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VIA E-DOCKET

U.S. Environmental Protection Agency
Air & Radiation Docket and Information Center
1200 Pennsylvania Ave. NW, Mail Code 2822T
Washington, DC 20460

**Re: EPA-HQ-OAR-2010-0873
Quality Assurance Requirements for Continuous Opacity Monitoring
Systems at Stationary Sources; Proposed Rule, 77 Fed. Reg. 8160, 8209
(February 14, 2012)**

INTRODUCTION

CIBO is a broad-based association of industrial boiler owners, architect-engineers, related equipment manufacturers, and university affiliates with members representing 20 major industrial sectors. CIBO members have facilities in every region of the country and a representative distribution of almost every type of boiler and fuel combination currently in operation. CIBO was formed in 1978 to promote the exchange of information within the industry and between industry and government relating to energy and environmental equipment, technology, operations, policies, law and regulations affecting industrial boilers. Since its formation, CIBO has been active in the development of technically sound, reasonable, cost effective energy and environmental regulations for industrial boilers. CIBO supports regulatory programs that provide industry with enough flexibility to modernize – effectively and without penalty – the nation's aging energy infrastructure, as modernization is the key to cost-effective environmental protection.

On February 14, 2012, EPA published a direct final rule and a proposed rule on Procedure 3 continuous opacity monitors (COMS) quality assurance/quality control (QA/QC). 77 Fed. Reg. 8160, 8209. The rule established QA/QC requirements for COMS at stationary sources. The effective date of the rule was set to April 16, 2012, unless adverse comments were received. On March 8, 2012, EPA extended the comment period for both the direct final rule and proposed rule to April 30, 2012. 77 Fed. Reg. 13977, 13997. EPA did not delay the effective date of the rule at that time. EPA withdrew the direct final rule on March 28, 2012 due to adverse comments received on the proposed rule. 77 Fed. Reg. 18709.

COMMENTS

I. The QA/QC requirements apply too broadly.

The rule establishes far reaching applicability without an opportunity for notice and comment by the public on its applicability to existing federally enforceable regulations. The rule states: “Procedure 3 applies to COMS used to demonstrate continuous compliance with opacity standards in *federally enforceable regulations*. (emphasis added)” 77 Fed. Reg. 8161, 8209.

It is irrational for EPA to assert the comprehensive applicability of the Procedure via the Procedure itself. Rather, applicability of Procedure 3 should be left to each federally enforceable regulation to reference. To do otherwise does not provide the public, including directly regulated sources, adequate notice and opportunity to comment, and leads to confusion.

It is important to note that it will take some amount of time for sources with existing COMS to be in compliance with Procedure 3 following the original effective date of the final rule. It will take sources several months to understand the requirements and incorporate the requirements into their compliance programs. For example, many stationary sources are subject to state implementation plans (SIPs) which are federally enforceable and may contain QA/QC requirements that differ from those outlined in Procedure 3, yet which ensure that valid data is produced by the COMs.

An example of a regulation that may be interpreted as “federally enforceable” are COMS requirements applicable to a fossil fuel boiler with a rated heat input capacity greater than 250 mmBtu/hr. Pursuant to 40 CFR 51.214(c) (which references Appendix P to Part 51) and section 2.1.1 of Appendix P, owners of such fossil fuel-fired steam generators must install COMS. Applicable regulations further specify that these COMS must comply with Performance Specification 1 (Appendix B to Part 60). Before this new Procedure 3 can be applied to COMS on these boilers, Appendix P should be revised to incorporate references to Procedure 3 and then states must revise their SIPs to incorporate the change. This process will give the regulated community the proper notice to prepare for compliance with the new Procedure.

EPA should also clarify that Procedure 3 does not apply to COMS that are not used to demonstrate continuous compliance. Such is the case with fossil fuel-fired steam generators subject to 40 CFR 60 Subparts D and Db. Although these subparts require COMS, they are not used for demonstrating compliance unless the source elects to use COMS in lieu of Method 9. EPA should clarify that this Procedure is not applicable to COMS required under subparts D and Db. Otherwise, there may be confusion as many states have delegated NSPS authority and any change in Part 60 is immediately enforceable in these states.

As EPA states in the proposed language, “Procedure 3 applies to COMS used to demonstrate compliance with opacity standards in federally enforceable regulations.” This general statement does not clarify applicability sufficiently for sources in the regulated community – particularly for small businesses that may not have the same resources as larger entities to make complicated applicability determinations including clarifying whether their requirements are federally enforceable. EPA should clarify what the scope of “federally enforceable regulations” includes (e.g. specific NSPS or NESHAPs with COMs requirements, opacity requirements with COMs

compliance procedures in the Federal portion of a Title V permit, etc.) Although EPA received comments on this in its 2003 proposal related to the applicability, EPA has failed to address this significant concern in responses to comments or in the preamble. Clarity and prior notice are essential if EPA expects compliance by affected sources.

