2009

STATIONARY SOURCE AUDIT SAMPLE PROGRAM

[VOLUME 1, MODULE 3]

GENERAL REQUIREMENTS FOR PARTICIPATION IN THE TNI STATIONARY SOURCE AUDIT SAMPLE PROGRAM

TNI Standard

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PREFACE

This Standard is the result of many hours of effort by volunteers on The NELAC Institute (TNI) Stationary Source Audit Sample Expert Committee. The TNI Board of Directors wishes to thank these committee members for their efforts in preparing this Standard as well as those TNI members who offered comments during the drafting process.

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[VOLUME 1, MODULE 3]

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1.0 INTRODUCTION, SCOPE, AND APPLICABILITY

1.1 Introduction

This Standard (Volume 1, Module 3) provides the requirements for participation in the TNI Stationary Source Audit Sample Program (SSAS Program).

1.2 Scope

The TNI SSAS Program includes the following elements:

a) The production and supply of stationary source audit samples (hereafter referred to as "audit samples") that challenge the critical components of each source test procedure, from sample collection to sample analysis;

b) The production and supply of audit samples that are as similar to real-world samples as are reasonably possible and are representative of materials analyzed for environmental regulatory programs, regulatory agencies, and communities;

c) The yielding of audit sample data that are technically defensible on the basis of the type and quality of the audit samples provided;

d) The preparation of audit samples that pose equivalent difficulty and challenge, regardless of the manner in which they are designed and manufactured by the Stationary Source Audit Sample Providers (hereafter referred to as "Providers"); and

e) Establishment of requirements for Facilities, Regulatory Agencies, Stationary Source Testers, Laboratories, Providers, and Stationary Source Audit Sample Provider Accreditors (hereafter referred to as "Provider Accreditors") participating in the SSAS Program.

1.3 Applicability

a) This Standard (Volume 1, Module 3) is applicable to all Participants using audit samples in the performance of stationary source air emissions testing for regulatory purposes.

b) The final acceptance of a Facility's stationary source air emissions test results by the Regulatory Agency is outside the scope of this Standard.

2.0 REFERENCES

2.1 *ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories.*

3.0 TERMS AND DEFINITIONS

For the purpose of this Standard (Volume 1, Module 3), the relevant terms and definitions conform to *ISO/IEC 17025:2005(E), Clause 3*. Additional relevant terms are defined below.

3.1 **Assigned Value:** Value attributed to a particular quantity and accepted, sometimes by convention, as having an uncertainty appropriate for a given purpose.

3.2 **Facility:** The responsible owner or operator for the stationary source or their authorized representative.

3.3 **Laboratory:** The organization that analyzes the samples collected during the stationary source test. This organization may be (1) the Stationary Source Tester or analytical chemist contractor analyzing the samples at the facility being tested or in a mobile laboratory or (2) an analytical laboratory or Stationary Source Tester analyzing the samples in their laboratory facility.

3.4 **Participants:** The Facilities, Regulatory Agencies, Stationary Source Testers, Laboratories, and Providers participating in a stationary source test.

3.5 **Regulatory Agency:** The federal, state, local, or tribal agency having responsibility and accountability for overseeing testing of atmospheric emissions from stationary sources.

3.6 **Stationary source:** Any building, structure, facility, or installation that emits or may emit any air pollutant.

3.7 **Stationary Source Audit Sample (audit sample):** A sample, the composition of which is unknown to the Stationary Source Tester and Laboratory, and that is provided to evaluate whether, during a particular test event, the Stationary Source Tester and/or Laboratory can produce measurement results within specified acceptance criteria. Audit samples are not analyzed on a regular schedule, but they are analyzed only during the particular event (e.g., a compliance test) that is being audited. Audit samples are analyzed, or collected and analyzed, as part of the batch of field test samples using the same personnel, procedures, and materials.

3.8 **Stationary Source Audit Sample Program (SSAS Program):** The procedures and operations for providing rigorously controlled and standardized audit samples, analyzing or collecting and analyzing them, reporting measured values, and reporting evaluations of the accuracy of the measured values.

3.9 **Stationary Source Audit Sample Provider (Provider):** A person or organization that offers audit samples in accordance with the requirements of the Provider Standard (Volume 1, Module 1). This term is synonymous with Accredited Audit Sample Provider (AASP).

3.10 **Stationary Source Audit Sample Provider Accreditor (Provider Accreditor):** An organization that is evaluated and approved by TNI, in accordance with the requirements of the Provider Accreditor Standard (Volume 1, Module 2), to accredit and monitor the performance of Providers. This term is synonymous with Audit Sample Provider Accreditor (ASPA).

