

### TNI Stationary Source Audit Sample (SSAS) Program

The NELAC Institute Bellevue, WA August 15, 2011





#### What is a stationary source audit sample?

- Event-driven (compliance)
- Blind: composition known only to Audit Sample Provider
- Collected and analyzed together with stationary source (stack) samples
- Evaluates whether, at a particular time, the combination of equipment and analyst is able to analyze the stack sample within an acceptable range
- Gives more confidence in stack sample results





#### When are audit samples required?

- Sources conducting compliance testing using an EPA test method found in 40 CFR Parts 51, 60, 61 or 63
  - Exempted methods = 3C, 6C, 7E, 9, 10, 18, 20, 22, 25A, 303, 318, 320, and 321.
- Only if commercially available (i.e., posted on EPA website)







What is the history of the stationary source audit sample program (SSAP)?

- 1998-2010: administered by EPA's Emissions Measurement Center, Office of Air and Radiation
- December 2007: EPA and TNI initiated discussions to establish TNI's role in transitioning the SSAP administration to the private sector
- August 2008: TNI formed an expert committee to develop consensus standards for a new privatized audit program



### What is the TNI Stationary Source Audit Sample (SSAS) Expert Committee?

- Diverse group of professionals involved in all aspects of stationary source testing and regulation
  - Regulatory Agencies
  - Stationary Source Testers (Stack Tester)
  - Providers
  - Provider Accreditors
  - Laboratories
  - Consultants





#### TNI SSAS Expert Committee Tasks:

- Establish standards governing accreditors of audit sample Providers, audit sample design and production, and rules for audit sample program participation
- Review and update SSAS Table at least every two years
  - Contains methods, analytes, concentration ranges, and acceptance criteria of audit samples
- Manage a Central Database of audit sample results
- Develop FAQs and other tools





### **Milestones**

Date	Milestone
08-11-2008	SSAS Expert Committee 1st Meeting
12-18-2008	TNI SSAS Working Draft Standard Published
05-15-2009	TNI SSAS Voting Draft Standard Published
10-09-2009	Final TNI SSAS Standard Adopted
09-13-2010	EPA Final Rule Published (75 FR 55636)
05-18-2011	EPA Approved TNI SSAS Program





### SSAS Standards ("Modules")

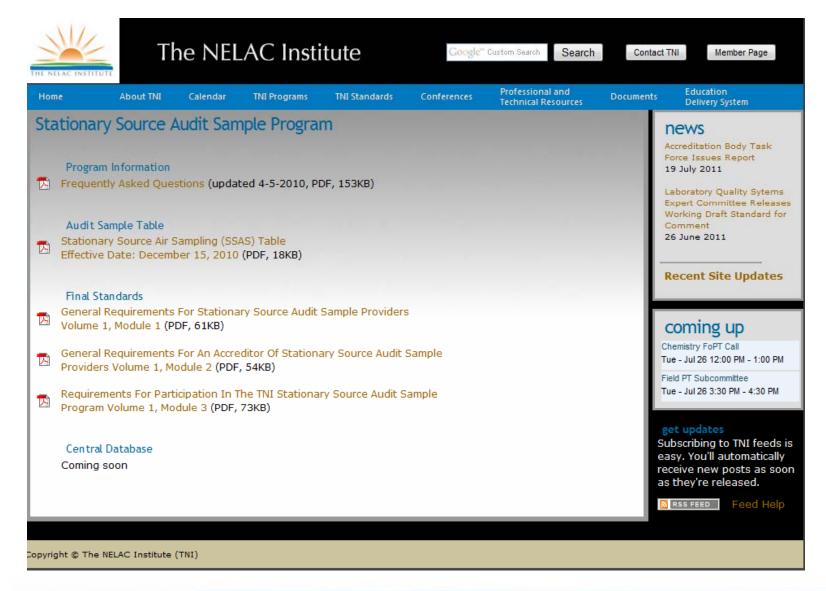
#### Three Modules

- 1 Audit Sample Providers
- 2 Audit Sample Provider Accreditors
- > 3 Participants
- SSAS FAQ Document
- SSAS Homepage on the TNI website

