Coalition for Responsible Waste Incineration

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August 5, 2009

Air and Radiation Docket and Information Center
U. S. Environmental Protection Agency
Mailcode: 2822T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Attn: Docket ID No. EPA-HQ-OAR-2008-0531

The Coalition for Responsible Waste Incineration (CRWI) appreciates the opportunity to submit comments on *Restructuring of the Stationary Source Audit Program* (74 Fed. Reg. 28451, June 16, 2009). CRWI is a trade association comprised of 27 members with interests in waste combustion. CRWI members operate incinerators, liquid fuel-fired boilers, solid fuel-fired boilers, and hydrochloric acid production furnaces that burn hazardous waste (hazardous waste combustors) and are regulated under a number of MACT standards. CRWI members also provide technical expertise and services to facilities that own and operate various types of combustion devices. We appreciate the effort EPA has put into this proposed rule. We look forward to working with the Agency to develop regulations that are consistent with the requirements of the Clean Air Act and good engineering practices.

CRWI members are concerned that about a number of issues in this proposed rule. Our comments and suggested modifications are as follows.

CRWI does not believe this program is needed. The reasons for this belief are as follows.

A. Program does not meet the stated purpose

The stated purpose within the text of the proposed rule is *"....PAs* [performance audits] *consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias."* As stated, this program is presumably intended as an audit of emissions sampling and analysis that would include the sampling technique, sample handling, sample preparation, and sample analysis accounting for the measurement biases relative to all steps

of the process. The program as delineated in the proposed rule provides no such information relative to all these test data biases.

There is a program currently administered by EPA that this proposed rule is seemingly intended to supplant. The existing program provides audit samples for metals, chlorine/chloride, dioxin/furans, and volatile organic compounds. Metals audits consist of filters and vials of an acid liquid media spiked with metals intended as surrogates for the sampling train filter and liquid fractions. Chlorine/chloride audits consist of vials of acidic and basic liquid media spiked with chloride intended as surrogates for the sampling train liquid fractions. Dioxin/furan audits consist of vials of resin media spiked with dioxins/furans intended as surrogates for the sampling train absorbent resin media. These samples are submitted along with the other field samples to the laboratory for analysis. None of these samples provide any measure of the sampling and handling technique biases, nor do they provide any indication of matrix specific impacts resulting from the emissions source itself. These samples are purely blind audits of the laboratory's ability to analyze a blind sample.

Additionally, the metals, chlorine/chloride, dioxin/furan audit samples only minimally mimic the field samples recovered from sampling trains. While the samples may be analyzed similarly, because the media fraction configurations do not match those of the actual field samples from recovered sampling trains, they are not necessarily prepared following the exact same steps or techniques as the actual field samples. Therefore, even at the laboratory level, these audit samples can provide only limited meaningful information relative to biases that may exist with the normal sample preparation, handling, and analysis processes within the laboratory.

The volatile organic sample audits of the SW-846 Method 0030 and Method 0031 sampling methods do go further than the other current suite of EPA-provided audit samples. The audit sample for these sampling methods consists of a compressed gas cylinder that is sampled in the field by the stack sampling company using the same equipment and the same type of resin media used for actual emissions sampling. The resin media are then analyzed by the laboratory using the exact same handling and preparation techniques as other actual stack gas field samples for the noted sampling methods. The field samples for this particular audit do include all the biases associated with the sampling technique, field handling, shipping, laboratory handling and preparation, and the laboratory analysis. No similar type audits exist for metals, chlorine/chloride, and dioxin/furan sampling and analysis. Until such audits are developed, the stated purpose of this rule can not and will not be met via the procedures delineated in the proposed rule.

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B. EPA has not demonstrated the need for an additional external quality assurance program of this magnitude.

Laboratory facilities already have a governing body that polices the standard analytical testing quality assurance and their policies. The National Environmental Laboratory Accreditation Council (NELAC) performs onsite facility audits for participating laboratories. This nationally recognized organization examines procedures, training records, proficiency test records, internal auditing records, external auditing records, and all instrument maintenance records. Laboratories are required to procure annual proficiency test (PT) samples in duplicate and provide the testing results to NELAC for evaluation. These analytical tests are blind audits for accuracy, and are required for each analytical procedure that is performed, assuming a PT is available. Every aspect of the laboratory's operation is open for periodic inspection, and certifications are provided after each detailed evaluation from NELAC. Regarding the issue of samples being submitted to the laboratory to evaluate a particular analyst, on a specific instrument, and with a specific project, the NELAC process is set up to address these concerns. Analysts are trained on specific methods following standard operating procedures controlled by the laboratory QA departments. Samples submitted that require that method are conducted by proficient analyst with records that display their training. All other EPA compliance programs deem this to be a sufficient process for tracing competency and Quality Assurance.

