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Via Electronic Mail (a-and-r-docket@epa.gov)
Attention Docket ID No. EPA-HQ-OAR-2002-0058
EPA Docket Center (EPA/DC)
Environmental Protection Agency
Mailcode 2822T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: Docket ID No. EPA-HQ-OAR-2002-0058
National Emissions Standards for Hazardous Air Pollutants for Major Sources:
Industrial, Commercial, and Institutional Boilers and Process Heaters
75 Fed. Reg. 32006

Dear Sir or Madam:

The International District Energy Association (IDEA) appreciates the opportunity to submit the following comments on EPA's June 4, 2010 proposed rule for National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters (75 FR 32006), more commonly referred to as the "Boiler MACT".

IDEA is a 101 year-old trade association representing over 400 district energy systems owned by municipalities, utilities, universities, hospitals, military bases, privately-owned entities, and airports in 38 states and around the world. Our mission is to facilitate the provision of reliable, economical, efficient, and emission-reducing district heating, district cooling, and cogeneration of electricity and thermal energy.

Yours truly,

A handwritten signature in blue ink, appearing to read "Robert P. Thornton". The signature is fluid and cursive, with a prominent initial "R" and a long, sweeping tail.

Robert Thornton
President

Comments of the International District Energy Association

National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (Docket ID No. EPA-HQ-OAR-2002-0058)

August 23, 2010

Overview of comments

IDEA supports EPA's efforts to protect human health and the environment. However, the methodology and data used to set the standards are flawed, and the proposed standards are far more stringent than needed to assure protection of health and the environment. The proposed Boiler MACT rule sets unachievable standards and fails to provide reasonable compliance alternatives that would ease compliance with no corresponding increased risk to human health or the environment.

IDEA believes that EPA has overstepped its statutory authority in some parts of the proposed rule. Further, EPA has not used an adequate and representative set of data for establishing the limits, and has underestimated the costs of complying with the rules.

This rule, if promulgated as proposed, would result in a huge cost burden on IDEA's members, and thus the users of these systems, which include colleges, universities, cities and businesses throughout the country. It is far from clear that the resulting financial burden is less than the resulting benefits to health and the environment. EPA has the legal discretion and technical justification to substantially reduce the burden of the standard while still providing ample protection to health and the environment.

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1. Unreasonably short comment period

The four interrelated rules raise an unprecedented number of issues for the Agency in determining the appropriate emissions standards for these very large, diverse source categories. EPA provided only 60 days for comment. Affected sources asked EPA for an additional 90-day period to permit affected sources to quality control data, review the database and analysis, consider EPA's proposed and alternative proposed regulatory options, and develop comments that would demonstrate the significant compliance problems with the standards as proposed. IDEA appreciates EPA's agreement to provide an additional 3 weeks for comment for 3 of the 4 rules (EPA did not extend the comment period for the Solid Waste Definition Rule).

However, even with the 3-week extension of the comment period, the time allotted for comment was inadequate for review and analysis of complex rules which will have enormous economic impact. IDEA does not believe that the timeline constitutes the reasonable opportunity for public comment guaranteed by the Clean Air Act and the Administrative Procedures Act. 42 U.S.C. § 7607(h) (2006).

2. Fundamental procedural problem

EPA's request for public comment on Boiler MACT while the final waste definition rule remains unknown creates a fundamental procedural problem. Without a clear delineation of which facilities will be regulated under Boiler MACT and which will be regulated under the CISWI, regulated entities cannot adequately assess and comment on the proposed Boiler MACT. This fundamental problem must be cured by first promulgating the waste definition rule and then proposing boiler standards based on the units that are then known to be ICI boilers.

3. Methodology for setting limits is fundamentally flawed

3.1 “Pollutant by pollutant” approach is inconsistent with § 112 because it does not reflect the performance of the best boilers

The proposed standards are based on pollutant-by-pollutant analyses that rely on a different set of best performing sources for each separate HAP standard.¹ EPA has picked the best data for each pollutant, without regard for the sources from which the data come. The result is a set of standards that reflect the performance of a hypothetical set of best performing sources that simultaneously achieve the greatest emission reductions for each HAP rather than the actual performance of one or more real sources. This “Frankenstein” approach² is contrary to the language of § 112 and produces unrealistic and impracticable standards.

§ 112 clearly directs EPA to set standards based on the overall performance of *sources*. Sections 112(d)(1), (2), and (3) specify that emissions standards must be established based on the performance of “sources” in the category or subcategory and that EPA’s discretion in setting standards for such units is limited to distinguishing among classes, types, and sizes of sources. The statute makes clear that standards must be based on actual sources, and cannot be the product of pollutant-by-pollutant parsing that results in a set of composite standards that do not necessarily reflect the overall performance of any actual source. Congress provided express limits on EPA’s authority to parse units and sources for purposes of setting standards under § 112 and that express authority *does not* allow EPA to “distinguish” units and sources by individual pollutant as is proposed in this rule. *Sierra Club v. EPA*, 551 F.3d 1019, 1028 (D.C. Cir. 2008).

EPA has not provided an assessment of how many existing boilers and process heaters will be able to meet the proposed standards without taking any further control measures. In other words, EPA has not shown that the proposed standards reflect the performance of any actual affected sources.

