



February 20, 2012

MEMBER COMPANIES

Clean Harbors Environmental Services
Dow Chemical U.S.A.
E. I. Du Pont de Nemours
Eastman Chemical Company
INVISTA S.à.r.l.
3M
Ross Incineration Services, Inc.
Veolia ES Technical Services, LLC

EPA Docket Center (EPA/DC)
Environmental Protection Agency
Mailcode: 2822T
1200 Pennsylvania Ave, NW
Washington, DC 20460.

GENERATOR MEMBERS

Eli Lilly and Company

Attn: Docket ID No. EPA-HQ-OAR-2002-0058

ASSOCIATE MEMBERS

AECOM
Analytical Perspectives
B3 Systems
Compliance Strategies & Solutions
Coterie Environmental, LLC
Focus Environmental, Inc.
Foster Wheeler USA
Franklin Engineering Group, Inc.
METCO Environmental, Inc.
SAIC
Strata-G, LLC
TestAmerica Laboratories, Inc.
TRC Environmental Corporation
URS Corporation

The Coalition for Responsible Waste Incineration (CRWI) appreciates the opportunity to submit comments on *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters: Proposed rule; Reconsideration of final rule*. 76 FR 80,598 (December 23, 2011). CRWI is a trade association comprised of 23 members. Some of them own and operate industrial boilers and process heaters.

INDIVIDUAL MEMBERS

Ronald E. Bastian, PE
Ronald O. Kagel, PhD

CRWI has been extensively involved in the development of rules under the MACT program. MACT rules regulating hazardous waste combustors (40 CFR Part 63, Subpart EEE), a source category covering most of our industrial members, have been at the forefront of many of the MACT's program legal and policy disputes over the past 12 years and were the subject of a decision by the DC Circuit Court of Appeals, *Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855, 862 (DC Cir. 2001). These rules, and others regulating our members, were also subject to numerous public notice and comment periods from 1996 – 2008, were extensively reviewed by the Agency in light of the *Brick MACT* court decision that plays a major role in this proposal. Consequently, CRWI has considerable expertise in MACT issues.

ACADEMIC MEMBERS (Includes faculty from:)

Clarkson University
Colorado School of Mines
Cornell University
Lamar University
Louisiana State University
Mississippi State University
New Jersey Institute of Technology
Rensselaer Polytechnic Institute
University of California – Berkeley
University of Dayton
University of Kentucky
University of Maryland
University of Utah

CRWI has concerns about following issues.

1. Based on EPA research, the Agency cannot justify setting a MACT-floor emission standard for CO at a level less than approximately 400 ppmv.
2. EPA should set a work practice standard for organic HAPS for coal-fired boilers.
3. Emission limits and MACT floor methodology.
4. CRWI supports the use of work practices for dioxin/furans and for startup and shutdown.

44121 Harry Byrd Highway, Suite 225
Ashburn, VA 20147

Phone: 703-431-7343
E-mail: mel@crwi.org
Web Page: <http://www.crwi.org>

5. EPA should modify the affirmative defense provisions so that it is a “rebuttable presumption.”
6. CRWI suggests that EPA clarify its affirmative defense provisions.
7. The PM CPMS provisions should be modified.
8. CRWI supports resetting the compliance date to 3 years after publication of the final reconsideration.
9. Sulfur dioxide (SO₂) CEMS should be allowed for demonstrating continuous compliance with HCl emission limits.

Thank you for the opportunity to comment on this proposed rule. If you have any questions, please contact me at (703-431-7343 or mel@crwi.org).

Sincerely yours,



Melvin E. Keener, Ph.D.
Executive Director

cc: CRWI members
B. Shrager – EPA

Specific Issues

1. Based on EPA research, the Agency cannot justify setting a MACT-floor emission standard for CO at a level less than approximately 400 ppmv.

