

**Draft**  
**Chemistry Expert Committee**  
**Public Meeting Summary**

**January 10, 2023**

The Committee met during the TNI Forum on Environmental Accreditation in San Antonio, Texas at 8:00 AM CT. Committee Chair Michelle Wade led the meeting. The meeting was recorded for participants who could not attend in person. Michelle introduced committee members present and illustrated the other members unable to participate in the San Antonio meeting.

**Introduction CEC members and Attendance**

Michelle Wade, A2LA Workplace Training (Other) - Chair	Present
Tony Francis, Saw Environmental (Other) - Vice Chair	Present
Joseph Manzella, OCSD (lab)	Absent
Jay Armstrong, VA DGS (AB)	Absent
Nicole Cairns, NYS DOH (Lab)	Absent
Paula Blaze, NJ DEP (AB)	Absent
Max Patterson, UT DOH (AB)	Absent
Charles Neslund, Eurofins (Lab)	Absent
Karna Holquist, Texas Commission on Environmental Quality (Lab)	Present
Calista Daigle, Pace (Lab)	Present
Anand Mudambi, US EPA	Present
Ali Boren, State of Vermont (AB)	Absent
Lee Wolf, Consultant (Other)	Absent
Chad Stoike, ALS Global (Lab)	Absent
Robert Wyeth, Program Administrator	Present

**Review of 2022 CEC Activities**

Michelle reviewed the activities of the committee during 2022 by first describing activities with SIRs which were not individually discussed but were recognized as having represented a significant amount of time of the committee. 2022 also saw the presentation and approval of the NOI to modify EL V1M4. To that end, the committee established multiple work groups to review and recommend changes in the module to keep pace with technological, regulatory or method changes in environmental analytical chemical testing. The process generally includes the review of sections of the module, suggestions change or clarify module language, presentation to the full committee and following full committee approval, the preparation of a revised draft standard (DS).

The established work groups were specific to the following sections of EL V1M4. All other sections of the module are being addressed by the entire committee.

- 1.4 /1.5 Method Selection Method Validation LOD/LOQ (Validation/Verification)
- 1.6 Demonstration of Capability
- 1.7.1 Calibration
- 1.7.2 Quality Control and 1.7.3 Data Acceptance 1.7.4 Sample Handling

### **Review of 2022 SIRs**

As presented above, Michelle did not review/discuss all the individual SIR (although those SIR debated in 2022 were presented on in the PowerPoint presentation) but advised the attendees that the major topics being addressed were detection limits, number of calibration points, relative error, demonstration of capabilities and segmented calibration curves or point-to-point calibration requirements for test such as those conducted by Ion Specific Electrodes (ISE).

As an example of the SIR process, Michelle presented SIR 437 and the response to SIR 390. Michelle also described the LASEC/AC process of determining the validity of every submitted SIR.

### **V1M4 Revision – Work group Summaries**

The first work group was to address sections 1.4 Method Selection Method Validation and 1.5 LOD/LOQ. Due conflicting schedules, the progress of this group has been less than anticipated and no suggestions or proposed language as to changes in these sections will be presented. The work group is being re-structured to enhance their progress and attendees were invited to participate in this effort.

The second work group on DOC (section 1,6) has completed their review and as presented at the TNI meeting in August is formulating their recommendations for the committee's consideration. Notes from the August meeting of the CEC are available on the TNI website.

The Calibration work group has also completed their review of section 1.7 and has been presenting their recommendations to the full committee. During open discussion some of the proposed changes to the calibration section of the module will be reviewed in detail for purposes of receiving public comment.

For the Quality Control, Data Acceptance, and Sample Handling portions of EL V1M4 (sections 1.7.2, 1.7.3 and 1.7.4, respectively), the work group has completed their review and is formulating their recommendations for the committee's consideration.

### **Open Discussion**

Eric Davis, a past member and now associate member of the CEC and participant in the work group, led the presentation and discussion of proposed changes in Section 1.6 of EL V1M4. During the presentation/discussion comments and issues from attendees were noted in the file used to present said proposed changes. This file relative to Section 1.6 is presented below.

In addition to those notations in the file below, general comments and observations directed at Section 1.6 are as follows (some of these comments and observations may already be incorporated in the file below).

- 1.6.1.c requires clarification, revised language maybe be more appropriately presented earlier in the section
- Suggested that the entire section may need complete restructuring; two separate sections. After section on laboratory demonstration of competence, new section for Initial and a second for on-going
- Record retention for Individual Analyst DOC maintained in perpetuity... no need to hold more than the 5-year (or lab defined) record retention policy (SIR 339 partially addressed this issue)
- 1.6.2 presented with little or no comment
- 1.6.3 presents the term technology which requires clarification (work with QMS EC)
- 1.6.3.3 should remove 2<sup>nd</sup> sentence and/or relocate within the section
- Suggest changing title on on-going to “continued”, “annual”, or ‘renewed”



V1M4 02 02 2022  
CEC workgroup sectic

Michelle Wade, the work group coordinator, presented the work groups proposed changes to the section on calibration and led the discussion of these changes for Section 1.7 of EL V1M4. During the presentation/discussion comments and issues from attendees were noted in the file used to present said proposed changes. This file relative to Section 1.7 is presented below.