In order to properly comply with these new requirements, sources need to identify the impacted units, develop compliance plans, identify and assign resources, and implement procedures. There may also be a need to complete employee training and certify or purchase neutral density filters. EPA should set the compliance date to no less than one year from promulgation of the final rule to ensure that sources have adequate opportunity to establish the mechanisms to achieve compliance with the requirements of Procedure 3. Where the underlying “federally enforceable regulation” is contained in a state implementation plan, EPA may have to extend the compliance date beyond one year to ensure that the administrative rulemaking requirements of a state or local agency can be completed.

This problem is exacerbated by the fact that some states may have opacity QA/QC requirements that differ from those outlined in the proposed Procedure 3. Furthermore, in cases in which a state QA/QC procedure differs from that of the EPA, it is unclear as to whether a source will have to comply with the state procedure, the EPA procedure, or both and the timing of such a change in compliance requirements.

II. Procedure 3 should not trigger certification or recertification of a COMs under the 2000 revisions to Performance Specification 1.

EPA promulgated substantial revisions to performance specification 1 (PS-1) in 2000. The revisions to PS-1 clarify applicability to COMs installed after February 6, 2001. If a “certified” continuous opacity monitoring systems (COMS) that was installed and certified prior to February 6, 2001, must now meet the requirements of PS-1, owners have not been provided adequate notice of this change. Sources should be allowed to continue to utilize COMs installed prior to February 6, 2001, that are in good working order and not repaired in such a way as to trigger a recertification (as outlined in Table 17-1 of the proposed Procedure 3). This would be consistent with the Preamble language of the 2000 PS-1 revisions. Requiring replacement of a well functioning COMs simply to meet Procedure 3 is unreasonable and imposes an unnecessary and unjustifiable burden on sources.

EPA should retain the requirements related to neutral density filters under the prior version of PS-1 (pre-2000) for COMs not subject to the revised version of PS-1, which did not require recertification of those filters every six months.

III. Quarterly audits are unnecessarily burdensome, provide no additional environmental protection and should be replaced with annual audits.

Section 2.0 requires quarterly performance audits with a provision to request approval by the Administrator for an annual frequency. A quarterly frequency is not necessary nor has EPA justified quarterly as the default frequency for the audit. Conducting the neutral density filter audit requires a typical facility to assign two to three people for a half day per boiler. Many units have the opacity monitor located on the stack at a high elevation. Generally in those cases,

personnel work on a buddy system: one climbs the stack and the other serves as stack watch for safety reasons. Another person is located in the control room where the data acquisition equipment is located in order to record the results of the filter audit.

If this function is outsourced, the typical cost for an audit is generally approximately \$5,000 for the first COMS, and \$1,000 per each additional COMS. At a large facility, on larger solid or liquid fuel combustion units, it is not unusual to have a COMS installation, which may be required by NSPS, State permitting requirements, or used as a parametric monitor due to a permitting process. For a typical large facility, quarterly neutral density filter audits could impose a \$10,000 quarterly/\$40,000 annual burden, and an even greater burden at larger or more complicated facilities.

EPA offers no justification for imposing these additional costs on sources. The frequent audits do not ensure greater environmental protection, nor do they provide additional compliance data that would be helpful to sources to detect potential compliance concerns. In fact, as alluded to below regarding computation of downtime, the more frequent the audit, the greater the amount of time that COMS are not in operation, because they cannot be operating during an audit.

Rather, Procedure 3 should require annual neutral density filter audits and only require more frequent audits for sources that consistently fail the annual audits. In any event, audits should not be more frequent than semi-annual for all of the reasons discussed above. In addition, the procedure should clarify that the state agency is authorized to approve requests for annual or less frequent audits where appropriate.

IV. The periods of time to conduct audits is not included in the calculation of COMS downtime for enforcement purposes under the proposed rule.

CIBO supports this approach, because COMS downtime reflects non-mandatory downtime. It would not be rational for EPA to mandate downtime, and then count that time against a source for enforcement purposes. CIBO supports not including audits in the calculation of COMS downtime.

V. The limited value of the annual zero alignment is not justified by the substantial efforts necessary to conduct it.

The rule requires that during the zero alignment process, “[t]here must be no adjustments to the monitor other than the establishment of the proper monitor path length and correct optical alignment of the COMS components.” 77 Fed. Reg. 8,164. However, standard practice in this process would be to make adjustments to ensure proper alignment of the COMS.

The rule also requires sources to perform the primary zero alignment annually. 77 Fed. Reg. 8,164. However, the extensive work necessary for the annual alignment – whether that be by, for example, removing the COMS from its installation or ensuring the COMS is free of particulate matter – is not justified by its limited value added to the COMS.

The Direct Final Rule states that “alternatives that verify that the zero optical adjustment is +/- 3% opacity are also allowed.” *Id.* The 3% opacity standard is too stringent. The challenge with

this is that the purpose of this is to ensure that zero is zero. If you think about the comparison to Method 9, at 3% opacity, you would likely record that as a 5% opacity (since Method 9 is 5% increments). Thus, error greater than 3% on the zero introduces a positive bias on opacity readings.