In the proposed rule, EPA offers some changes to the CO standard that is being used as a surrogate for organic HAP emissions and proposes a second, alternative CO standard based on CO CEMS data. 76 Fed. Reg. at 80,611, and 80,614. As the Agency knows, based on D.C. Circuit Court of Appeals precedent, EPA may use non-HAP surrogates as long as the Agency can establish a necessary relationship between emissions of the surrogate and emissions of the underlying HAPs. EPA has justifiably used a CO standard as a proxy for organic destruction for over 20 years.

The first EPA regulation to set a carbon monoxide (CO) standard for combustion was the "Burning of Hazardous Waste in Boilers and Industrial Furnaces" (56 Fed. Reg. 7134, February 21, 1991) under the Resource Conservation and Recovery Act (RCRA). In that rule EPA set a CO standard of 100 ppmv. EPA chose that limit because their research indicated that while CO was a good surrogate for the destruction of organics, the validity of that surrogacy broke down at CO levels of approximately 400 ppmv. Based on RCRA's authority to establish standards that are protective of human health and the environment, EPA established a 100 ppmv standard as protective.

As the Agency knows, the first stage of thermal decomposition of organic compounds is to form smaller organic compounds (commonly called products of incomplete combustion or PICs). These PICs rapidly decompose to CO – a non-HAP organic not subject to regulation under the CAA MACT program. The second stage of combustion is to oxidize CO to CO₂. The CO to CO₂ step is the rate controlling step because CO is more difficult to oxidize than the other intermediate products of combustion. Given enough time under steady state conditions, all measurable amounts of the organics are destroyed and the CO and CO₂ come into equilibrium. The levels of CO at this equilibrium point depend upon the temperature and the amount of excess air in the combustion chamber. However, since conditions in a combustor are never in equilibrium because additional fuels are being added and gases are being exhausted, the Agency had to decide what levels of CO will guarantee that the organics have been destroyed and they are no longer a threat to human health and the environment – the primary regulatory question for RCRA regulation.

EPA attempted to answer this question in a series of studies to support the BIF rule. The Agency found that there was a correlation between the destruction removal efficiency of organics in the combustion process and CO above 400 ppmv but below this value, the relationship between CO and destruction of organics becomes more complicated. This makes sense since the rate limiting step is not the destruction of hydrocarbon but the oxidation of CO to CO₂. This is illustrated by data comparing benzene emissions to CO concentration (data from Graham, J.L., D.L. Hall, and B.

Dellinger, "Laboratory Investigations of Thermal Degradation of Mixtures of Hazardous Organic Compounds," *Envi. Sci. Technol.*, Vol. 20, No. 7, pp 703-710, July 1988, cited in "Guidance on PIC Controls for Hazardous Waste Incinerators," Volume 5 of the Hazardous Waste Incineration Series, EPA/530-SW-90-040, April 1990). This graph (Appendix A) shows that the below about 400 ppmv CO, the benzene concentrations are essentially flat and at a very low concentrations. Above these values, the benzene concentrations may be higher. EPA concluded from this information that CO was a conservative indicator for organics – an important technical policy decision because it meant that below a certain level of CO, one can be assured that organic destruction is adequate. Complete destruction may occur above that level but it is not guaranteed. To add an additional level of safety to this conservative estimate, the Agency chose to set the CO standard at 100 ppmv. From the data, it can be seen that the Agency could just have well selected 200 ppmv or any value up to about 400 ppmv.

In the MACT program, EPA is charged with the responsibility to develop emission standards that reflect the maximum degree of reduction in emissions of hazardous air pollutants being achieved by the best performers. According to EPA studies, therefore, all facilities emitting less than 400 ppmv are best performers. There is no reason to distinguish between them. EPA understands this concept because in the boiler and CISWI ICR, the Agency states "Agency research suggests that at CO levels below 100 ppm, CO concentration is no longer an accurate indicator of organic HAP control." (ICR No. 2286.11, OMB Control No. 2060-0616).