EPA’s database shows that very few units are best performers for more than one pollutant. As a result, the record demonstrates that the proposed standards reflect the performance of exceedingly few actual sources. Thus, even if EPA had investigated the consequences of using a pollutant by pollutant approach, it could not have reasonably concluded that the proposed standards reflect the performance of actual sources.

3.2 Proposed MACT standards are unrealistic because they fail to recognize the pollution control trade-offs between the HAP standards and other emissions regulations

¹ See, e.g., 75 FR 32019 (“For each pollutant, we calculated the MACT floor for a subcategory of sources by ranking all the available emissions data from units within the subcategory from lowest emissions to highest emissions, and then taking the numerical average of the test results from the best performing (lowest emitting) 12 percent of sources.”)

² *Industry Faults Strict EPA MACT Method for Regulating “Best” Sources*, Inside EPA’s Clean Air Report, Sept. 3, 2009.

A related concern is that achievement of low emissions in one pollutant may negatively affect the ability to reduce emissions of other pollutants. The proposed standards are seriously flawed because they fail to recognize the interactivity of a range of pollution controls. For example, emissions of CO and NO_x are inversely related. Reducing NO_x emissions leads to increasing CO emissions, while reducing CO emissions leads to increasing NO_x emissions.

It appears that of the 14 MACT floor pool sources used to set standards for liquid fuel boilers, 6 of the 14 sources do not have low NO_x burners. It is likely that these sources, operating with low CO emissions, had high NO_x emissions. Sources that have installed low NO_x burners may have higher CO emissions.

The proposed MACT standards put regulated entities in the untenable position of being unable to meet both the proposed MACT standards as well as current standards for non-HAP emissions.

3.3 EPA relies on inadequate datasets and inappropriately relies on data from the “best of the best” in determining existing source MACT floors

EPA requests comment on whether there is a more appropriate statistical approach to account for variability in the MACT floor analyses when there are emission data from a limited number of units in the subcategory. Section 112(d)(3) of the Clean Air Act requires the MACT floor be based on the best performing 12% of sources with emissions data for subcategories with 30 or more sources and the MACT floor be based on the best performing 5 sources in subcategories of less than 30 sources.

Although the 1990 Clean Air Act Amendments were enacted almost 20 years ago, giving sufficient time to collect data, the EPA has gathered shockingly little data and has used an even subset of available to set the proposed standards. Using the data from Tables 2 and 3 on pages 32022-32023, the following summary table shows that of the 30 subcategory limits proposed, 10 were set based on data from less than 2% of the sources; in some cases relying on only one source to set the limit. It is inconsistent with the intent of the Clean Air Act and counter to the public interest to use such small subsets of operating units to be representative of a given subcategory.

	# of sources	% of sources used for MACT floor		
		PM	Mercury	HCl
Coal	578	7.6%	6.1%	6.7%
Biomass	420	5.7%	2.6%	2.9%
Liquid fuel	826	1.3%	2.7%	2.8%
Other gas	199	1.0%	0.5%	0.5%

	# of sources	% of sources used for MACT floor	
		CO	D/F
Coal -- stoker	361	2.2%	0.6%
Coal -- fluidized bed	31	9.7%	6.5%
Coal -- PC	186	2.7%	1.1%
Biomass -- stoker	320	4.7%	0.6%
Biomass -- fluidized bed	12	41.7%	41.7%
Biomass -- suspension burner/dutch oven	62	4.8%	1.6%
Biomass -- fuel cell	26	19.2%	19.2%
Liquid fuel	826	1.7%	0.4%
Other gases	199	4.5%	0.5%

The fact that, at this point, data on only a small subset of sources in each subcategory is available represents an abdication of EPA's responsibility that should be corrected before MACT standards are promulgated.

Further, we are gravely concerned that the information collection request (ICR) for emissions data may have been skewed toward representing the best performing units. The Section 114 letter stated the intent of the ICR as collecting additional emissions data to be representative of various fuels, combustor designs and control devices. In the Phase I Industrial Boiler MACT data collection effort, EPA requested and received emissions data from most of the potentially affected sources across all of the subcategories for PM, CO, NOx and many HAPs. After reviewing the Phase I data, EPA developed a Phase II plan for collecting additional data. During this second round, however, EPA targeted only those sources whose data EPA determined it would need to set the MACT floor. It appears that EPA artificially limited the pool of data from which it drew its top 12% best performing sources. EPA's sampling approach for Phase II created a dataset that is not representative of sources for which the data is being used to infer emissions.

Instead of using emissions data from the "best of the best," EPA should simply use emissions data from the "best" units in each subcategory. In other words, EPA should determine how many units constitute the top 12% in each subcategory (or top 5 in subcategories with fewer

than 30 sources) and then use emissions data from this number of units (or as many of these units for which emissions data are available) in determining the MACT floor and MACT standard.

3.4 Emission limits should not be set below detection limits

In a number of cases, the data used by EPA are reported as below detection limit and/or less than the allowable tolerance of the calibration error requirement for Method 10. For example, relative to the CO emission limit of 1 ppm for liquid fuel fired sources, the MACT floor was set in part based on CO averaging values below the detection limit of 0.51. Method 10 allows a tolerance of the calibration error results to be 2% of the span calibration gas value or 0.51 ppm. It is questionable whether any results that are reported below 0.5 ppm can be relied upon to be true values. Given this, how can sources reliably demonstrate compliance with an emission limit of 1 ppm?