http://www.nelac-institute.org/ssas/



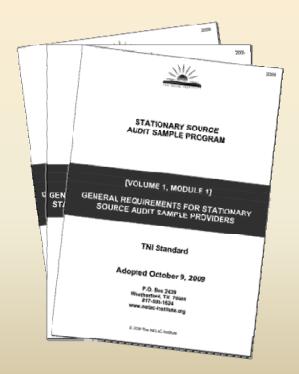








### The TNI SSAS Standard





### Module 1: Audit Sample Providers

- Defines standards to be met by Audit
   Sample Providers
  - Audit samples equivalent challenge to all
  - Meet SSAS Table analytes/concentrations
  - Verify assigned values
  - Conduct homogeneity and stability testing





## Module 1: Audit Sample Providers (cont.)

- Audit Sample Provider Responsibilities
  - Receive order from Facility
  - Contact Regulator any changes needed on Facility's order? (e.g., chg conc. /shipment address)
  - Ship within 15 calendar days if no response
  - Notify Regulator within 2 business days if Facility cancels or modifies audit sample order



## Module 1: Audit Sample Providers (cont.)

- Audit Sample Provider Responsibilities
  - Shall not send the same audit sample twice to the same Facility/Laboratory
  - Provide report within 3 business days to Facility/Regulator/Stack Tester/SSAS Central Database
    - Assigned value
    - Acceptance limit
    - Laboratory value





## Module 2: Provider Accreditors

- Defines standards for oversight of the Program
  - Accreditation requirements for Audit Sample Providers
  - Periodic review of SSAS Program analytes, concentration ranges, and acceptance criteria by SSAS Expert Committee
    - Limits set so that 90% of well qualified Laboratories pass audits



## Module 2: Provider Accreditors

Note: TNI currently has two approved

**Provider Accreditors: A2LA and** 

**ACLASS** 





## **Module 3: Participants**

- Facility Responsibilities
  - Before Sampling Event
    - Inform Regulator of their selected Provider
    - Provide Regulator with sufficient documentation to calculate each audit sample concentration range needed





- Facility Responsibilities
  - Before Sampling Event (cont.)
    - Contact the Audit Sample Provider
      - Order audit sample(s)
      - Provide contact info for Regulator, Stack Tester, and Laboratory





- Facility Responsibilities
  - After Sampling Event
    - Collect stack and audit sample results and submit reports to Regulator
    - Receive evaluation of audit sample results from the Audit Sample Provider





- Regulator responsibilities:
  - Review pre-test info from Facility (e.g., test protocol or other)
  - Review Facility's audit sample request;
    - Accept or modify audit sample request within 15 days of notification from Audit Sample Provider
  - Review audit sample/stack test results



- Stack Tester Responsibilities
  - Coordinate with Facility, Laboratory, and Regulator
  - Receive audit samples from the Audit Sample Provider or Facility
  - Perform the stack test
  - Deliver stack and audit samples to the Laboratory at the same time
  - Report stack and audit sample results to Facility





- Laboratory Responsibilities
  - Analyze stack and audit samples together
    - Use same personnel, tracking, storage, preparation, methods, equipment, materials, SOPs, calibration, QC procedures, and acceptance criteria
  - Report audit sample results to Audit Sample Provider, and report stack and audit sample results to the Regulator



- Laboratory Responsibilities (cont.)
  - Receive audit sample evaluations from Provider within 3 business days
  - Perform corrective action, as needed
  - Maintain records of audit sample analysis for minimum 5 years





### **SSAS Program Status**





#### **Current Status**

- TNI SSAS Program approved by EPA
- Two Accreditors (A2LA and ACLASS) approved by TNI to accredit Audit Sample Providers
- At least two prospective Audit Sample Providers being evaluated by Accreditors; approval pending
- TNI SSAS Expert Committee completing review of an update to the SSAS Audit Sample Table