CRWI asserts that requiring a combustor to operate below a specified threshold will not result in any additional destruction of organics because there is little or none left to destroy. Thus, EPA is not justified in lowering the CO level to lowest observed level. As a non-HAP surrogate, CO must be judged based on the relationship it has to the regulated HAP. According to EPA research, any combustor with CO emissions below 400 ppmv, has destroyed virtually all organics and should all be considered as top performers. Therefore, setting a CO standard below approximately 400 ppmv is unnecessary and unlawful.

2. EPA should set a work practice standard for organic HAPS for coal-fired boilers.

In the "Utility MACT" final rule (77 Fed. Reg. 9,304, February 16, 2012), EPA concluded that numerical emission standards for organic HAPs were not justified and, instead, set work practice standards. This decision was made because the majority of data for measuring organic HAP emissions were below the detection limit even when long duration tests were used. 77 Fed. Reg. at 9,369. As such, the Agency concluded this allowed the use of a work practice standard under section 112(h) of the Clean Air Act.

CRWI supports that decision and suggests that the same set of facts applies to the coal-fired boilers in this proposed rule. Coal-fired industrial boilers are similar in design, construction, and operation to coal-fired boilers used to generate electricity. Coal-fired boilers under both rule produce steam as their initial product. For the electric

generation units, that steam is used to produce electricity. For industrial boilers, the steam is also used to produce electricity but can also be directly used in the production process, to heat buildings, to provide temperature control for the production processes, etc. Essentially, these two sets of coal-fired boilers are similar, just categorized differently based on their use of steam. If the Agency decided that it was inappropriate to set numerical limits for coal-fired boilers used to generate electricity, it also seems that it is inappropriate to set numerical emission standards for organic HAPs for coal-fired industrial boilers. CRWI urges EPA to set work practice standards for organic HAPs similar to what was promulgated in the "Utility MACT" final rule.

3. Emission limits and MACT floor methodology.

EPA proposes to make changes to a number of emission limits, including the Hg limits, as well as making some minor adjustments to their floor setting methodologies. See e.g., 76 Fed. Reg. at 80610 – 80614. When doing so, CRWI suggests that EPA take note of the D.C. Circuit Court of Appeals most recent MACT related decision, *Portland Cement Association v. EPA* (D.C. Cir. 2011) in which Judge Brown wrote a compelling concurrence questioning the Agency's reliance on a previous case, *Sierra Club v. EPA*, 479 F.3d 875, 883 (D.C. Cir. 2007), (also known as *Brick MACT*) for support of EPA's "lowest emission" floor-setting methodology.

In *Brick MACT* the court seemed to uphold the concept that EPA was justified in using the lowest levels emanating from a source to set the regulatory limits, regardless of how that level was achieved. However, in doing so, as Judge Brown notes, the *Brick MACT* court erroneously interpreted a prior decision (*National Lime Association v. EPA*, 233 F.3d 625, 631 – 633, D.C. Cir. 2000) (also known as *NLA II*) relating to the Portland Cement MACT.

In that case, the court held that EPA could not refuse to set standards because sources did not use air pollution control technology to control emissions. Later in the opinion, when deciding a challenge from the National Lime Association ("NLA"), the court rejected NLA's argument that particulate matter ("PM") was not a proper surrogate for setting a standard and wrote the language that prompts EPA's erroneous interpretation. The *NLA II* court noted that controlling PM actually controls hazardous air pollutant ("HAP") metals stating:

According to the NLA, this methodology requires the agency to set a floor of "no control" for HAP metals because no cement plant intentionally controls HAP metals; metal emissions are controlled only incidentally by controls placed upon PM. The EPA's response is the correct one: "cement plants actually *are* controlling HAP metals[,] intentionally or not. *Id.* at 640.