Another example are the proposed dioxins/furan emission limits for biomass boilers. The detection limits of dioxin/furan isomers are so variable that many boilers are likely to exceed the proposed limits even though the tests will show that all the isomers are present below the detection limits. Consequently, we strongly recommend that such practice requirements be adopted instead of numeric limits for dioxins/furans in biomass boilers.

EPA's use of standards at or close to the detection limit introduces an improper bias to setting the MACT floor. IDEA supports the comments of the Council of Industrial Boiler Operators (CIBO)³ regarding basing floors on emissions test data that is below detection limits.

4. EPA's estimates of the costs of the rule are significantly lower than the real cost impact on sources

It is not clear that the EPA has adequately accounted for the total costs of controls, including not only capital costs but also ongoing operation and maintenance costs of, for example, PM CEMS and CO CEMS. IDEA encourages EPA to consider the use of parametric monitoring, including opacity and bag-leak detection equipment, in lieu of the PM CEMs as a compliance monitoring tool.

IDEA supports the comments of CIBO regarding the costs of retrofit for CO catalysts.⁴

5. Fuel switching is not an appropriate beyond-the-floor option

IDEA strongly agrees with EPA that "fuel switching is not an appropriate beyond-the-floor option" (75 FR 32026). Not only is fuel switching an enormously costly option, it also reduces the flexibility of facilities to manage risks related to fuel availability and cost volatility.

³ Id., pages 26-30.

⁴ Id., pages 67-68.

6. The scope of the required energy assessment exceeds EPA's authority under the Clean Air Act

IDEA actively supports energy efficiency as a tool to achieve national goals for reduction in fuel consumption, emissions reductions and improvement in energy security. IDEA members have implemented many projects to improve the energy efficiency of our facilities as well as customer facilities. However, the energy assessments proposed as a beyond-the-floor option exceeds EPA's authority, cannot be practically implemented by all sources operating district energy systems, and should not be included in the final rule.

EPA is only authorized under § 112 to regulate "sources" of HAPs. For example, § 112(d)(1) explains that EPA "may distinguish among classes, types, and sizes of *sources* within a category or subcategory in establishing ... standards" (emphasis added). More particularly, § 112(d)(2)(A) authorizes EPA to establish standards that would "reduce the volume of, or eliminate emissions of, [HAPs] through process changes, substitution of materials or other modifications"; however, this authority is limited in § 112(d)(2) standards regulating "sources in the category or subcategory to which such emission standard applies." The term "source" unambiguously means something that actually emits HAPs. Because the proposed energy assessment requirement would apply to processes that demand energy from affected boilers, but are not necessarily sources of HAPs themselves, EPA's proposal exceeds the Agency's limited authority to regulate only HAP "sources." In the case of a district energy system, the energy assessment appears to extend beyond the physical plant boundaries and to customers of the district energy system. Owners or operators of district energy systems may not have the authority to complete such an assessment of customer facilities.

The proposed assessment is not an "emission standard" and thus EPA is not legally authorized to either require such an assessment or to compel regulated facilities to implement measures identified in such an assessment. EPA has not demonstrated the relationship of such assessments to HAP reduction, and has provided no data demonstrating such a relationship. Potential energy and cost savings from the energy assessments can't be reliably projected. Further, the assessment will require sources to submit data that may constitute confidential business information.

Mandating the use of third-party auditors is counter-productive because the facility operators have the most extensive knowledge for assessing energy consumption within their facilities.

7. The standards inadequately account "real-world" variability in emissions

The proposed rule fails to adequately account for variability in emissions resulting from unavoidable variations in loads and fuel mix and due to start-up, shutdown and malfunction (SSM).

EPA is mistaken in its suggestion that CO emissions do not vary with load. In fact, to adequately accommodate expected CO emissions variability with load, the 2004 Industrial Boiler MACT rule did not require CO CEMS data obtained at less than 50 percent of maximum load to be included in the 30-day CO average. EPA's proposal not to accommodate load variability is not supported by the record and inexplicable as a technical matter.

EPA has proposed a CO standard that boilers must meet at all times based on 3-run stack tests. The methodology used fails to properly characterize the highly variable nature of CO emissions in solid fueled boilers resulting from changes in fuel mix and load. Facilities are typically required to conduct stack tests under at least 90 percent of full load during normal operating conditions, resulting in data representing the best operating conditions. 3-run stack test data represents only a small and unrepresentative snapshot in time captured during optimal conditions, yet these data are used to set emission limits for a pollutant that is highly variable throughout the operating year.

Analysis of CO CEMS data included in EPA's database for top performing units in each of the solid fuel subcategories indicates that even the top performing sources would not be able to meet the proposed CO standards that are based on the performance of those very units. According to page 32024 of the preamble, EPA obtained 30 days of CO CEMS data from six sources to evaluate variability in emission rates at different operating loads. Six sources were selected from the best performing units - two sources fire coal, two fire biomass, and two fire gas. No liquid fired sources were used in this analysis. One of the biomass units was reclassified as a CISWI unit, therefore the use of its data is not representative of the affected sources. The two gas fired units do not have a CO emissions limit in the proposed rule, therefore their data is not representative of subcategories that have emission limits. The remaining units, two coal-fired and one biomass-fired unit, therefore make up the dataset that should be used to determine if CO emissions vary with load.

