TNI Stationary Source Audit Sample Expert Committee (SSAS)
Meeting Summary

February 25, 2019

1. Roll call and approval of minutes:

   Chair, Tom Widera, called the TNI SSAS Executive Committee meeting to order by teleconference on February 25, 2019, at 2 pm Eastern. Attendance is recorded in Attachment A – there were 7 committee members present. Associate Members present: Mike May (Guest - Chester LabNet), Kelley Dorsi (Bison Engineering), Eugene Chen (EPA Region 9), Stanley Tong (EPA Region 9) and Khoi Nguyen (EPA Region 9).

   The minutes will be reviewed by email.

2. Public Meeting

   Tom would like to go through the DRAFT outline of possible changes to the SSAS Standard. This is what will be presented and sent out for comment and the public webinar. The webinar is being pushed back to March to give the Committee time to complete the outlines.

   Sheri put together the outline drafts that are being reviewed. Tom started with the outline for Module 1. He wants to be sure everyone is OK with what is being proposed before it goes out to the public. Sheri reminded everyone that the purpose of the webinar is seek input on the proposed changes. It should be emphasized that these changes have not already been finalized or agreed to. The table has a column for the current language and a column for the proposed language. If we get input on the front end, it will make it easier to write the final standard and get it accepted. It should speed up the process.

   The invitation to the public webinar and copies of the proposed outline will go to regulators, labs, testers, etc … There should be a few hundred invitations going out.

   Tom started with Module 1 and made changes to the table as he went through each item (see Attachment D). He also opened Volume 1 Module 1 of the SASS Standard.

   Tom then reviewed Module 3 and made changes to the table as he went through each item (see Attachment E). He also opened Volume 1 Module 3 of the SSAS Standard.

   Stan looked at 40 CFR 60.8 g(2)vii – last sentence. It says you can give a range for pass/fail, but the provider can't give actual concentration. Every audit has a unique ID now so another member on the call thought this is now irrelevant. Less chance of recognizing a sample. Tom also noted that Section 60.8 is for performance tests. Not for

compliance testing? Tom will check-in with Ned Shappley and confirm there is no problem. Tom thought a work around would be to require unique IDs for samples.

Tom then reviewed Module 2 and made changes to the table as he went through each item (see Attachment F). He also opened Volume 1 Module 2 of the SSAS Standard.

The concern was raised that the entire system is not being challenged and it should be. A comment was made that the language in Section 1.2.a) should not be removed, because this should still be the goal. A number of people preferred not to take it completely out. Perhaps it could be footnoted.

Section 4.1- Does the PTPEC have any responsibility to the content of the SASS Program? The limits are reviewed by the PTPEC, but the rest is the responsibility of the SSAS Expert Committee. Ilona noted that the PTPEC also coordinates the evaluation of the PTPA's who then accredit the SSAS audit sample providers. This can be shared with the PTPEC to develop some wording.

Tom asked people to continue to review the information and send comments by email.

Sheri will review and make any needed additional updates to the tables based on the call today (see Attachment D, E and F).

3. New Business.

   - None.

4. Action Items

   The action items can be found in Attachment B.

5. Next Meeting

   The next meeting will March 18, 2019 at 2pm Eastern by teleconference.

   Action Items are included in Attachment B and Attachment C includes a listing of reminders.

   Tom adjourned the meeting at 3:37pm Eastern.

Attachment A

Participants
TNI
Stationary Source Audit Sample Expert Committee

Members	Rep	Affiliation	Contact Information
Tom Widera (2020) CHAIR **Present**	Other	ERA (Provider)	twidera@eraqc.com
Ilona Taunton, Program Administrator **Present**			Ilona.taunton@nelac-institute.org
Ed MacKinnon (2022) **Present**	Other	TRC Env Corp (Stationary Source Tester)	emackinnon@trcsolutions.com
Gregg O'Neal (2020*) **Present**	AB	NC DAQ	gregg.oneal@ncmail.net
Katie Gattis (2021) **Present**	Lab	Element One Inc.	katie.strickland@e1lab.com
Michael Klein (2020*) **Present**	AB	NJ DEP	michael.klein@dep.nj.gov
Michael Schapira (2021*) **Present**	Lab	Enthalpy Analytical LLC	Mike.schapira@enthalpy.com
Sheri Heldstab (2022*) **Present**	Lab	Chester LabNet	sheldstab@chesterlab.net