Thus, the *NLA II* court was not saying that control does not matter. Instead, the court was explaining that *as long as control is being achieved*, intent to control does not matter. Therefore, if a source is controlling one pollutant and that control also limits

another pollutant, the Agency can consider the performance data for that second pollutant as well. Thus, EPA may not use just any emissions data to select best performers. It must be emissions data for pollutants that are being controlled.

Judge Brown makes the same conclusion. In her concurrence she notes:

Sierra Club [Brick MACT] relied on our holding in *National Lime Ass'n v. EPA*, 233 F.3d 625, 640 (D.C. Cir. 2000), that the CAA does not require “that [the] achievement . . . be the product of a specific intent.” But I do not read *National Lime* to have held that the achievement need not be the product of *any* intent. Instead, context reveals that the *National Lime* Court was referring to emissions of one sort that are “controlled only incidentally by controls placed upon” another sort of emission. *Id.* The incidental control of one emission as the result of controlling another still certainly counts as an “achievement” of emission control. But the Court did not state—or even imply—that emissions levels determined by inputs alone count as an “achievement” of emission control within the meaning of the statute.

Thus, Judge Brown cast considerable doubt on the astuteness of the *Brick MACT* panel’s analysis of prior cases. Continuing on, Judge Brown declared that

Our holding in *Sierra Club* was a self-inflicted wound, and the result of a series of interpretive leaps that I simply cannot follow. I regret that we have ignored Congress’s wishes and made life more difficult—for industry and its employees, for EPA, and for ourselves.

CRWI, therefore, urges EPA to avoid perpetuating this “self-inflicted” wound, and to avoid putting too much credence in the *Brick MACT* decision.

4. CRWI supports the use of work practices for dioxin/furans and for startup and shutdown.

At 76 Fed. Reg. 80606, EPA explains that the majority of dioxin/furan data is below the detection limit. As such, the Agency made the decision to set work practice standards for dioxin/furans instead of numerical emission standards. CRWI supports that decision. Section 112(h) of the Clean Air Act allows the use of work practice standards when “the application of measurement technology...is not practicable due to technological and economic limitations.” Not being able to reliably measure a pollutant certainly qualifies as a technology limitation. In addition, it is practically impossible to properly quantify the variability as a part of setting a floor standard when the majority of the data is below the detection limit.

EPA also asks for comments on using work practices during startup and shutdown (76 Fed. Reg. at 80615). CRWI and many other commenters suggested the use of work practices in our comments on the 2010 proposed rule (75 Fed. Reg. 32006, June 4,

2010) (CRWI's comments are at EPA-HQ-OAR-2002-0058-2824). In those comments we pointed out that it is difficult to use stack testing methods to obtain emissions estimates during transient conditions. Even if data could be obtained during rapidly changing conditions (e.g., use of CEMs), it is difficult to understand what that data means or how it can be used to determine top performers. However, Congress provided for these types of conditions when they set up the work practice provisions of 112(h). Here Congress stated that EPA may set work practice standards if it is not feasible to prescribe or enforce an emissions standard. CRWI continues to believe that it is infeasible to gather data during startup and shutdowns simply because there are no EPA approved methods to make measurement during non-steady-state. As such, CRWI believes that EPA has properly used work practice standards for startup and shutdown periods.

5. EPA should modify the affirmative defense provisions so that it is a “rebuttable presumption.”

As EPA knows, malfunctions will occur. Even the best run facilities will have circumstances where events happen that are out of their control. While CRWI believes that EPA must take into account the conditions that occur during malfunctions and establish limits that consider these circumstances, CRWI also agrees that some form of enforcement discretion is needed for malfunctions. As such, we support EPA maintaining a regulatory provision for malfunctions. However, we are concerned that by allowing a facility to interpose an affirmative defense for violations caused by malfunctions implies that the facility is guilty until proven innocent and improperly shifts the burden to the facility. Therefore, CRWI suggests that EPA establish a rebuttable presumption (rather than affirmative defense) where it is presumed any violation occurring during the malfunction was not the operator's fault unless the Agency proves certain facts that are enumerated in the rules. This will allow the Agency to challenge the alleged deviation without compromising the legal rights of either party.