3.11 **Stationary Source Test:** The determination of the qualitative and/or quantitative composition of atmospheric emissions from a stationary source.

3.12 **Stationary Source Tester:** Person or persons testing a stationary source for atmospheric emissions.

4.0 ROLES OF PARTICIPANTS

Refer to Figure 1 for a representation of the flow of information among the primary Participants in the TNI SSAS Program. This section describes the roles of the Participants in a stationary source test.

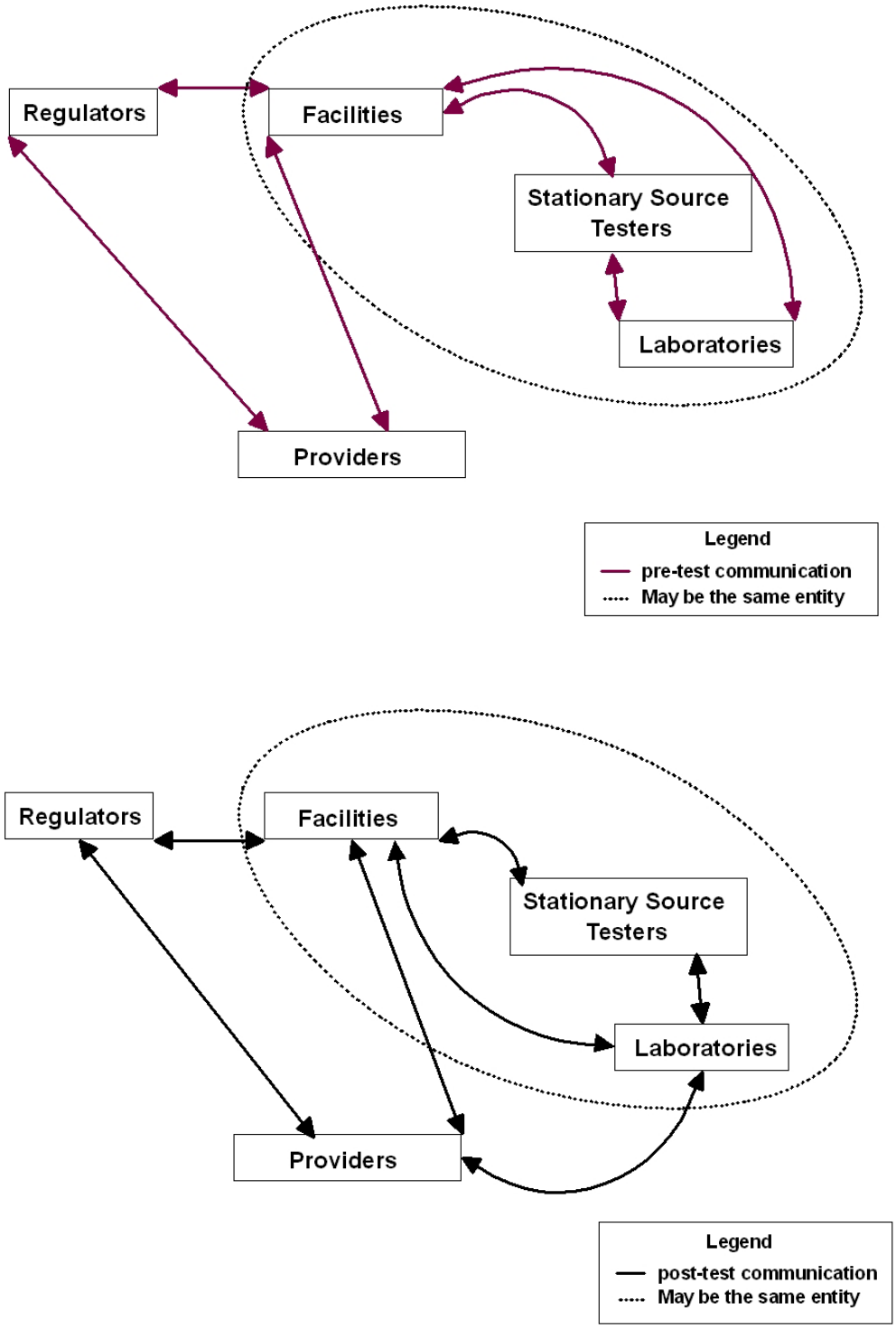

Figure 1. TNI SSAS Program Information Flows

4.1 Facility

4.1.1 The Facility shall prepare and submit a site-specific test plan to the Regulatory Agency, and shall identify the selected accredited Provider. The information in the test plan shall contain sufficient documentation to determine the type of each audit sample and to calculate each audit sample

concentration range needed. Such documentation shall (as applicable) include, but not be 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

4.1.2 The Facility shall contact the Provider to order the audit sample(s), and identify and provide contact information for the Regulatory Agency, the Stationary Source Test Companies, and the Laboratories participating in the stationary source tests.