### **Next Steps**

- TNI Finish review of update to SSAS Table
- TNI Finish audit sample concentration tool
- Accreditation of Audit Sample Providers
- Audit samples commercially available
  - 2 Audit Sample Providers (minimum)
  - Posted at <u>www.epa.gov/ttn/emc</u> at least 60 days before compliance test
- Inform Stack Testers/Facilities of new requirements





#### Next Steps (cont.)

- Regulators Sign up to access TNI SSAS Central Database
  - Establish point of contact for Audit Sample Providers
  - Use application forms available at Registration Desk or go online:

nelac-institute.org/ssas/regaccount.php





#### For More Information

- EPA website:
  - http://www.epa.gov/ttn/emc/email.html
  - Summarizes the restructuring of the Stationary Source Audit Program (SSAP)
  - Will provide lists of available audit samples and accredited Audit Sample Providers, when available
  - Provides links to the Final Rule, Public Comments and Responses, EPA Contact Information, EPA SSAP Rule FAQ, and TNI SSAS Standard



#### 1. When will audit samples become available?

There is no set date. Before audit samples may be ordered, at least two Providers must be approved by the Provider Accreditor, and at least two Providers must make the audit sample available to order.





# 2. Can I use a proficiency test (PT) sample instead of an audit sample if audit samples are not available from Accredited Audit sample providers?

No, PT samples cannot be used instead of audit samples because the PT samples may not be made using the same protocols set forth in the TNI SSAS Standard, and this could bring into question the validity of the data.



## 3. How do I find out if an audit sample is available?

EPA will provide a list of the available audit samples at <a href="https://www.epa.gov/ttn/emc">www.epa.gov/ttn/emc</a> along with a list of accredited audit sample Providers. The list will be updated as new information becomes available.





## 4. How far in advance do I need to order a sample?

That will need to be worked out between the requester, the Provider, and the Regulatory Agency. The rule does not specify any timeframe.





## 5. Who should I contact at EPA concerning the Restructuring of the Stationary Source Audit Program rule?

The contact is Candace Sorrell. Her phone number is 919-541-1064 and her e-mail address is sorrell.candace@epa.gov





## 6. Who is responsible for obtaining an audit sample?

The source owner, operator or representative of the tested Facility is responsible for obtaining an audit sample.





## 7. <u>Do laboratories have to be accredited to analyze audit samples?</u>

The EPA Final Rule does not require laboratories to be accredited to analyze the audit samples; however, individual regulatory authorities may require testing firms and laboratories to be accredited to conduct testing in their jurisdiction. You will need to check with the regulatory authority to determine their requirements.



## 8. How many audit samples are required for a given performance test?

Only one audit sample per method used during a performance test is required by the rule. However, a state or local regulatory authority can require more than one audit sample if they think it is useful or necessary. If a state places requirements in state rules and/or SIPs that multiple audit samples are required under certain conditions, then that is the law for those sources in that state.



#### 9. <u>Do regulatory authorities need the</u> <u>Administrator's approval to waive the audit</u> <u>requirement for a particular test?</u>

No, the rule states that the regulatory authority may waive the requirement to include an audit sample if they believe that an audit is not necessary.





#### 10. What sources are required to use audits?

Any source that is required to conduct compliance testing using an EPA test method found in Parts 51, 60, 61 or 63 is required to use audit samples if they are available. The rule does exempt several methods which already have sufficient calibration and quality assurance requirements or determine visible emissions by observation and therefore, there is no practical way to audit them. Those methods are Methods 3C, 6C, 7E, 9, 10, 18, 20, 25A, 303, 318, 320, and 321.



## 11. Why was Method 3A not exempt from needing an audit sample?

Method 3A was accidently left off the list of exempt methods in the rule and should not be required to use an audit sample. EPA will correct this error in the next method update package.





#### **Comments – Questions?**

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### **Other Questions**





## Thank you to all who participate and contribute to the TNI SSAS Program!