6. CRWI suggests that EPA clarify its affirmative defense provisions.

While we prefer EPA use a rebuttable presumption, should the Agency keep the affirmative defense concept, CRWI suggests the following modifications to the language to make it more usable. CRWI understands that most of the provisions EPA has proposed for the affirmative defense comes from earlier guidance memos. While these provisions were in guidance, the Agency did not need to be careful of the wording since they were only guidance and did not have the weight of regulation. However, if the Agency wants to codify this guidance into regulatory language, several changes are needed. For example, EPA should drop the reference to “any” activity in this paragraph. There are also several references to “All” that would make it difficult to satisfy the requirements of an affirmative defense. In addition, the language in the provision is contradictory. In paragraph (a), the phrase “preponderance of evidence” is used while later in that paragraph (iii), the language refers to “any activity” meaning that more than a preponderance of evidence is needed. This same trend occurs in paragraphs (5) –

“All possible,” (6) “All,” (7) “All of the actions,” and (8) “At all times.” While “all” would include “preponderance,” “preponderance” does not mean all of the time. CRWI suggests that the phrase “preponderance of evidence” is adequate and the references to “all” and “any” in the later paragraphs should be modified.

To many engineers, the term “root cause analysis” implies a specific formal process. For many malfunctions, the cause is immediately obvious and a formal process for determining the cause is not needed. When a malfunction occurs, the expectation is that the facility will correct the problem as quickly as possible and return to their operating window. A formal root cause analysis is typically limited to very significant events or repeat events. For example, if a thermocouple fails, the most likely cause is a bad thermocouple. The first response is to simply replace the thermocouple. However, if a second thermocouple fails within a short period of time, then something else may be causing that event to happen and a more detailed analysis may be needed. It may take several failures before the real cause is identified. Here a formal root cause analysis may be needed, but it certainly is not needed to replace the first failed thermocouple. The proposed language assumes that all malfunctions are equally significant and need an identical degree of investigation. For example, a missing data point due to a malfunction of the data acquisition system is not as significant as a power failure or a catastrophic event such as fire or explosion. CRWI believes that a formal root cause analysis should only be used when other reasonable methods fail to show what caused the malfunction or when the serious nature of an event might make such an analysis necessary. Moreover, other tools may be more appropriate (e.g., failure mode and effect, fault tree, etc.) or more powerful tools may be introduced in the future. The facility is the only one that can and should decide what tool to use to determine the cause of the malfunction.

Part of this problem may be in communications. To some companies and potentially to some local regulators, the term “root cause analysis” implies a specific formal process. There are several techniques that may be called “root cause analysis,” depending on the author and industry. If EPA intends for the facility to investigate and fix the source of the malfunction so that it is less likely to recur, CRWI supports that concept but suggests that the Agency use an alternative term that does not carry a specific meaning. However, if the Agency envisions a formal process for determining the root cause for every malfunction, no matter how simple, CRWI believes this is unnecessary and would result in excess efforts with no environmental gains.

In a recently proposed rule (77 Fed. Reg. 4522, 4538, January 30, 2012), EPA proposed dropping the immediate notification process and simply requiring a written report within 45 days of the malfunction. CRWI suggests that the Agency adopt the same change in this regulation. If the Agency keeps the immediate notification requirement, faxing is an obsolete technology. EPA should allow notification by e-mail or other electronic means. As facilities and EPA move toward electronic recordkeeping, it makes no sense to require keeping a “properly signed, contemporaneous operating logs” as a requirement for an affirmative defense. There are a number of electronic

methods for maintaining records currently available (and more will likely be available in the future). As such, we suggest modifying this provision. It should also be noted that it is impossible to eliminate the causes for certain malfunctions (e.g., lightning strikes).