Attachment B

Action Items – TNI Stationary Source Audit Sample Expert Committee

	Action Item	Who	Date Added	Expected Completion	Completion
2	Find out which group in EPA is helping the Microbiology FoPT Subcommittee crunch numbers for limits.	Ilona	2/12/18	3/19/18	Need to hear back from Jennifer Best.
9	Prepare general summary of what the committee plans to change in the current Standard and why. First DRAFT.	Tom	4/23/18	5/21/18	In progress.
10	Send ideas on Storage Condition issue to Tom so he can summarize them for an agenda item in July.	All	6/18/18	7/15/18	
12	Discuss matrix matching with Sigma.	Tom	10/15/18	11/15/18	
13	Contact Ned Shappley about PT concentrations to complete SOP 6-100.	Tom	10/15/18	11/15/18	
14	Contact Ken Jackson and Bob Wyeth about glossary definitions to make sure there are no conflicts with SOPs being worked on.	Tom	10/15/18	11/15/18	
15	Provide Ilona with notes from New Orleans meeting so August minutes can be completed.	Tom	10/15/18	TBD	
16	Contact Carl and Shawn about equations used for limits. Can they provide wording for the SOP?	Tom	1/22/19	2/24/19	

	Action Item	Who	Date Added	Expected Completion	Completion
17	Talk to Maria about CRA and get posted on the SSAS website.	Tom	1/22/19	2/24/19	
18	Update SOP 6-100 based on review during meeting.	Tom	1/22/19	2/24/19	
19	Discuss impact of 40 CFR 60.8 g(2)vii – last sentence with Ned.	Tom	2/25/19	3/1/19	

Attachment C

Backburner / Reminders – SSAS Expert Committee

	Item	Meeting Reference	Comments

Attachment D:

TNI SSAS EXPERT COMMITTEE: OUTLINE OF CHANGES AND IMPROVEMENTS

SSAS Volume 1: Module 1 (Providers)

The revised TNI SSAS Volume 1 Standard combines the requirements for Providers audit samples (Module 1), the Provider Accreditor requirements (Module 2) and the Participant requirements (Module 3).

Most of the normative language by The NELAC Institute (TNI) that is specific for the SSAS program has been retained or revised for clarity.

Section	Current Text	Proposed Text	Justification
6.3.1	Providers shall prepare audit samples that are…	Audit samples prepared by Providers shall be…	Some Testers were interpreting the original verbiage to mean that Providers were required to manufacture audits for all methods - clarification of ambiguity.
[6.3.6]	[new text]	6.3.6 The Provider may produce the audit in "whole sample" form (i.e., to be analyzed as received) or as a concentrate (i.e., requiring dilution or other preparation prior to any analytical steps being performed on the audit).	Clarifying statement which impacts Volume 1, Module 3.
6.4.1 NOTE	NOTE: A Provider may, upon request, supply samples, similar in composition to audit samples, which have concentrations outside the ranges in the SSAS Table. By definition, such samples would not be considered audit samples, and are, therefore, outside the scope of this Standard.	[struck from module]	This text came from the water/wastewater PE program and does not apply to SSAS Program.
6.5 NEW	[new text]	**6.5 Audit Sample Availability**	

6.5.1 NEW	[new text]	6.5.1 At any given time, Providers shall have available a sufficient number of batches to ensure that the laboratories are adequately challenged.	This is a unique necessity for the SSAS Program. Water/Wastewater PE studies are conducted in an entirely different manner, and the language borrowed from their requirements was insufficient for the SSAS Program's needs.
6.5.2 NEW	[new text]	6.5.2 Each SSAS table concentration range may be split into three groups, the lowest third of the range (low), the middle of the range (mid), and the high end of the range (high).	Providers were struggling to meet the high demand for low concentration audits without having to also produce large numbers of lots of mid- or high-concentration audits that were not being used. By breaking the concentration ranges into three categories, the Providers can manufacture more lots of the concentration levels in high demand.
6.5.3 NEW	[new text]	6.5.3 Each sub-range (low, mid, high) if used, shall have a minimum of (X) unexpired batches available at all times.	Ensures that all concentration levels have adequate supply to meet demand at any point in time.
6.5.4 NEW	[new text]	6.5.4 Any sub-range, if used, which has greater than (X) requests in a rolling 12 month period must have additional batches made to provide the adequate challenge for laboratories. One batch per (X) requests in a rolling 12 month period is sufficient to meet this requirement.	Ensures that all concentration levels have adequate supply to meet demand at any point in time.
6.5.5 NEW	[new text]	6.5.5 All sub-range batches, if used, must have certified values sufficiently different from one another such that an adequate challenge to laboratories can be assured.	Decreases the likelihood that a lab will receive multiple audits with the same concentration.