Data from the dutch oven/suspension burner, biomass-fired source: TXDiboll, is provided in Appendix B-2 of the MACT Floor memo. Considering that data, and using the "start anew" method for calculating the rolling averages, the data show that the source would be out of compliance with the proposed standard of 1010 ppm for several days, and would be out of compliance for several days at a time, because of the 30-day rolling averaging period. (The "start anew" method requires the facility to meet their standard for day 1 using only day 1 data. On day 2, the average of days 1 and 2 are used. For day 3, the average of days 1, 2, and 3 are used. This continues until 30 days are reached and then each new day uses the last 29 days to calculate the average.)

Therefore, using the data that EPA used to assess variability, a top-performer would not be able to meet the emission standard during a 30-day period. UVA believes EPA should reassess the issue of CO variability using more data from more sources, and evaluate if those data indicate that the sources can meet the proposed standards. If not, the UVA suggests the standards be reconsidered.

EPA makes a similar mistake with regard to its proposal not to set a separate standard for periods of startup, shutdown, and malfunction. On the one hand, EPA asserts that "[t]he standards we are proposing are daily or monthly averages ... [t]hus, we are not establishing separate emission standards for these periods because startup and shutdown are part of their routine operations and, therefore, are already addressed by the standards." On the other hand, EPA uses short term performance test results to set the standards rather than the results of long-term CEMS monitoring. As a result, the emissions data on which the standards are based do not, in fact, reflect or adequately accommodate emissions from periods of startup, shutdown, or malfunction.

EPA must use data to set the standard that are consistent with the form of the standard. As compliance with the CO standard is to be measured at all times using CO CEMS for units of 100 MMBtu/hr and greater and the averaging time is 30 days, EPA should use 30-day CEMS data from affected boilers to establish the appropriate MACT floors and not 3-run stack test data.

To assure that startup, shutdown, and malfunction are appropriately accommodated, EPA must either assure that the data on which the standard is based include representative data from such periods or, alternatively, set a separate work practice standard to properly accommodate startup, shutdown, and malfunction.

8. Solid fuel variability will create insurmountable hurdles in meeting the standards

Variability in the characteristics of solid fuels will make it extremely difficult and expensive to meet the proposed standards for both coal and biomass. For example, coal mercury and chlorine concentrations can vary substantially, even within a given coal seam or coal shipment. This is clearly demonstrated by the data from the nearly 28,000 samples of bituminous coal collected in response to the EPA's 1999 Information Collection Request (ICR) for the utility industry mercury MACT determination. Those data show that the average coal mercury concentration was 0.11 ppm (dry basis) with a standard deviation of 0.09 ppm. The average coal chlorine concentration was 1,031 ppm (dry basis) with a standard deviation of 879 ppm.