Finally, CRWI notes that EPA does not allow facilities to assert an affirmative defense for the exceedance of an emission limit during malfunctions if EPA is seeking to enforce that emission limit through injunctive relief. Apparently the Agency takes that position based on a memorandum, State Implementation Plans: Policy Regarding Excessive Emissions During Malfunctions, Startup, and Shutdown at 2 (Sept. 20, 1999). (SIP SSM Memo). CRWI asserts that this policy is wrong. The type of legal action or relief should have no bearing on the availability of this defense. A malfunction “is a sudden, infrequent, not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner.” 40 CFR § 60.2. It is not affected by the type of enforcement action EPA may eventually bring. Indeed, because a malfunction is not reasonably preventable, enforcement actions, regardless of type, have no deterrent effect on them. Therefore, the type of legal action EPA uses to enforce a violation of its emission limits is simply irrelevant to whether the violation should be excused because of circumstances beyond the facilities control.

Consequently, CRWI believes that not allowing an affirmative defense in an action for injunctive relief is arbitrary and capricious. As the D.C. Circuit Court stated in *Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 433 (D.C. Cir. 1973) a case reviewing a § 111 rule, the court held that startup, shutdown, or malfunction (“SSM”) provisions are “necessary to preserve the reasonableness of the standards as a whole.” The D.C. Circuit Court of Appeals has also noted that “[a] technology-based standard discards its fundamental premise when it ignores the limits inherent in the technology.” *NRDC v. EPA*, 859 F.2d 156, 208 (D.C. Cir. 1988). Therefore, EPA should not apply a policy drafted to “ensure that SIPs provide for attainment and maintenance of the national ambient air quality standards (“NAAQS”) and protection of prevention of significant deterioration (PSD) increments” and other risk-based programs, SIP SSM Memo at 2, to the CAA § 129 technology-based program.

CRWI suggests that EPA consider making the following modifications to the regulatory language in § 63.7501 to address the concerns mentioned above and to make an affirmative defense a more useful tool (using ~~strikeout~~ to show text deleted and underline to show text added).

§ 63.7501 How can I assert an affirmative defense if I exceed an emission limitations during a malfunction?

In response to an action to enforce the emission limitations and operating limits set forth in § 63.7500 you may assert an affirmative defense to a claim for civil penalties for exceeding such standards that are caused by malfunction, as defined at § 63.2. Appropriate penalties may be assessed, however, if you fail to meet your burden of

proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) To establish the affirmative defense in any action to enforce such a limit, you must timely meet the notification requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

- (1) The excess emissions:
 - (i) Were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner, and
 - (ii) Could not have been reasonably prevented through careful planning, proper design or better operation and maintenance practices; and
 - (iii) Did not stem from any activity or event that could have been reasonably foreseen and avoided, or planned for; and
 - (iv) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- (2) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and
- (3) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; and
- (4) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
- (5) ~~All possible~~ Reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health; and
- (6) ~~All e~~ Emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and
- (7) ~~All of the a~~ Actions in response to the excess emissions were documented by ~~properly signed, contemporaneous operating logs;~~ and
- (8) ~~At all times, t~~ The facility was operated in a manner consistent with good practices for minimizing emissions; and
- (9) A written ~~root cause analysis~~ report has been prepared, the purpose of which is to determine, ~~correct, and eliminate~~ mitigate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. Facility personnel will determine the appropriate type of analysis required (may include but not limited to root cause analysis, failure mode and effect, fault tree, etc.) to identify the cause of the malfunction. The analysis report shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

(b) *Notification.* The owner or operator of the facility experiencing an exceedance of its emission limitation(s) during a malfunction shall ~~notify the Administrator by telephone or facsimile (fax) transmission as soon as possible, but no later than 2~~

~~business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 45 days of the initial occurrence of the exceedance of the standard in § 63.7500 to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. The owner or operator may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Administrator before the expiration of the 45-day period. Until a request for an extension has been approved by the Administrator, the owner or operator is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance.~~