Laboratory accreditations are made available to clients and regulatory agencies as proof that this nationally recognized auditing group has recently performed the evaluation. The scores of the proficiency testing samples as blind audits are included as part of the performance proof to all who desire to check on an individual laboratory prior to using their services.

Thus, there is already a program in place to ensure the quality of the data from accredited laboratories. Since annual or semiannual laboratory auditing has been sufficient for all other types of EPA compliance testing, more frequent auditing is not needed and is inconsistent with other programs within the Agency. If the EPA has identified a pattern or history of poor performance with respect to results of these audits, no such evidence has been published. Furthermore, since the audit samples are a measure of the laboratory's performance and do not reflect the performance of the sample collection, the requirement to submit an audit sample with each field test is excessive and unwarranted. A better approach may be to require the regulated facility to use an accredited laboratory that has successfully analyzed proficiency samples in accordance with some periodic requirement. This would be similar to the EPA's DMR-QA program (see below). In addition, the current certification process has been accepted by the Department of Energy, the Department of Defense, the

Army Corp of Engineers, etc. We see no reason to add complication to an already complicated process for no gain in data quality.

EPA has an analogous type of proficiency testing for the water program. Permittees under the NPDES program are required to participate in the annual Discharge Monitoring Report – Quality Assurance (DMR-QA) study program (http://www.epa.gov/compliance/monitoring/programs/cwa/dmr/). This program evaluates the analytical and reporting ability of the laboratories that routinely report inorganic chemistry and whole effluent toxicity self-monitoring as required by their permit. For all analytes on the DMR-QA analyte list that are listed in a facility's permit, that facility must instruct their testing laboratory to obtain a proficiency test sample from the American Association for Laboratory Accreditation (A2LA). The laboratory then analyzes those samples and reports the results to A2LA who reports them as pass/fail. Repeated laboratory failures can trigger enforcement action.

CRWI believes the processes already in place to assure the quality control from sample analysis are more than adequate. An additional requirement to purchase audit samples and have the laboratory analyze these samples does not provide any check of the emissions sampling process. Such audit samples only duplicates the existing NELAC process for accrediting laboratories. The audit sample analyses increase testing cost with no discernable improvements in data quality. As such, we suggest there simply is no need to promulgate this rule.

C. Costs

EPA estimates the total cost to implement these new requirements will be $100,000 to $150,000 per year. We believe this estimate to be low. HWC MACT sources are required to conduct a compliance test every 5 years and a dioxin/furan test every 2.5 years. The compliance test will include Methods 5, 23/23A, and 26/26A (and other methods not covered by this proposed rule). The dioxin/furan test requires using Method 23/23A. To meet this requirement, CRWI estimated the cost for just this source category to be $154,504 per year. This estimate is based on the following cost data. Audit samples from ERA for Method 5 and 26/26A cost $125 and $135 per sample, respectively (http://www.eraqc.com/pages/public/PDFs/Misc/AE%20Descriptions.pdf). One of our members recently purchased an audit sample for Method 23/23A for $500. The analytical costs for Method 5 is approximately $100, for Method 23/23A is $1000, and for Method 26/26A is $200. For a five year period, each HWC source will be required to run one compliance test and one confirmatory test. For the compliance test the added cost would be $760 for the samples and an additional $1300 for analysis for a total additional cost of $2060. In addition, each facility is required to run a dioxin/furan confirmatory test every 2.5 years. The additional cost for this test

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would be $1500. Thus, in a five year period, the cost for each HWC source would be $3560. Dividing by five gives $712 cost per year. According to EPA's latest estimates, there are 217 HWC sources. If each were required to provide audit samples for Methods 5, 23/23A, and 26/26A, the annual additional cost for this category alone would be $154,504. This value is greater than what EPA estimated the cost to be for all categories. CRWI suggests EPA needs to revise their estimate and give serious thought to the overall cost of the proposed program. There are better and more cost effective ways to conduct laboratory certifications.

Thus, CRWI believes that there are programs already in place that certify laboratories, the program will not accomplish what its stated purpose is, and the costs are significantly underestimated. As such, CRWI believes that the proposed program should not be finalized. However, if the Agency chooses to go forward with this rulemaking, we suggest the following modifications should be made to the proposed rule.