8.2	The Provider shall provide instructions with each audit sample shipment, describing:	8.2.a) UNCHANGED	
8.2.b) NEW	[new text]	b) that the audit sample be prepared and analyzed per the applicable methods in the SSAS Table;	Previously, the instructions accompanying the audit sample said to "analyze the audit" and omitted the word "preparation". As a result, some labs were not following the preparation steps of the method(s), and simply diluting the audit and running it with no preparation. This is a particular issue with Method 29, which has a lengthy and convoluted preparation prior to analysis.
8.2.c) 2	2) The audit sample(s) I am reporting was/were analyzed in the same laboratory in keeping with module 3 of this standard under the same calibration, utilizing the same quality control standards, by the same analysts following audit sample instructions as the stationary source test samples.	2) The audit sample(s) I am reporting was/were analyzed in the same laboratory following the requirements of module 3 of this standard.	This text was originally borrowed from the water/wastewater PE program. It is not always possible for the laboratory to analyze the audit "under the same calibration, utilizing the same quality control standards, by the same analysts following audit sample instructions as the stationary source test samples." For instance, if 3 samples out of 12 need to be diluted in a different run with a different calibration, does the audit sample need to be run with those 3 diluted samples also? And if so, which audit result gets reported? By referring back to Module 3 of the SSAS module (laboratory requirements), the new text removes this ambiguity.
	[editorial changes]	other sections in 8.2 renumbered in keeping with above changes	

8.3 NEW	[new text]	**8.3** The Provider shall provide Data Reporting forms that will include:	This requirement should alleviate some of the issues encountered by laboratories and regulators with regards to:
8.3.a) NEW	[new text]	a) name of the Facility;	Not knowing which project, the audit is associated with
8.3.b) NEW	[new text]	b) name of the Tester;	Not knowing which client, the audit is associated with
8.3.c) NEW	[new text]	c) name of the laboratory performing the analysis; and	Not knowing which laboratory, the audit is associated with/laboratories receiving audits intended for different labs
8.3.d) NEW	[new text]	d) name of the Regulatory Agency.	Regulators receiving audit results for projects being overseen by a different regulator.
8.4.j	send an audit sample from the same manufacturing lot to the same Facility or Laboratory consecutively, or more than once in a calendar month, or more than eight (8) times in a twelve-month period.	[struck from module]	This is a carryover from the water/wastewater PE program and is outside of the control of the Provider, who can only monitor which Tester receives a given lot of audit. The Tester is responsible for the timing by which the laboratory receives a given audit. Most labs are working with more than one Testing Company, who are not coordinating their audit samples with each other.
10.2.1 NEW	[new text]	10.2.1 Acceptance limits shall be calculated by the provider per the current SSAS Table and shall be rounded to three (3) significant figures.	Clarifying significant figure usage in providing acceptance limits.

10.2.2 NEW	[new text]	10.2.2 The Provider shall evaluate audit sample results “as reported” by the laboratory.	Not all laboratories report to 3 significant figures. The Provider is not responsible for acceptance or failure based on the number of significant figures reported by the laboratory.
	[editorial changes]	renumbered to 10.2.3 - 10.2.6	editorial change

Attachment E:

TNI SSAS EXPERT COMMITTEE: OUTLINE OF CHANGES AND IMPROVEMENTS

SSAS Volume 1: Module 3 (Stakeholders)

The revised TNI SSAS Volume 1 Standard combines the requirements for Providers audit samples (Module 1), the Provider Accreditor requirements (Module 2) and the Participant requirements (Module 3). Most of the normative language by The NELAC Institute (TNI) that is specific for the SSAS program has been retained or revised for clarity.

Section	Current Text	Proposed Text	Justification
1.3.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	The final acceptance of a Facility's stationary source air emissions test results by the Regulatory Agency is outside the scope of this Standard,and is the responsibility of the Regulatory Agency involved in the Testing event for a given Facility.	clarifying responsibility of Regulatory Agency regarding final acceptance of audit results.
3.2	[new text]	**Concentrated Audit:** An audit requiring dilution or other preparation prior to the beginning of any analytical steps.	necessary to differentiate between audit preparation and method-required sample preparation (dilution of audit versus preparation of field samples)
3.15	[new text]	**Whole Sample Audit:** An audit which requires no further preparation prior to the beginning of analysis.	necessary to differentiate between audit preparation and method-required sample preparation (dilution of audit versus preparation of field samples)
4.1 & 4.2	[multiple throughout section 4.1 & 4.2]	**changed "Facility" to "Facility or Designee" where applicable.**	Most of the activities discussed in Section 4.1 are generally carried out by the Testers, not directly by the Facilities.
Figure 1	Figure 1 & Figure 1 Notes	moved to end of document	editorial change for ease of formatting and readability
4.1.4	The Facility shall receive the evaluation of the audit sample results from the Provider.	The Facility or Designee, Regulatory Agency, the Stationary Source Test companies, and the Laboratories participating in the stationary source tests shall receive the evaluation of the audit sample results from the Provider.	Results are already being sent to this list of entities. Change in text makes Standard match actual practice.