7. The PM CPMS provisions should be modified.

EPA is proposing to remove the requirement to install PM CEMs on biomass boilers and to modify the particulate matter (PM) continuous monitoring requirements for coal-fired boilers so they can be used as parametric monitors rather than emissions compliance monitors (76 Fed. Reg. at 80,609). EPA's logic for removing the PM CEMs requirement for biomass boilers is based on the inability to calibrate these instruments. EPA logic for changing the requirements for coal-fired boilers is based on commenter's concerns over the readiness of current PM CEMs technology and the technical effort and cost for recertification. EPA's proposal places coal-fired boilers in a difficult position. On the one hand, EPA states these monitors do not have to comply with Performance Specification (PS) 11, while on the other hand, EPA's proposed rule language requires the same host of requirements in a site-specific monitoring plan as any other continuous monitoring system (see §63.7540(a)(9) and §63.7505(d)). Without an EPA-approved performance specification, how can a source possibly "certify" a monitoring system? EPA apparently recognizes that the burden of complying with PS-11 is unreasonable for industrial boilers. However, the proposed rule has created a second problem of how to certify an instrument without a performance specification.

It is also unreasonable to limit the 30-day rolling average PM CPMS output data (milliamps) to less than the operating limit established during the performance test (see Table 8, item 2c). This requirement would reduce operating flexibility of these boilers to an unacceptable level. It imposes a much tighter operating envelope than even the final rule, which only required the 30 day rolling average to remain less than the emission standard (see §63.7525(b)(3) of the March 21, 2011 final rule). At the very least, EPA should allow the operating limit to be increased by the ratio of the allowable PM emission rate to the actual PM emission rate during the performance test.

All of this seems to point out the uncertainty over the use of PM CEMs for this source category. CRWI suggests that until all this uncertainty can be worked out, EPA should remove the PM CEMs requirement for both biomass boilers and coal-fired boilers. The Agency should conduct field studies on these instruments to determine their real-world

practicability. After further evaluation of these systems, the Agency may be able to clear up these uncertainties associated with these instruments on these sources and create clear methods for certifying and operating these types of instruments.

8. CRWI supports resetting the compliance date to 3 years after publication of the final reconsideration.

CRWI supports EPA's decision to reset the compliance date to three years after the publication of the reconsideration final rule. EPA has proposed changes to standards for every subcategory. Once final, each facility will need the three years to revise their strategies for coming into compliance.

9. Sulfur dioxide (SO₂) CEMS should be allowed for demonstrating continuous compliance with HCl emission limits.

EPA is soliciting comments on petitioner's request to allow use of SO₂ CEMS for demonstration of continuous compliance with the HCl emission limits for sources that are equipped with acid gas controls (76 Fed. Reg. at 80,610).

CRWI agrees with EPA's conclusions that acid gas HAP control efficiencies would be better than SO₂ control efficiency (for a given acid gas control device) and that it should be possible to demonstrate a correlation between the two control efficiencies and then to rely on an SO₂ CEMS to demonstrate continuous compliance. EPA drew this same conclusion in the recently finalized Utility MACT and set alternative SO₂ emission limits. We also agree there is not enough information to set an alternative SO₂ limit that correlates with the HCl emission standard, such as was done in Utility MACT.

We suggest SO₂ continuous monitoring be allowed as a continuous parametric monitoring system (CPMS) and that the maximum 30 day rolling average SO₂ operating parameter limit to be set during a 3-run performance test where HCl emissions are demonstrated to comply with the final HCl emission limit. This method of continuous compliance should be allowed on any unit that utilizes an acid-gas control technology including wet scrubber, dry scrubbers, and duct sorbent injection.

If this option is incorporated into the final rule, we request that the SO₂ CEMS be allowed to select either Part 60 or Part 75 for compliance procedures as many of the existing SO₂ CEMS already use Part 75 quality assurance procedures.