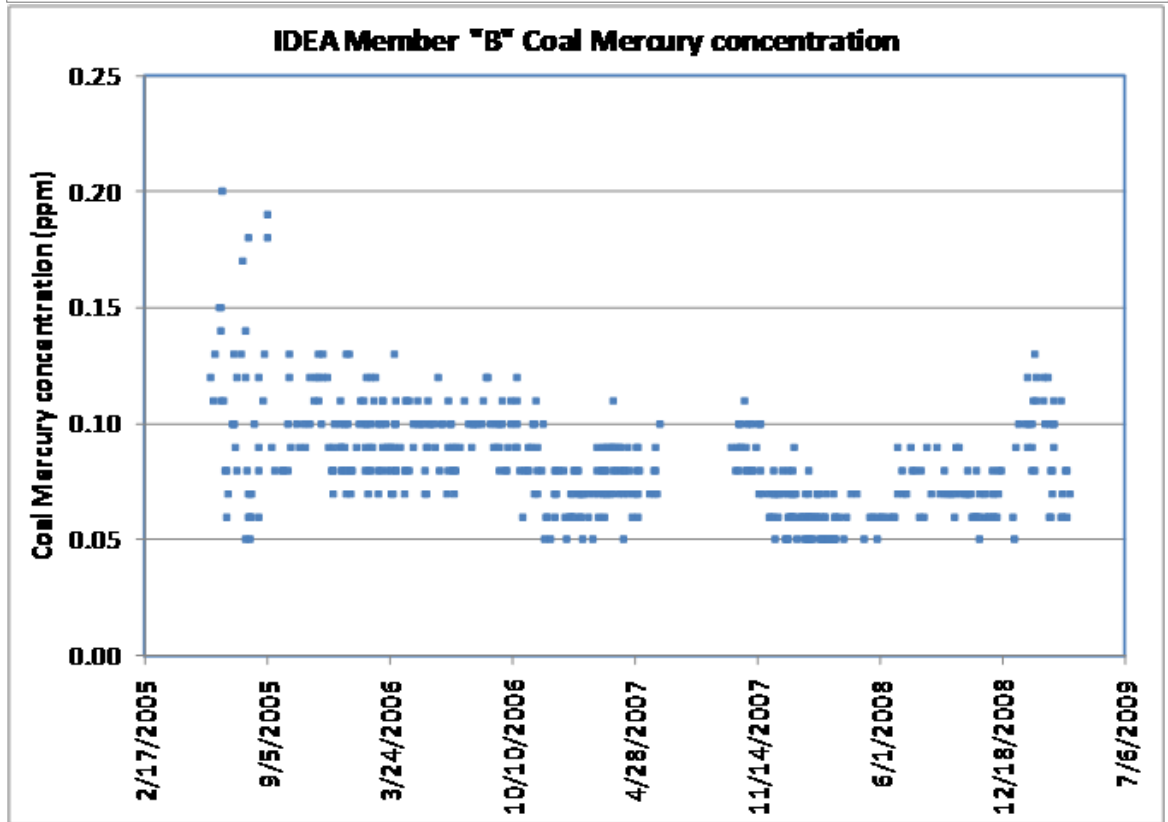
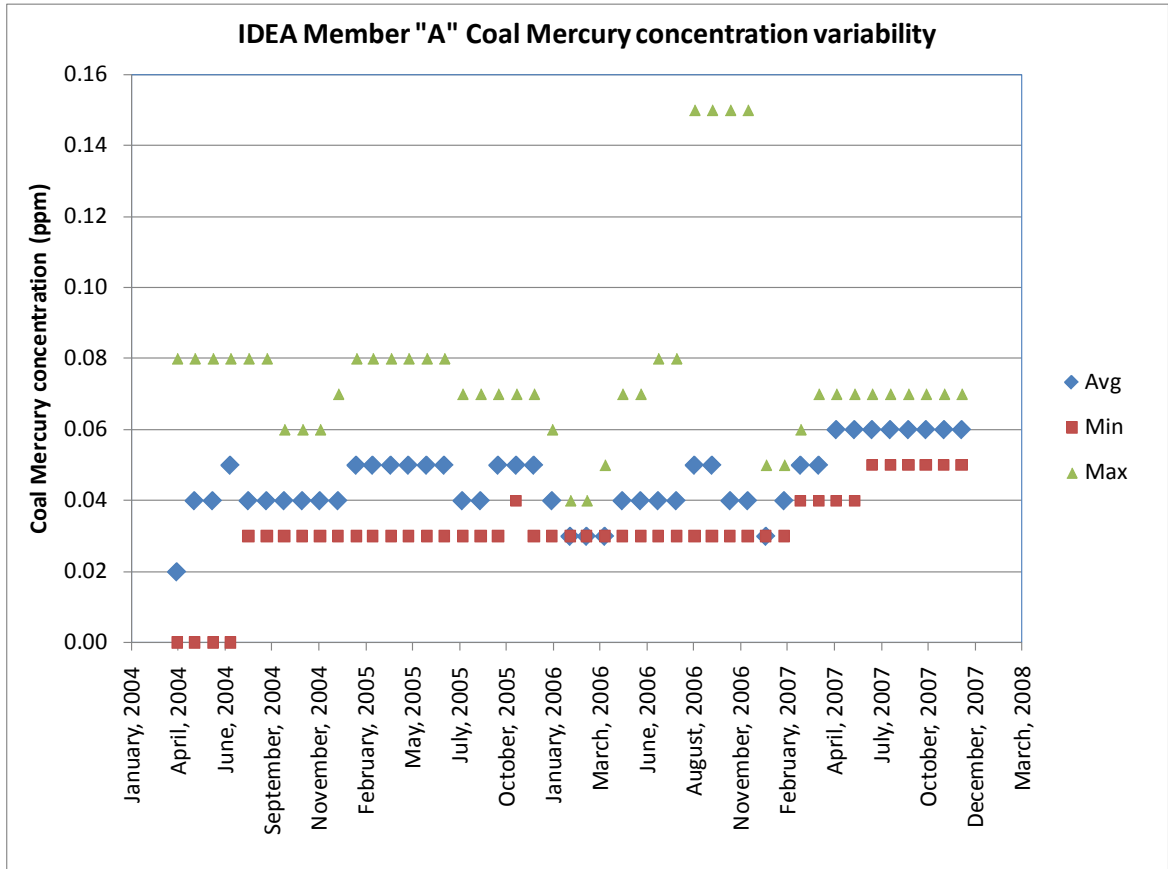
The significant variability in mercury and chlorine concentrations found in power plant coal in 1999 is consistent with more recent results from sampling of coal used in IDEA member facilities that would likely be subject to the Boiler MACT rule. Below are graphs of coal mercury and chlorine concentrations in for two IDEA members operating coal-fired facilities.

