

**SUMMARY OF THE
TNI CHEMISTRY EXPERT COMMITTEE MEETING**

OCTOBER 17, 2013

The Committee held a conference call on Thursday, October 17, 2013, at 1:00 pm EDT.

1 – Roll call

Richard Burrows, Test America (Lab)	Present
Francoise Chauvin, NYC DEP (Lab)	Present
Brooke Connor, USGS (Other)	Present
Dan Dickinson, NYSDOH (Accreditation Body)	Present
Mandi Edwards, Envirochem (Lab)	Present
Tim Fitzpatrick, Florida DEP (Lab)	Present
Andrew Friedrich, Chevron (Lab)	Present
Nancy Grams, Advanced Earth Technologists, Inc. (Other)	Present
Anand Mudambi, USEPA (Other)	Present
John Phillips, Ford Motor Co., (Other)	Present
Scott Siders, IL DEP (AB)	Present
Gary Ward, OR DPH (AB)	Present
Ken Jackson, Program Administrator	Present

Associate Committee members present: Lynn Boyson; Diana Shannon

2 – Previous Minutes

It was moved by John and seconded by Scott to approve the minutes of October 4, 2013. All were in favor, except, Nancy, Brooke and Anand who abstained.

3 – Calibration Voting Draft Standard

Committee members had circulated and exchanged proposed language for dropping calibration points. The following language was proposed by John on Section 1.7.1.1 d), in an e-mail message on Oct. 9:

The laboratory shall have a written procedure to address the rejection, removal or replacement of standards (i.e., concentration levels or analyte points) from a calibration curve. This procedure shall at a minimum address the following criteria:

- i) individual analyte points with a poor response (e.g., particularly weak or strong) may be removed from the high or low levels of the calibration curve*

- ii) *the entire concentration level at the low or high end of the calibration curve may be removed*
- iii) *when any individual analyte or concentration level is removed from the low or high end of the calibration curve, the working range of the calibration is changed accordingly, and any resulting changes to the LOQ or need for qualification of reported data shall be determined*
- iv) *individual analyte points shall not be removed from any interior concentration levels of the calibration curve*
- v) *an entire concentration level (e.g., all compounds) can be removed or replaced from the interior of the calibration curve only for a documented and technically valid reason (e.g., leak in purge vessel, bad injection). For this to occur, one or more of the following conditions must be satisfied:*
 - a. *data file is corrupted or unusable*
 - b. *run is interrupted before completion*
 - c. *responses of all analytes in a standard are less than 50% or greater than 150% relative to other standards in the calibration (e.g., all analytes show the same bias in the standard)*

In a calibration sequence only one entire concentration level can be removed or replaced from the interior of the calibration curve. A replacement concentration level must be analyzed within 24 hours the initial level and prior to sample analysis

- vi) *in all cases where concentration levels or analyte points are rejected or removed from the calibration curve the remaining points must be sufficient to meet all the requirements of this document (e.g., minimum number of required calibration concentration levels and an acceptable calibration)*

Tim suggested adding to iv) *“for multianalyte methods, individual analyte points shall not be removed..”* Anand proposed moving v) to ii), because both refer to the entire concentration level. Richard said in v), the first parenthetical should be *“i.e.”*, not *“e.g.”*, and Anand said for consistency *“analytes”* should be substituted for *“compounds”*. It was agreed that *“response factor”* should be used in v) c. On Andrew’s suggestion *“and replaced”* was added after *“removed”* in iv). Andrew also suggested deleting *“rejected”* in vi).

Dan had reservations about placing strict limits (50% - 150%) in v) c, since they appeared arbitrary. There was discussion on the three conditions (a, b, and c) in v), and there was general agreement the laboratory should be allowed to decide what is a technically valid reason for dropping points. Therefore, those conditions could be listed in the second parenthetical of v), with addition of *“all analytes show a significant bias in the same direction”*. Following a prolonged discussion, the following re-wording was proposed for v): *“An entire concentration level can be removed or replaced from the interior of the calibration curve only for documented and technically valid reasons (e.g., a leak in the*

purge vessel, bad injection, all analytes show a significant bias in the same direction). Only one entire concentration level may be removed or replaced in the calibration curve. If replaced, the replacement level must be analyzed within 24 hours of the initial level and prior to sample analysis.”

Francoise asked why the analyst could only remove a concentration level from the middle of the curve and not the ends for a technically valid reason. Nancy was concerned that it should not be allowed to remove 3 points from the middle, high end and low end; and Tim added the standard should not let people remove or replace more than one point from the curve.

Francoise cautioned that the standard is now specifying replacement within 24 hours, but nowhere else does it say all calibration points have to be done within 24 hours.

Anand suggested saying in ii) “*removed or replaced*”, and then inserting the part in v) that addresses replacement. Richard countered that you must have a technically valid reason to remove and then replace, so he suggested leaving ii) as just removal, and then making remove and replace from the end as part of v). However, Scott wanted to keep them separate; ie, leave v) as it is and create a new section for removing and replacing from the ends of the calibration curve. Richard volunteered to craft some language for replacing at the high and low ends and then circulate it to the group. He would make it clear you can only replace one level.

The next call was scheduled for November 1, 2:00 – 3:30 pm Eastern Time.

5 – Adjournment

The call was adjourned at 3:30 pm EDT.