

TNI Stationary Source Audit Sample Expert Committee Teleconference
June 20, 2011

Attendance:

Maria Friedman – Chair TestAmerica (Laboratory)	Committee member	present
Mike Hayes Linde (Provider)	Committee member	absent
Michael Klein New Jersey DEP (State government)	Committee member	present
Gregg O’Neal, North Carolina DAQ (State government)	Committee member	present
Michael Schapira Enthalpy (Laboratory)	Committee member	present
Jim Serne TRC Solutions (Stationary Source Tester)	Committee member	present
Richard Swartz, Vice-chair Missouri DNR (State government)	Committee member	present
Stanley Tong EPA Region 9 (Federal government)	Committee member	absent

- 1) Continue discussions re. Method 25

Point 5 (continued from 6-17-2011 meeting)

The Committee resumed discussion about Method 25. Gregg started by reiterating his support for using the regression equation for the acceptance limits, and pointed out that the last discussion ended with an idea to omit acceptance limits for concentrations below 150 ppmC. Michael Klein noted that with the regression equation, the acceptance limits would be around +/- 50% at 150 ppmC, and he would not support limits that wide.

Michael Schapira asked how low Method 25 was needed to go in the field. Michael Klein replied that it was case-by-case. Usually if the results in the field samples are <50 ppmC, an audit failure will not affect the compliance status. Very few retests are required due to audit failures, and audits that fail typically fail high. Those failures are usually attributed to a problem in the sampling rather than in the analysis.

Michael Klein also noted that when EPA developed the capture efficiency guidelines for the various protocols (liquid-liquid, gas-gas, etc.), those calculations were all based on the assumption of Method 25 having +/- 20% accuracy.

Maria asked Michael Klein if he could accept +/- 40% limits on the low end of the concentration range. Michael replied that he would stick with +/- 30%.

A discussion about the meaning of a failed audit and its significance as a compliance issue then ensued.

Maria reminded everyone that if the Committee did not reach a consensus on what to do with Method 25, the information currently in the SSAS Table would be used.

Greg then referred to an e-mail from Stan concerning the question of adding diluents or interferences to the audit sample and said that no supporting data to back up the addition of interferences are available. Jim added that a policy or procedure is needed for bringing new types of audits into the Program. He thought we could have new types of audits, but with no pass/fail criteria until enough data had been collected to establish limits. Maria said that the Committee would take on the task of creating a policy for new audits once the pending work on the SSAS Table is finished.

There was a question about why CO₂ as a diluent for Method 25 is in the current SSAS Table as a footnote. There was no definitive answer to this.

Getting back to the topic at hand (Point 5), Michael Schapira said he was not particularly fond of the regression equation, but he understood why the limits ended up as wide as they were given the historical results. He also said that if the two laboratories performing most of the Method 25 analyses are okay with tight limits, perhaps it was okay to have those limits.

Gregg suggested using the regression equation with a maximum cap of +/- 40% on limits generated by the regression equation. Richard agreed. Jim put the proposal in perspective by pointing out that at 50 ppmC, limits of +/- 40% would produce an acceptable result range from 30 ppmC up to 70 ppmC, a span of only 40 ppmC. He thought that might be too narrow a range for laboratories to meet. Gregg suggested following up with the laboratories (Wayne's and Charles') to see what they thought about that.

Gregg said that we also need to keep in mind that Providers will still need to be able to make and feel comfortable they can verify the kinds of audit samples we put into the SSAS Table, and if we do not have two Providers who are willing to make the kind of audit sample we specify, we won't have audit samples. He shared that when he was on the subcommittee, some of the criteria were adjusted based on the expected or expressed ability of Providers to make those samples.

Richard proposed amending Point 5 as follows: the regression equation will be used for field audits, minimizing to +/- 30% on the high end, maximizing to +/- 40% on the low end; and for lab audits, the limits would be fixed at +/- 20%. By example, for the field audits, this proposal would have the effect of fixing limits at +/- 40% from 190 ppmC on down, and fixing limits at +/- 30% from 370 ppmC on up; between 190 ppmC and 370 ppmC, the regression equation would drive the limits.

Jim reiterated that the final rule requires that acceptance limits be set so that 90% of labs will pass future audits at 95% confidence. He pointed out the very serious potential consequences to audit failure. Gregg agreed, saying that a company could be financially wiped out by the costs due to failures.

Michael Schapira said that he agreed with Michael Klein that if we have wider limits and they pass, people will conclude there's nothing wrong, and that it is better to have a tighter range and give provisional passing as a Regulator prerogative than to try to "just say it passes" and then as a Regulator try to say it didn't "really" pass. Gregg said that situation has been addressed in the past through the language in permits, for example, saying that if results are not within +/- 40%, certain corrective action is needed. Michael

Klein said they wouldn't add that level of complexity to their permits, and that when the permits are written, the methods to be used are not known.

Michael Klein said that he would accept Richard's proposal with the following addition: a footnote should be added to the SSAS Table that says the Regulatory Agency may apply the audit bias to the results to assess the impact on the compliance status.

Maria proposed the following language for the footnote suggested by Michael Klein: "Results within acceptance limits, but not within 30% of the assigned value, are considered marginally acceptable and may be subject to additional regulatory review, including applying the audit bias to the results to assess the impact on the compliance status."

There seemed to be consensus in favor of Richard's motion with the addition of the footnote, but before holding a vote, Jim and Gregg felt that the laboratories that perform Method 25 should be contacted to seek their opinion regarding their ability to meet +/- 20% criteria (the criteria proposed for the lab audit samples). There was consensus that this should be done.

Action Item: Jim will contact the laboratories (Wayne and Charles), with copy to Maria, to ascertain their confidence at being able to meet +/- 20% limits for the lab audits.

Point 4

Gregg said that the Committee needs to collect more information on the ramifications of adding diluents/interferents before taking that action. Michael Schapira agreed it was premature to do that. Michael Klein said he thought it would be a good idea to add the gases, but as long as the Committee would look into adding them in the future, it was okay with him to remove Point 4 from the motion.

Motion and Vote

Michael Schapira moved to remove Point 4 from the motion. Gregg seconded, and all present voted in favor.

The Committee will continue discussion on Point 5, hopefully with input from Wayne and Charles, based on Jim's action item, at the next meeting.

2) Adjournment

The meeting was adjourned 1:30 pm EDT.

The next meeting is scheduled for June 27, 2:00 - 3:30 pm EDT. Guests and associate members will be invited to join the voting members on the call.