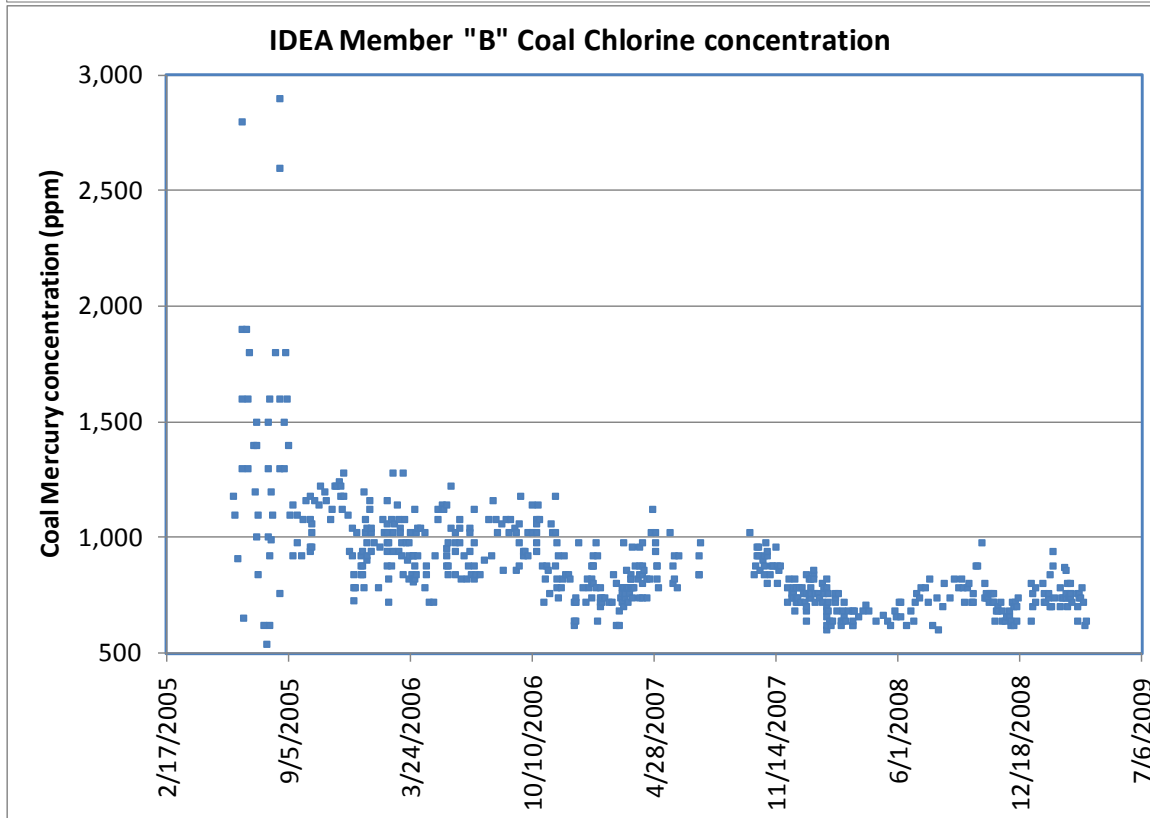
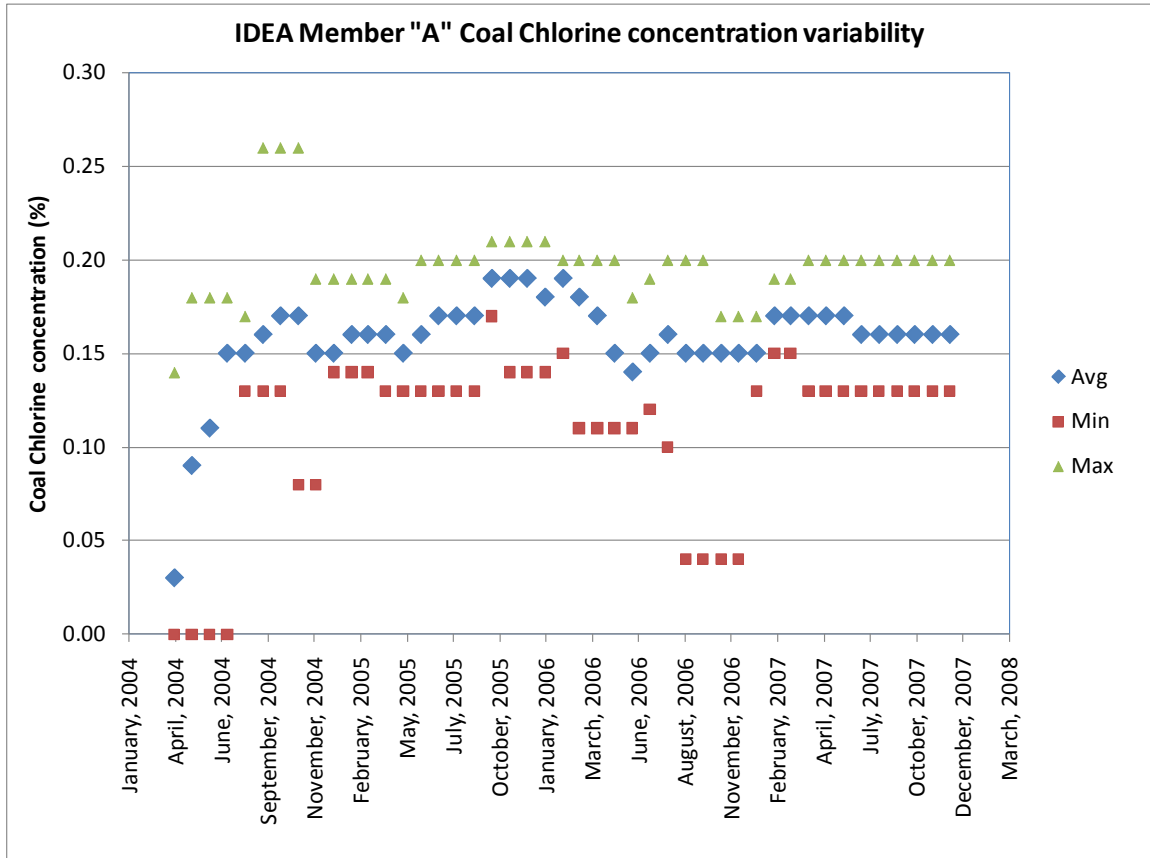
Biomass fuels exhibit even more variability than coal; this variability was inadequately considered in the proposed rule.

