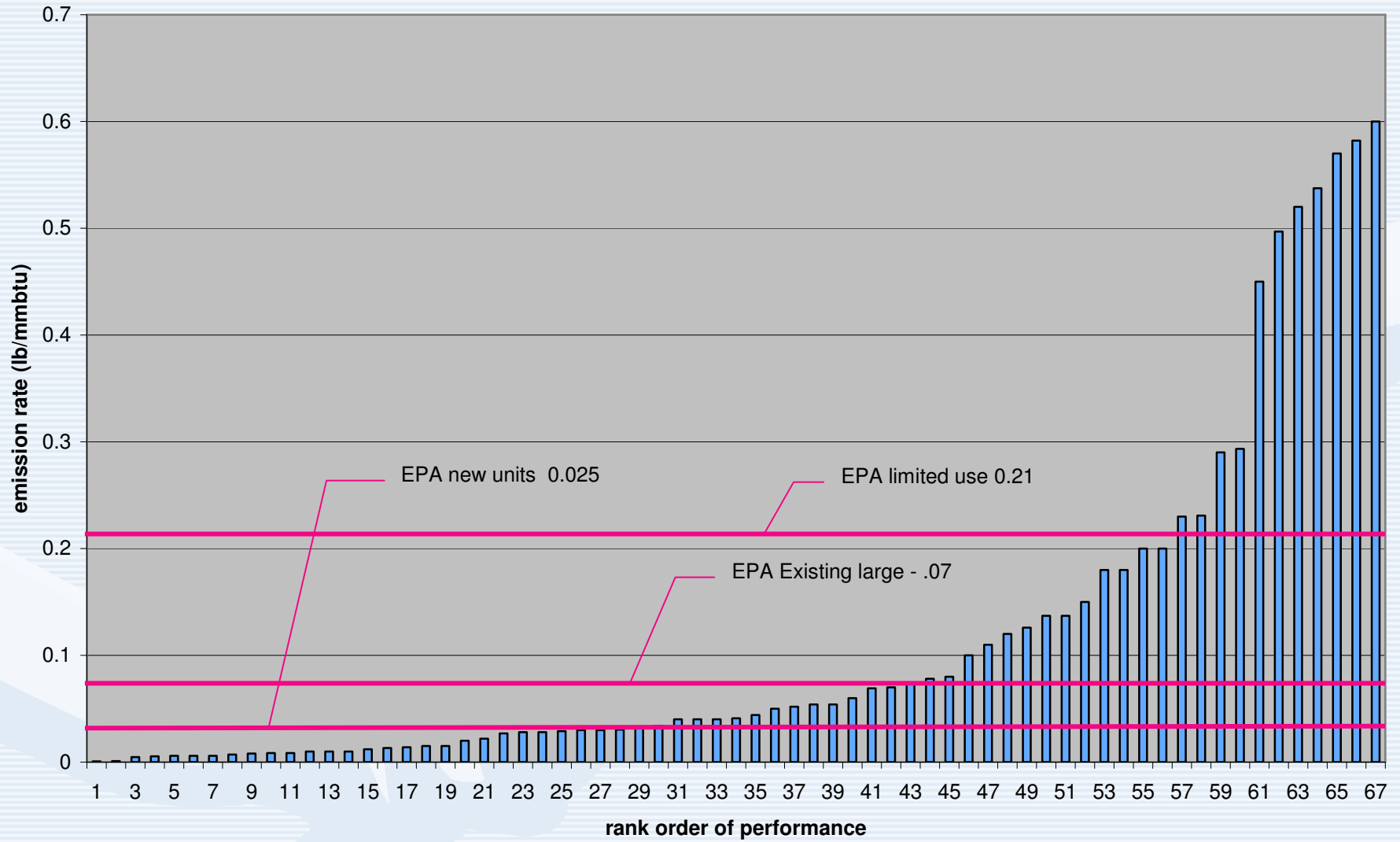
### Oil Fired Boilers 50th% (PM)



### Wood fired boilers (PM)



### Coal Fired Boilers (PM)



## Other Issues

- Procedural requirements – Title V permit modification
- Monitoring – “enhanced monitoring” required, recommend tiered monitoring depending on the size of the unit and the variability of emissions, for example:
  - “type” testing for package natural gas boilers
  - continuous CO monitors for large wet wood boilers
  - parametric monitoring and CAM plans as appropriate
- Work practice requirements as applicable – e.g. annual “tune up”
- Recordkeeping – 5 years, per Title V rules
- Reporting – Per Title V rules

## Industry Concerns

- Emission limits suggested by the NACAA data set are too low – imposing such limits will cause significant economic disruption.
- CO and PM should not be used as surrogates for HAPs; at low levels there is no evidence that CO and HAPs are still correlated with HAPs.
- NACAA “compliance testing” does not reflect true operating conditions for industrial boilers.
- Standard setting must consider performance and reasonable emission variability over time.

## EPA Data Gathering

- September, 2008 - EPA requests existing test data from ICI boilers subject to section 112(j) or section 129. Responses to EPA's data request have been summarized (but not analyzed) by EPA and are posted at <http://survey.erg.com/ss/wsb.dll/s/7g8d/>
- EPA apparently also sought emissions data on CISWI units from EPA Regional Offices
- Preliminary review of EPA data suggests results consistent with NACAA results (e.g. CO data (all fuels) shows large population of 1 ppm results and approximately half of all responders (all fuels) at less than 10 ppm.
- May/June 2009 – EPA requests “gap filling” testing from ICI boilers and process heaters subject to section 112(j) or 129. Data is due to EPA October 15, 2009.

## ICI Boiler and Process Heater MACT Rulemaking

- Under terms of Consent Decree ICI MACT proposal to be published July 15, 2009.
- Clearly EPA will not comply with the terms of the Court Order and is seeking an extension from the Plaintiffs in the case (Earth Justice).
- EPA is seeking to extend both the date for the proposal and the date for the final rule.
- Underlying rulemaking involves both MACT floor and “beyond the floor” issues as well as the definition of “waste.” The latter issue has historically proven to be difficult for EPA.

## Actions by States/Others

- Most states attempting to “wait it out” and hope that EPA finishes its rulemaking before they are forced to invest resources in case-by-case MACT permitting.
- Some states have called for permit applications; others are working on generic rules in lieu of case-by-case permits.
- At least one source has been sued for failure to have permits required by the CAA.
- A number of sources in Oregon have received citizen suit notice letters threatening similar suits.