A. The program integrity would be easily compromised as proposed.

CRWI is concerned there may be a fundamental flaw in the proposed plan that may have an impact on cost and/or program administration. Current PT providers (what will be AASP) go to great length to ensure true values are not known to the laboratory. PT programs are typically administered to cover discreet periods of time with a single set of samples issued to a laboratory for analysis and reporting. The participating laboratories report the results back to the PT providers where performance is evaluated. If audit samples are to be submitted by a facility with each compliance test or test event, it is highly likely that a laboratory will receive the same audit sample from the same AASP more than once, especially during periods when many permitted facilities are conducting compliance testing (HWC test every 2.5 years, others test annually). This could compromise the program's integrity, especially if results are made available in a timely manner to the Permittee (as the Permittee would want). If the AASPs must prepare and provide a different audit sample for every compliance test, this will certainly drive the cost of the audit samples up.

B. Program administration and AASP certified providers should be part of a continuously maintained web site.

The rule needs to include a requirement on the part of EPA to maintain an online data base of the current AASP-certified providers. The data base serves to communicate which providers are current relative to certification status and the types of samples provided. The website location of the database needs to be included in the text of the rule.

C. Audit samples should be shipped directly to the laboratory

If audit samples are required, we suggest that a more efficient method would be for the facility to simply order the required audit samples and have the provider ship them directly to the laboratory. Since the program as proposed does not incorporate the sampling process, only the analytical process, having the audit sample on site does not add anything to the process except cost. There is no reason to have audit samples shipped to the site and then have the testing company ship them to the laboratory for analysis. Cutting out an unnecessary step saves time, money, and reduces possible lost or damaged samples.

D. Test plans should indicate how the facility intends to comply with this requirement.

If audit samples are ultimately required for each test, CRWI would suggest that each test plan should clearly indicate how the facility intends to comply with this requirement during the test event. There would be no need to specify which AASP will provide the audits. Conditional language in the approved plan could protect a facility from unexpected unavailability of an audit sample. For example: Audit samples will be provided for the following test methods [list of methods] provided such audits are available from an accredited provider. In the event audit samples are not available for one or more test methods from an accredited provider, the Permittee will notify the Administrator within 60 days of testing that a method audit sample is not available for one or more methods from an accredited provider and no audit sample will be provided for the subject method in accordance with [insert regulatory citation].

E. Blind audits may cause transportation problems.

Transporting a blind audit sample to a location may cause transportation complications. In many cases, transportation regulations require the identification of the chemicals present along with concentrations and hazards. Thus, the AASP should be required to identify the chemicals present and indicate in a general fashion the approximate concentration of the various chemicals that are present in the blind audit sample.

F. Flexibility should be added for audit samples being analyzed in the field.

The proposed changes to the General Provisions (60.8, 61.13, and 63.7) contain the following for field testing: If the method being audited is a method that allows the samples to be analyzed in the field and tester plans to analyze the samples in the

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field, the tester may analyze the audit samples prior to collecting the emission samples provided a representative of the compliance authority is present at the testing site. The rule should allow the owner/operator to obtain a waiver from the requirement to have the compliance authority present at the testing site on a case-by-case basis. It may not be practical for a representative from the compliance authority to be on-site for every one of these audit analyses.

G. EPA should require the use of audit samples on a case-by-case basis.

Companies often conduct several compliance tests per year for a variety of EPA and State regulatory programs. In some cases, similar sources with similar pollutants are being tested, and in other cases, some tests must be repeated for a variety of reasons (e.g. not being able to operate at true maximum processing rates during the testing). It makes more sense for the company and the compliance authority to discuss the need for audit samples on a case-by-case basis for each of these individual tests as opposed to mandating the use of an audit sample(s) for each individual test. The inclusion of audit samples should be discussed as part of the test plan that is submitted by the facility and reviewed by the compliance authority (see suggested language at the end of this section of comments).

H. Failure of an audit sample should not constitute non-compliance.

The proposed language suggests that a failure of an audit sample can be used as evidence for non-compliance. CRWI believes that EPA needs to remove this part of the regulatory language. Audit samples are generally not representative of actual field samples and a "failure" could occur for a variety of reasons that are not indicative of the laboratory's performance as it relates to the accurate and precise analysis of the field samples. As such, failure of an audit sample should not trigger a non-compliance finding. Instead, the audit sample should be used as a tool to assess the useability of the results for compliance purposes and in instances where poor audit sample performance is observed this could trigger a corrective action investigation and/or a retest.

If the laboratory were adequately certified, and the requirement was to only use a NELAC certified laboratory, then both the public and the permittee can have the assurance that the laboratory chosen would meet the QA/QC requirements and the data could then be used appropriately. Knowing before testing that the laboratory meets QA/QC requirements allows proper testing, while conserving scarce resources for both the agency and the permittee.