Solid fuel variability will make it very difficult and expensive for a facility in achieving compliance under the proposed Boiler MACT rule. As an example, a coal-fired facility may choose to demonstrate compliance with the mercury and chlorine limits via fuel analysis. A facility that chooses to comply via a fuel analysis must conduct an initial fuel analysis compliance test and then must conduct monthly fuel analyses to demonstrate that the emission limits are being met continuously. Due to the inherent variability of the chlorine and mercury concentrations in the coal, it may be very difficult to meet the emission limits on a monthly basis considering that a facility could demonstrate its initial compliance during a shipment of coal with relatively low mercury or chlorine concentrations.

For a facility that must retrofit air pollution control equipment to reduce the mercury and/or HCl emissions below the emission limits, an unnecessary margin will have to be added to the design removal efficiency of the equipment to achieve compliance with a once annual stack test. However, if the emissions limits were met over a longer averaging period, a facility could reduce the unnecessary design margin and risk associated with meeting the emission limits.

IDEA requests that the EPA gather additional data and further consider the impact of solid fuel variability with respect to the Boiler MACT Rule compliance requirements.





9. EPA should establish a subcategory for "limited use" units due to their significant differences from steady-state units

In the preamble discussion, it appears that the EPA intended to provide that a natural gas-fired boiler that receives less than 10% of the annual heat-input from liquid fuels would be considered a natural gas-fired boiler for purposes of regulation under the MACT rule, and thus only subject to the annual tune-up requirements. However, the proposed restricts the use of liquid fuels to periods of testing or supply curtailment.

This is problematic and inappropriate because "plant-side" equipment may require the use of liquid fuels to provide for maintenance of natural gas systems during periods that do not constitute emergencies as narrowly defined in the proposed rule. Within the universe of potentially affected units, many are operated as stand-by or redundant capacity, reserved for use during periods when circumstances mandate the need to provide steam in order to preserve conditions within the distribution system. These boilers are often equipped with coils to maintain internal metal temperatures, as well as boiler drum pressure and temperature, to allow for quick response following the combustion safety purge.

IDEA recommends that EPA provide for these sorts of operating scenarios in the final rule by establishing a limited use subcategory for liquid or gas 2 units based on 10% annual capacity factor or 1,000 hours/year as a threshold. These units operate for short periods of time during the year and as such may experience relatively little SSM. The short run times would likely exacerbate the effect of startup/shutdown on 30 day averages. Because limited use units do not operate regularly, their emissions differ from average boilers operating for longer periods of time or near their design capacity.

EPA has recognized that "units operate most efficiently when operated at or near their design capacity." 75 FR 32023-24. Based on their operating schedule, limited use units may or may not operate at or near their design capacity, but if they do it is for limited periods of time. Considering this, limited use units may operate for a greater percentage of their total operating time inefficiently as compared to steady state units operating near design capacity.

In addition, the short operating times of limited use units results in difficulties in effectively controlling emissions. As EPA noted in a 2004 response to comments document , based on the operating schedules of limited use units the agency could not identify a control technology for controlling organic HAP emissions. See EPA, Response to Public Comments on Proposed Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP, at 67 (Feb. 25, 2004). Considering these differences based on the operating schedule of limited use units, EPA should establish a subcategory for limited use boilers and process heaters. The subcategory should be defined to include units with a capacity utilization factor of 10 percent; or, by a 1,000 hours operating per year threshold.

Furthermore, EPA should adopt a work practices standard for the limited use subcategory for two reasons:

- EPA has acknowledged that there is no proven control technology for organic HAP emissions from limited use units.
- Limited use units, such as emergency and backup boilers, cannot be tested effectively due to their limited operating schedules and because most EPA test methods require a unit to operate in a steady state (See Proposed 40 CFR 63.7520(d)).

10. Emissions averaging across categories should be allowed

In the proposed rule, the use of emissions averaging is limited to units in the same designated subcategories. IDEA encourages EPA to allow averaging across subcategories, thereby allowing facilities to make cost-effective investments in technologies and other strategies designed to achieve the reductions required under this regulation. In many facilities that are likely subject to the proposed rules, some plant equipment may be located in a congested area of the site in which it is difficult or impossible to install control technologies. On the other hand, other equipment at the same site may have space and the cost-effective ability to “over-comply” on one or more emission units in order to ensure the overall reductions are achieved.

11. Combination boilers are inappropriately addressed

In addition to the concern expressed above regarding liquid fuel boilers, other subcategories should be adjusted to properly accommodate the unique characteristics of combination boilers (e.g. those burning coal and biomass, coal and gas or biomass and gas).

Some boilers co-fire coal in an amount greater than 10% heat input basis with at least 10% biomass. These combination boilers have emission profiles than units that burn coal or units that burn biomass and do not fit cleanly into either the coal-fired boiler subcategory or the biomass-fired boiler subcategory. To better accommodate the actual performance of combination boilers, we recommend that EPA adjust the proposed subcategory for combination boilers so that they belong to the coal subcategory for purposes of regulating the fuel-based HAP (i.e., metals/PM, HAP acid gases, and mercury) and the biomass subcategory for purposes of regulating the combustion-based HAP (i.e., CO (as a surrogate for organic HAPs) and dioxins/furans).