4.1.3 The Facility shall collect the stationary source test results and the audit sample results and shall report them to the Regulatory Agency, in accordance with the requirements of the Regulatory Agency.

4.1.4 The Facility shall receive the evaluation of the audit sample results from the Provider.

4.2 Regulatory Agency

4.2.1 The Regulatory Agency shall receive and review the test plan(s) from the Facility.

4.2.2 The Regulatory Agency shall receive and review the Facility's request for audit samples and may provide input regarding the audit samples to the Facility and to the Provider within fifteen (15) calendar days after receiving notice and information about the order from the Provider.

4.2.3 The Regulatory Agency shall receive and review the stationary source test results and the audit sample results from the Facility and may provide input to the Facility after the test.

4.2.4 The Regulatory Agency shall receive the evaluations of the audit samples from the Provider.

4.3 Stationary Source Tester

4.3.1 The Stationary Source Tester shall coordinate with the Facility, Laboratory, and Regulatory Agency to plan and schedule the stationary source test and to plan for appropriate audit sample(s).

4.3.2 The Stationary Source Tester shall receive the audit samples from the Provider or the Facility, 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 Regulatory Agency.

4.3.3 The Stationary Source Tester shall perform the stationary source test.

4.3.4 The Stationary Source Tester shall deliver the stationary source test samples and the audit samples to the Laboratory at the same time.

4.3.5 The Stationary Source Tester shall prepare the data report, as defined by the Regulatory Agency, and provide it to the Facility. The data report shall contain the stationary source test results and the audit sample results.

4.4 Laboratory

4.4.1 The Laboratory shall receive and analyze the stationary source test samples and the audit samples from the Stationary Source Tester. The Laboratory shall handle, store, and analyze each audit sample in the same batch and in the same manner as the stationary source test samples for the test method and analyte being audited. The Laboratory shall prepare each audit sample for analysis according to the instructions provided by the Provider. The Laboratory shall use the same staff, sample tracking, sample storage, preparation, analysis methods, equipment, materials, standard operating procedures, calibration techniques, quality control procedures, and quality control acceptance criteria for the stationary source test samples and the audit samples.

4.4.2 The Laboratory shall report the audit sample results to the Provider and simultaneously report the stationary source test laboratory results and the audit sample results to the Regulatory Agency, unless otherwise directed by the Regulatory Agency.

4.4.3 The Laboratory shall receive the audit sample evaluations from the Provider in the time frame defined in Section 11.1.1 of the Provider Standard (Volume 1, Module 1).

4.4.4 The Laboratory may perform corrective action, as needed, based on the audit sample results.

4.4.5 The Laboratory shall keep records regarding the analysis of audit samples and make them available for review upon request for a minimum of five years, or as required by the Regulatory Agency.

4.5 Provider

Requirements for the Provider are specified in Volume 1, Module 1.

5.0 GENERAL REQUIREMENTS FOR HANDLING, ANALYSIS, AND REPORTING OF THE AUDIT SAMPLE

5.1 The Facility, Stationary Source Tester, and Laboratory shall not:

a) subcontract the analysis of any audit sample or a portion of the audit sample to a Laboratory not specified to the Provider;

b) knowingly receive and analyze any audit sample or a portion of the audit sample from another Facility, other Stationary Source Testers, or another Laboratory for which the results of the audit sample are intended to be used for a stationary source audit;

c) communicate with any individual at another Facility, Stationary Source Tester, or Laboratory concerning the analysis or measurement of the audit sample; or

d) attempt to obtain the assigned value of any audit sample.

6.0 REQUIREMENTS FOR QUESTION AND COMPLAINT RESOLUTION

6.1 When a Facility, Stationary Source Tester, or Laboratory has a question or complaint regarding an audit sample or performance evaluation from the Provider, and when the Facility, Stationary Source Tester, or Laboratory has sufficient cause to question the validity of that audit sample or performance evaluation, they may submit the question or complaint to the Provider, and notify the Regulatory Agency.

6.1.1 If the Provider is unable to resolve the question or complaint to the satisfaction of the Facility, Stationary Source Tester, or Laboratory within 45 days, the Facility, Stationary Source Tester, or

Laboratory may elevate the question or complaint to the Provider Accreditor. The Provider Accreditor shall conduct a review in accordance with their policies, and provide their recommendation to the Regulatory Agency. The Regulatory Agency shall then resolve the question or complaint, in accordance with their policies.