CRWI believes that there is something fundamentally unfair about finding a facility in violation based on an analysis of an audit sample that was not collected form the

source and, therefore, cannot be representative of the pollutants emitted by that source. Thus, CRWI suggests that this part of the regulatory language be modified (see suggested language at the end of this section of comments).

I. Accredited laboratories may not use the same analyst for all samples from a test.

CRWI is also concerned about the proposed requirement that the audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system as the compliance samples. This is not how accredited laboratories operate. The laboratory will have a number of different analysts using the same type of equipment. For example, there may be several gas chromatograph/mass spectrometry instruments in a particular lab. All of these instruments are calibrated and certified. For all practical purposes, it does not matter which of these instruments is used to analyze an individual sample. All should give the same answer. When the samples from a test come in, they may be divided among a number of analysts using different analytical systems. This proposed requirement would modify current procedures and increase costs without adding to the quality of the data. We suggest this requirement be removed from the regulatory language (see suggested regulatory language at the end of this section of comments).

Thus, we believe that EPA should modify the regulatory language to address the aforementioned issues (particularly flexibility with respect to audit samples, failure of audit samples and non-compliance issues, and same analyst issues) as follows

Appendix M To Part 51 – Recommended Test Methods for State Implementation Plans

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4.0 *Quality Assurance Procedures.* The compliance authority may require a test method performance audit (PA) during the performance test. If the compliance authority determines that a test method PA is necessary, the following requirements apply. The performance test shall include an external QA program which shall include, at a minimum, a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. ~~The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system as the compliance samples.~~ Reanalysis, further audits, or retests may be ~~Retests are~~ required when there is a failure to produce acceptable results for an audit sample. However, if the audit results, when taken into consideration with the test results in relation to the applicable standard, can reasonably be determined not to ~~do not~~ affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or

retests and accept the results of the compliance test. The compliance authority may use an audit sample failure as evidence of a problem with the QA/QC element of the testing program, but shall not use an audit sample failure as evidence when determining the compliance or noncompliance status of the affected facility ~~also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility~~. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample...

§ 60.8 Performance tests.
* * * * *

(g) The compliance authority may require a test method performance audit (PA) during the performance test. If the compliance authority determines that a test method PA is necessary, the following requirements apply. The performance test shall include an external QA program which shall include, at a minimum, a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. ~~The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system as the compliance samples.~~ Reanalysis, further audits, or retests may be ~~Retests are~~ required when there is a failure to produce acceptable results for an audit sample. However, if the audit results, when taken into consideration with the test results in relation to the applicable standard, can reasonably be determined not to ~~do not~~ affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or retests and accept the results of the compliance test. The compliance authority may use an audit sample failure as evidence of a problem with the QA/QC element of the testing program, but shall not use an audit sample failure as evidence when determining the compliance or noncompliance status of the affected facility ~~also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility~~. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample...

§ 61.13 Emission tests and waiver of emission tests.
* * * * *

(e) * * *

(1) The compliance authority may require a test method performance audit (PA) during the performance test. If the compliance authority determines that a test method PA is necessary, the following requirements apply. The emissions test shall include an external QA program which shall include, at a minimum, a test method performance audit (PA) during the emissions test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the emissions test in order to provide a measure of test data bias. ~~The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system as the compliance samples.~~ Reanalysis, further audits, or retests may be ~~Retests are~~ required when there is a failure to produce acceptable results for an audit sample. However, if the audit results, when taken into consideration with the test results in relation to the applicable standard, can reasonably be determined not to ~~do not~~ affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or retests and accept the results of the compliance test. The compliance authority may use an audit sample failure as evidence of a problem with the QA/QC element of the testing program, but shall not use an audit sample failure as evidence when determining the compliance or noncompliance status of the affected facility ~~also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility~~. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample...

§ 63.7 Performance testing requirements.
* * * * *
(c) * * *
(2) * * *
(iii) The compliance authority may require a test method performance audit (PA) during the performance test. If the compliance authority determines that a test method PA is necessary, the following requirements apply. The external QA program shall include, at a minimum, a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. ~~The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system as the compliance samples.~~ Reanalysis, further audits, or retests may be ~~Retests are~~ required when there is a failure to produce acceptable results for an audit sample. However, if the audit results, when taken into consideration with the test results in relation to the applicable standard, can reasonably be determined not to ~~do not~~ affect the compliance or noncompliance status of the affected facility,

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Thank you for the opportunity to comment on this proposed rule. If you have any questions, please contact me at (202-452-1241 or mel@crwi.org).

Sincerely yours,

Melvin E. Keener, Ph.D.
Executive Director

cc: CRWI members
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