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. It is the responsibility of the Regulatory Agency to evaluate the method, container, matrix, analytes, and requested analyte requested value proposed for the audit sample and to choose, in consultation with the Provider, the analyte values that best audit the test and are blind to the other Participants. If any aspect of the audit sample, except the analyte value, must be changed, the Regulatory Agency shall inform the Facility as well as the Provider so that the Facility can also change the order as the Regulatory Agency requires.	The Regulatory Agency shall receive and review the Facility's or Designee's request for audit samples and may provide input regarding the audit samples to the Facility or Designee and to the Provider within fifteen (15) calendar days after receiving notice and information about the order from the Provider. It is the responsibility of the Regulatory Agency to evaluate the method, container, matrix, analytes, and requested analyte requested concentrations proposed for the audit sample and to choose, in consultation with the Provider, the analyte concentrations that best audit the test and are blind to the other Participants. If any aspect of the audit sample, except the analyte value concentration, must be changed, the Regulatory Agency shall inform the Facility or Designee as well as the Provider so that the Facility or Designee can also change the order as the Regulatory Agency requires.	(Facility changed to "Facility or Designees") "value" changed to "concentration", as the two are not synonymous. Audit samples are ordered based upon concentrations.
4.2.4	The Regulatory Agency shall receive and review the stationary source test results and the audit sample results from the Facility and Laboratory (see Section 4.4.2), and may provide input to the Facility after the test.	The Regulatory Agency shall receive and review the stationary source test results and the audit sample results from the Facility or Designee and Laboratory (see Section 4.4.2), and may provide input to the Facility or Designee after the test.	Clarification that the sample results and audit results are submitted to the regulators by the Facility or Designee AND by the laboratory. Lab is required to report to Tester, Provider, and Regulator simultaneously.
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.	The Stationary Source Tester shall receive the audit samples from the Provider or the Facility, have them available at the test site during testing, store the audit samples in accordance with the Provider's instructions while in possession of the audit samples, and add them to the batch of field samples sent for analysis, unless otherwise authorized by the Regulatory Agency.	Added in requirement that audits be stored properly while in the custody of the Tester, as failure to do so may invalidate the audit, and neither the lab nor the provider have control over the actions of the Tester.

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 personnel, 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.	The Laboratory shall receive and analyze the stationary source test samples and the audit samples from the Stationary Source Tester. If necessary, the Laboratory shall prepare each audit sample according to the instructions provided by the Provider prior to beginning any analytical steps, including method-specific preparatory steps, if any.	Broken into 3 paragraphs to remove ambiguous references to "prepare" & "preparation".
4.4.1		The Laboratory shall handle, store, prepare 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.	Broken into 3 paragraphs to remove ambiguous references to "prepare" & "preparation".
4.4.1		The Laboratory shall use the same personnel, sample tracking, sample storage, sample preparation and 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.	Broken into 3 paragraphs to remove ambiguous references to "prepare" & "preparation".

4.4.2 - 4.4.5	editorial changes	renumbered to 4.4.4 - 4.4.7	editorial change
6.0	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...	When a Facility, Stationary Source Tester, or Laboratory has a question or complaint regarding an audit sample, and when the Facility, Stationary Source Tester, or Laboratory has sufficient cause to question the validity of that audit sample…	removed references to "Performance Evaluation" because PE samples apply to water/wastewater, not to the SSAS Program.
Figure 1	[moved to end of document]	Figure 1 & Figure 1 Notes	editorial change for ease of formatting and readability

Attachment F:

TNI SSAS EXPERT COMMITTEE: OUTLINE OF CHANGES AND IMPROVEMENTS

SSAS Volume 1: Module 2

The revised TNI SSAS Volume 1 Standard combines the requirements for Providers audit samples (Module 1), the Provider Accreditor requirements (Module 2) and the Participant requirements (Module 3). Most of the normative language by The NELAC Institute (TNI) that is specific for the SSAS program has been retained or revised for clarity.

Section	Current Text	Proposed Text	Justification
1.2.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;	add footnote [1]: [1] If the provider does not or cannot create a gaseous audit capable of challenging the test procedure from sample collection to analysis, an audit may be produced in liquid form to challenge the analytical component of the method. The liquid audit must contain the same analyte in the same or similar matrix as the final collected sample.	Recognizes that, at present, not all audits are capable of being used to challenge the sample collection component of all methods for which audits exist. While this is still the goal of the audit program, it is not fully implemented yet.
4.1	The PT Executive Committee shall determine the content of the approved TNI SSAS Program…	The PT Executive Committee in conjunction with the SSAS committee shall determine the content of the approved TNI SSAS Program… OR The SSAS Expert Committee, in conjunction with the PT Executive Committee, shall determine the content of the approved TNI SSAS Program...	Originally, the PTEC had oversight over the SSAS Audit program. The SSAS Expert Committee was formed upon realization that SSAS audits were quite different from PT samples/programs.