Zero alignment typically requires two people two hours to complete per stack. The more often this procedure is undertaken, it introduces personnel error and risk of damage to the monitor. As CIBO noted in its comments to the proposed rule, bringing the monitor off the stack, presents more of an opportunity for the COM to be damaged, in transition from the monitor location, to the place where a clear-path can be accomplished. As one specific example, one CIBO member had successfully passed its off-stack zero alignment test, when one of its opacity monitors was inadvertently bumped during its reinstallation, which resulted in two additional days of downtime.

If the filter audits are all passed with < 3% error, an annual off-stack zero alignment check is not necessary to ensure compliance and accuracy. A possible approach would be for EPA to propose an option to do either an annual off stack zero alignment OR the annual zero alignment without taking the opacity monitor off the stack when the boiler (and its exhaust fan) are not running. Under this approach, the off-stack zero alignment check would not be required unless the routine audits indicated excessive drift.

Rather than off-stack, EPA could require this when the boiler is down. This would accomplish EPA's goal of ensuring accuracy without compelling sources to risk damage to equipment.

VI. CIBO Supports the Valid Data Capture Requirement of 95 Percent.

As noted in comments submitted in connection with the 2003 proposed rule, CIBO strongly supports the valid data capture requirement of 95 percent.

VII. There appears to be a conflict on the criterion for excessive zero alignment.

Notwithstanding CIBO's earlier comment related to the requirement to conduct an annual clear stack zero alignment, Section 10.3(1) allows an adjustment of the clear path zero as long as the 2 hour readings do not vary more than 3 percent opacity whereas section 10.4(2) defines the COMS to be out of control if the zero alignment exceeds 2 percent opacity. CIBO believes that the clear stack zero alignment should be acceptable if the readings do not vary more than 3 percent opacity.

VIII. The criterion for excessive audit inaccuracy is not clear.

Section 10.4(3)(i) defines a COMS to be out-of-control whenever the optical alignment misalignment error exceeds 3 percent opacity. It is unclear how this error is determined. Optical alignment is determined via an alignment device on the monitor. Is it meant to take an opacity reading before and after checking the alignment and record the difference as the optical alignment misalignment error?

IX. Additional Concerns

- Section 9.2 – Consequences of failing two consecutive QC audits annually or quarterly. If so, you must either revise your QC procedures or repair or replace the COMS to correct deficiencies.
This requirement is not reasonable because it may not solve an underlying problem. Normally, if a quarterly or annual audit has failed, it would already require immediate corrective action. The next QC audit failure could be caused by something altogether unrelated. That makes this requirement arbitrary. In the case where consecutive QC failures are caused by the same issue, it might be conceivable to apply this approach, but it is not rational to mandate these specific corrective actions, as neither may resolve the specific problem at the site. Owners and operators should have the discretion to determine what is most reasonable concerning corrective actions, especially when each circumstance will vary greatly, and failing an audit provides strong incentive to make all appropriate changes.
- Section 10.1 (3) – “COMS data recorded during periods in which the fault status indicators are illuminated are to be considered invalid.”
This presumes too much and EPA should delete this from the rule. A fault status indicator does not necessarily mean the data is invalid. A few examples of this would be: the lens is cleaned on the COMS unit and the COMS fault indicator light illuminates due to excessive drift, or the fault indicator illuminates due to a purge switch failure but the blower is still operating. These examples indicate situations where the COMS data would not necessarily be invalid. If the COMS is in “failure” mode, then we agree that the data should always be invalidated.
- Section 10.2 (2) – Three point calibration error test using three neutral density filters.
The rule states that “all monitor responses must be independently recorded from the COMS permanent data recorder.” This statement is unclear. Does this mean that the responses must be recorded directly from the DAS or recorded directly from the COMS unit itself?
- Section 10.2 (3) – Must check the optical alignment when the stack temperature is +/- 50 percent of the typical operating temperature in degrees F.
This is not always feasible. EPA must allow for alternatives or provisions for this if the requirement cannot be met all of the time. An example would be a boiler that doesn’t run frequently and is not kept in hot standby mode. For those situations, how soon after restarting would the optical alignment need to be completed? Would data be invalid from startup until the optical alignment was completed or would there be a grace period? These and similar circumstances must be provided for in the rule.
- Section 10.9 – QA/QC reporting requirements.
The example Data Assessment Report (DAR) provided in Procedure 1 of Appendix F does not appear to include all of the audit results specified in the newly proposed section 10.0. Should the example DAR format in Appendix F be updated to reflect this?

If you have any questions concerning our comments or require clarification, please contact me at 540-349-9043. Thank you for your consideration.

Sincerely yours,

/s/ Robert D. Bessette

Robert D. Bessette
President