



COMMONWEALTH of VIRGINIA

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MEMORANDUM

TO: Regional Directors; Director, Air Compliance; Director, Air Permits; Director, Air Data Analysis and Planning; Director, Air Quality Assessments; Director, Enforcement; Air Compliance Managers, Air Enforcement Manager; Air Permit Managers;

CC: Jeffrey Steers, Deputy Director of Central Office Operations

FROM: Michael G. Dowd, Director, Air Division *MGD*

SUBJECT: ACG-002: Guidance for Implementing the EPA Stationary Source Audit Sampling Program (SSASP)

DATE: February 24, 2015

Purpose:

The purpose of this guidance is to promote consistency regarding the evaluation of emissions data generated by or for stationary sources to demonstrate compliance with air emissions standards and monitoring requirements. The goal is to provide DEQ air compliance staff with information, references, and tools regarding the implementation of the EPA Stationary Source Audit Sampling Program (SSASP).

Questions or comments concerning this guidance should be directed to the Office of Air Compliance Coordination.

Applicability:

Audit sampling is specifically required per 40 CFR [§60.8\(g\)](#), [§61.13\(e\)\(1\)](#), [§63.7\(c\)\(2\)\(iii\)](#), and [Part 51, Appendix M, §4.0](#), effective September 13, 2010.

Under the final rules, the requirement to analyze an audit sample during a compliance test applies to all test methods for which a commercially available audit sample is available from a certified audit sample provider. However, audit samples are not required for the following test methods: 3A, 3C, 6C, 7E, 9, 10, 18, 19, 20, 22, 25A, 303, 318, 320, and 321.

The restructuring of the audit program also revises test methods 5I, 6, 6A-C, 7, 7A-D, 8, 15A, 16A, 18, 23, 25, 25C, 25D, 26, 26A, 104, 106, 108, 108A-C, 204A-F, 306, 306A, and 308 to move any language pertaining to audit sample requirements to the General Provisions of Parts 51, 60, 61, and 63.

Background:

EPA implemented the audit sampling program as a measure of a laboratory's influence on data generated during laboratory analysis. Different than laboratory accreditation, which, through an application process, indicates whether a laboratory has minimum requirements to perform specific methods, the audit samples are analyzed at the same time, on the same equipment, by the same analysts, to determine the level of bias the laboratory has on sample concentrations with known values.

EPA worked with The NELAC Institute (TNI) to develop the current program and accreditation for audit sample providers. Details regarding the SSASP and TNI can be found at the following links.

- <http://www.ss-awma.org/documents/2013/annual/presentations/13%20-%20SSAS%20Presentation%20John%20Sutton.pdf>
- <http://www.epa.gov/ttn/emc/SSAPFinal.pdf>
- <http://nelac-institute.org/aboutus.php>

TNI assembled general requirements for Audit Sample Providers, for Accreditors of Audit Sample Providers, and for Participants in the SSASP can be found in the following three modules:

- Module 1 - <http://www.epa.gov/ttn/emc/provider.pdf>
- Module 2 - <http://www.epa.gov/ttn/emc/accreditoraudit.pdf>
- Module 3 - <http://www.epa.gov/ttn/emc/participants.pdf>

The third module describes how the SSASP impacts DEQ's role and was used to develop the following procedure.

How To Evaluate An Audit Sample:

1. Upon receipt of the test protocol, determine if an audit sample is required.
 - Check audit sample availability at:
<http://nelac-institute.org/content/SSAS/ssas-avail.php>. If a sample is not published as available at least 60 days prior to the performance test, an audit sample is not required. If a sample is listed as “available” but is not “on-hand”, the Facility must ensure the Provider has ample time to prepare the audit sample prior to the scheduled test date.
 - The following test methods do not need an audit sample:
 - 3A; 3C; 6C; 7E; 9; 10; 18; 19; 20; 22; 25A; 303; 318; 320; 321
 - Audit sample availability is constantly changing; therefore, the availability must be checked for each stack test (i.e., the inspector should not assume that if it was not available for a previous test, it won't be available for a current test).
 - If multiple sources at a single facility are tested during a compliance test event, only one audit sample is required for each test method.
 - Pursuant to 40 CFR 60.8(g)(1) and 40 CFR 63.7(c)(2)(iii)(A), a facility may request a waiver from the audit requirement due to certain aspects of the test (e.g., the “commercially available” concentration is significantly above the known or expected concentration in the gas stream). In such instances, waivers are granted on a case-by-case basis. Regional staff is strongly encouraged to contact OACC for assistance with audit sampling waiver requests.
2. If an audit sample is not required, proceed with the standard protocol review procedure.
3. If an audit sample is required, communication between the Facility, Provider, and DEQ may occur prior to the receipt of the protocol to ensure the correct concentration is obtained (audit samples may take 4-6 weeks to be shipped from

- The information referenced Module 3, Section 4.1.1 must be included in the protocol. Specifically, Module 3, Section 4.1.1, states the Facility shall inform the Regulatory Agency (i.e., DEQ) of their selected accredited Provider. The Facility shall submit to the DEQ sufficient documentation to determine the type of each audit sample and to calculate each audit sample concentration range needed. Such documentation shall include, but is not limited to, the following information:
 - a) Test methods
 - b) Analytes
 - c) Matrix or collection media, as appropriate
 - d) Emission limits
 - e) Estimated (or permitted, as applicable) stack flow rates
 - f) In-stack concentration estimates
 - g) Proposed or estimated stack gas sample volume
- 4. Use the calculator tool at: <http://nelac-institute.org/ssas/calctool.php> to verify the submitted audit sample concentration is within the proper range. If requested by the DEQ and/or the Facility, ranges that are not listed in the SSAS Table may be included in an audit sample if the purpose and technical justification are documented, and if, where appropriate, the DEQ and/or Facility are notified in advance.
- 5. Approve/reject the submitted concentration based upon the results of step #4.
 - Per Module 1, Section 8.1, the Provider shall receive an audit sample order from a Facility. The Provider shall contact the DEQ to request any specific requirements (e.g., changes to the audit sample concentration and/or shipment address) prior to shipment of the audit sample. The Provider may ship the audit sample if a response from the DEQ is not received within fifteen (15) calendar days of such request.
 - The “blind” audit sample(s) will be shipped directly from the Provider to the Facility, who will then forward the sample(s) to the Source Tester. The Source Tester must have them available at the test site during testing, and add them to the batch of field samples sent for analysis, unless otherwise authorized by the DEQ. The Source Tester shall deliver the reference method test samples and the audit samples to the Laboratory at the same time.

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6. A valid VELAP certification for the lab is also required. Associated VELAP information must be included in the test protocol and final test report.
7. The audit sample results will be provided to DEQ from the accredited Laboratory and/or the Provider. The results must also be included with the final test report. Verify that the results from the Laboratory; Provider; and Facility coincide with each other (if applicable).
8. Based on the results of the audit sample¹:
 - Pass: Proceed with the review of the final test report.
 - Fail: Retests are required due to a failure to produce acceptable results for the audit sample. However, if the audit results do not affect the compliance status of the affected facility (after the bias correction factor is applied), DEQ may waive the re-analysis requirement, further audits, or retests and accept the results of the compliance test.
9. The SSASP requirements are to be addressed in DEQ generated reports as follows:
 - Protocol Review Report: Document information regarding the applicability of the audit sampling program, the availability of the samples, and if the sample concentrations are within the proper range.
 - Stack Test Observation Report: Document information regarding the audit samples on-hand for the test, the manner in which the samples were handled, and the laboratory the samples will be sent to for analysis.
 - Final Stack Test Review Report: Document if the audit sample results met the acceptance criteria, the bias identified, and, if applicable, the bias corrected emission results.

1. See determination made by the Provider using the criteria at:
http://nelac-institute.org/docs/comm/ptair/table/SSAS%20Table%20Rev.%204_Effective%2010-8-2013.pdf