In addition to those notations in the file below, general comments and observations directed at Section 1. are as follows (some of these comments and observations may already be incorporated in the file below).

- Abundant discussion was initiated on most parts of Section 1.7.1 of EL V1M4
- Questions focused on the number of standards required; if method says 5 points, can you run only three because of your range of interest
- Clarification needed in 1.7.1.1.e)iii.
- Should the Table in this section include Point-to-Point (Segmented) calibration
- Electrometric method calibrations are based upon the log of the concentration
- See there any method that doesn't specify the number of calibration standards, since method requirements “rule”, is this section even relevant
- Suggested that the work group get rid of the table and specify minimum numbers required
- Commentor suggested that regardless of what is in old/other methods, 3 point calibration is insufficient for acceptable quality

- Suggested that the topic and issues surrounding ISE calibration be handled separately in a new section of the module
- Pointed out that pH and conductivity are not ISE and may require separate consideration
- Suggested that if ISE and other tests not handled separately that a section on Segmented or Point-to-Point calibration is needed
- Clarification of Linear Dynamic Range (LDR) and use of a one-point calibration is required
- ISE and other tests require measurement of relative error
- Need to somehow verify all calibrations
- As EL V1M4 speaks to what is required and not how to accomplish said requirements, new guidance is likely needed to address ISE and other tests
- Aroclor statement in M4 says to use the method requirements but is in conflict with other sections of the module. Is this statement even necessary if compliance with method is acceptable...state an exception
- Comment of “batch” versus “run” ...believe as defined in glossary; not an issue
- For pre-calibrated instruments supplied by instrument vendors, how can calibration verification be made...one suggestion is that calibration be simply verify by standards analysis and then be exempt from other requirements
- Suggested that provision of manufacture/vendor certificate of authenticity (or by whatever name) be sufficient for compliance with QMS section 4.6.1
- Current standard requires lab to demonstrate materials/equipment provide for quality data; if materials have appropriate certificate, there should be no further requirement upon the lab
- Shouldn't matter who does the certification but only that the lab can demonstrate it is acceptable
- Question raised of what adequate certificate content is
- Reference was made to Section 5.4 of EL V1M2 but was not recorded



Calibration  
Workgroup Working I

The final work group being discussed was relative to proposed changes in sections on quality control, data acceptance and sample handling (Sections 1.7.2, 1.7.3 and 1.7.4 respectively of EL V1M4). Tony Francis, the leader of this work group presented their proposed recommendations.

During the presentation/discussion comments and issues from attendees were noted in the file used to present said proposed changes. This file relative to these specific sections is presented below.

In addition to those notations in the file below, general comments and observations directed at Section 1. are as follows (some of these comments and observations may already be incorporated in the file below).

- Suggestion was made to change the use of the terms negative and positive controls to simply “method blanks” and “LCS”.
- Language clarification was requested in Section 1.7.2.1.c
- In section 1.7.2.2.1 the use of the term handling was suggested to be ambiguous

Time restrictions did not permit any further discussion of these sections of EL V1M4.



CEC Workgroup  
V1M4 1.7.2 and 1.7.3.

Bob and Michelle thanked the attendees for their participation and suggestions/comments. Michelle invited all interested parties to continue to provide any additional comments for the committee’s consideration. Progress in the changes in EL V1M4 can be seen in CEC meeting minutes on the TNI website. Bob also welcomed all interested parties to join the CEC and advised that there is an open full (voting) member position available and those interested can indicate said interest on the committee application form also on the TNI website.

The meeting was adjourned at 12:00 PM CT. The next meeting of the Chemistry Expert Committee is scheduled for Wednesday February 1, 2023.

## **Attachment 1**

**Chemistry Expert Committee  
2023 Forum on Environmental Accreditation  
January 10, 2023; 8:00 AM  
San Antonio, Texas**

### **Agenda**

- Introduction of CEC Members/Attendance
- Review of 2022 CEC Activities
- Review or 2022 SIRs
- V1M4 Revision – Work group Summaries

- 1.4 /1.5 Method Selection Method Validation LOD/LOQ (Validation/Verification)
- 1.6 Demonstration of Capability
- 1.7.1 Calibration
- 1.7.2 Quality Control and 1.7.3 Data Acceptance 1.7.4 Sample Handling
- Open Discussion on V1M4 Changes