As the rule is currently proposed, boilers that burn more than 10% coal with biomass will be classified in the coal subcategory; however, most such boilers will not be able to meet the coal subcategory CO emission standard for organic HAPs due to the substantial amount of biomass that they burn. Biomass fuels are more variable than coal and typically contain significantly more moisture than coal. As a result, it is more difficult to control combustion conditions in combination boilers than in boilers combusting only coal, which means that CO emissions from combination boilers often will be unavoidably greater than from a comparable coal-fired boiler. This makes the coal subcategory an inappropriate choice for establishing standards for combustion-based HAP. Regulating combustion-based HAP from combination boilers under the biomass subcategory makes more sense because combination boilers will perform more like biomass-fired boilers with regard to the combustion related HAPs.

On the other hand, biomass typically has lower levels of metals, halogens, and mercury than coal. As a result, regulating the fuel-related HAPs from combination boilers under the biomass subcategory would be inappropriate because the amount of co-fired coal would in many cases prevent combination boilers from meeting the standards for fuel-based HAPs. For this reason, it makes more sense to regulate fuel-based HAP emissions from combination boilers under the coal subcategory.

Notably, if owners or operators of combination boilers anticipate difficulty complying with the proposed CO standard, they may have to switch away from biomass and burn more coal to be able to comply with the coal subcategory emission standards. This unintended consequence of

replacing biomass with coal is contrary to national energy and climate policy, which encourages the use of more renewable biomass fuel.

Therefore, for both technical and policy reasons, EPA should revise the way combination boilers are regulated under the Industrial Boiler MACT. Combination boilers burning more than 10% coal with biomass should be subject to the same emission standards for PM/metals, mercury, and acid gases as the coal subcategory and should be subject to the biomass subcategory emission limitations for CO and dioxins/furans.

12. Work practice threshold for natural gas boilers should be set at 30 million Btu/hr

EPA rightly proposed that work practices (annual tune-up) are required for natural gas boilers (Gas 1) rather than numeric HAP limits. On page 32024 of the preamble, EPA requests comment on whether a threshold higher than 10 MMBtu/hr meets the technical and economic limitations as specified in CAA section 112(h).

EPA proposes work practices for boilers under 10 MMBtu/hr based on the conclusion that emissions testing would be economically onerous. For the same reason EPA should extend the work practice standard to units with a design heat input capacity of less than 30 MMBtu/hr. Many units with heat input capacities between 10 MMBtu/hr and 30 MMBtu/hr encounter the same issues and costs that would have a "significant adverse economic impact" on facilities. Many units less than 30 MMBtu/hr do not have the facilities such as test ports and test platforms in place to test for emissions. In addition, small units can have configurations that make such testing very costly, for example, vertical units with the stack located on top of the furnace, convection section, and heat recovery section, thus placing the stack in an inaccessible location.

13. Work practices should be used instead of numeric limits for biomass and landfill gas boilers

EPA has proposed that work practice standards are appropriate and justified for units in the Gas 1 subcategory out of concern for the cost of complying with numeric emissions limitations and based on the adverse policy incentives that would be created. The rationale that supports the proposed approach for the Gas 1 subcategory applies equally well to biomass boilers and, therefore, provides ample support for adopting work practices instead of numeric emissions limitations for biomass boilers.

Use of biomass reduces net GHG emissions, which makes the combustion of biomass an important tool in managing and reducing the Nation's carbon footprint. Similarly, biomass is an abundant, renewable domestically-produced fuel that can help reduce reliance on foreign sources of fossil fuel and, thus, improve the Nation's energy security. Prescribing stringent HAP emissions limitations on biomass boilers will create a significant barrier to the continued use and expansion of biomass fuels and incentivize the use of less desirable fossil fuel alternatives.

Given the high costs of complying with the proposed HAP emissions limits for biomass boilers and the strong energy and environmental policy benefits off biomass, EPA has ample

justification for requiring work practices rather than HAP emissions limitations for biomass boilers.

The proposed standards will drive energy facility managers to avoid or abandon biomass for natural gas. This will reduce fuel flexibility and the associated economic and reliability benefits of using biomass. Dependence on one fuel increases risks relative to price fluctuations and supply disruption.

We also note that there is very little difference between the emissions from the top performing sources in the Gas 2 subcategory as compared with the Gas 1 subcategory. As a result, EPA would be justified in concluding that the Gas 1 and Gas 2 subcategories should be combined into a single gas-fired subcategory, which would be regulated by work practice standards for the reasons EPA explains in the preamble.

14. Promulgation schedule is unreasonable and will not serve the public interest

IDEA believes EPA's current schedule, with promulgation by December 16, 2010 is inadequate for the necessary evaluations, deliberations, and revisions that are needed to this Proposed Rule. This rule in combination with the three other proposed combustion rules presents the largest set of rulemakings from an impact and cost perspective that EPA has ever issued. As such, the cost and potential impact on jobs in the US demand a thorough deliberation and thought process so that the most reasonable and defensible rule can be finalized that meets the intentions of the Clean Air Act. Requiring EPA to do all of the work required in less than 4 months puts EPA in an untenable position and the results of having too little time will be a less than optimum regulatory result.

Further, given both the significant cost for design and construction of facilities to meet the standards and the current constraints on access to capital (particularly for colleges, universities and other institutions), the three year deadline for compliance will be onerous.