

**Whole Effluent Toxicity Testing Expert Committee Meeting Summary**  
**January 20, 2021 1:00 pm Eastern**

**1. Welcome and Announcements**

Rami welcomed everyone to the meeting. Attendance is recorded in Attachment 1, below. Rami thanked all of the outgoing members and encouraged them to remain as associates on the committee, and then thanked the new members who will make up the roster at the February meeting. There were no changes to the agenda, which is in Attachment 2, below. Chris Pasch moved and Sarah seconded that the minutes of December 16 be approved, and the vote was unanimously in favor, with Ginger and Steve Rewa abstaining due to their absence.

**2. Updates**

Confirmation of New Members – the Chair of the Consensus Standards Development Executive Committee has approved all newly elected members.

DOC presentation to NELAP Accreditation Council – Rami and Pete participated in the NELAP AC call on January 4 to present the committee’s concept for individual demonstration of competency. The final documents had minor edits from the December meeting, and were distributed with today’s meeting reminder. There were few questions, but Council members indicated that they will ask their AB’s WET assessors to review the concept. Rami will return for the Council’s April meeting to receive comments and address any further questions.

Plans for joint meeting w/ PTPEC/PTEC (Monday afternoon, January 25, 2 pm Eastern) – this is a follow-on to the “Instructions for PT Providers” that was prepared by the committee and sent to the PT Program Executive Committee last year. Hopefully, the discussion at this session will provide a path towards standardizing PT conditions to improve the usefulness of PT results. Rami indicated that he would provide information to the other committee chairs for presentation, including a representation of the multiple options for test conditions if PTs are done “per the permit”. He used Fathead Minnow acute tests iterations as the example, listing 16 options (24/48/96 hours, static and static-renewal, 3 water types and varying numbers of replicates).

Assessor Training Errata Sheet – a response to the requested errata sheet was received in the evening before this meeting. The five members who reviewed the slides are asked to look at the trainer’s feedback and then a teleconference will be scheduled in February. Lynn sent the file to the original reviewers, shortly after the meeting.

Data Interpretation Training – Natalie held a workgroup meeting earlier in the week. They agreed on a September time for offering the training, with draft materials ready for committee review in late June. She asked for feedback about areas of the methods or guidance documents that need more clarification, and also about how much detail to include. Stephen noted that many groups are doing related work and also looking for ways to minimize the use of vertebrates in WET testing, and stated that the SETAC Aquatic Toxicity Interest Group is likely to be interested in this training. He also noted that a study is underway to improve the laboratory performance of the chronic *C. dubia* test, and provided a URL for the study, [https://www.waterboards.ca.gov/water\\_issues/programs/state\\_implementation\\_policy/tx\\_ass\\_cntrl.html](https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_cntrl.html), see the *C. dubia* study section. (Katie, Rami, Stephen and John with Natalie and Teresa)

Method Codes for WET Analyses (Michele, Ginger and maybe Teresa) – resume in February/March

LAMS Clean-up for WET Methods (Rami, Michele and Elizabeth) – still on hold

### 3. Method Validation

At long last, this next section (Method Validation, section 1.5) of the standard module came up for discussion. Pete had earlier provided some draft language and communicated with the Quality Systems (QS) Expert Committee Chair about the QS module (V1M2) language, but the DOC conversations kept pushing validation beyond the meeting's time limitations.

Pete began by noting that the ISO language in V1M2 describes an extensive process for method validation, but when he reached out the QS Chair, Jessica Jensen, she pointed to section 5.4.5 that requires all methods to be validated by the lab and explained that for peer-reviewed and published or promulgated methods, that typically means verifying that the method works by running several standards. The microbiology portion of V1M2's validation section relates better to WET testing than does the chemistry portion, with its reference to PT studies and assessing the accuracy, precision and selectivity of the method.

He posed the question, what do we want included in V1M7? Should we address validation only for methods that will be accredited, or for every method that a lab runs? There was general consensus that exploratory methods [Toxicity Identification Evaluations (TIEs) and Toxicity Reduction Evaluations (TREs)] do not need multi-lab validation as they are typically one-of-a-kind projects applicable to specific effluents.

However, one participant described that at least one region of California State requires non-standard methods for certain toxicants such as pyrethroids, and that regional state authority allows each lab to define its own method. Experience showed that test results varied widely across different laboratories in this situation, and thus it seems desirable to have prescriptive guidance for method development in such cases. Discussion progressed to a consensus about the need for some flexibility as there may be a spectrum of toxicants that require these non-standard methods, and then agreement was reached on a list of factors that needed to be considered when developing a new method:

Adsorption/Absorption	# of Replicates
Degradation of substrate	Sensitivity/organism response
Loading	Renewal frequency
Feeding	Hydro-phobic/-philic toxicants

Participants agreed that the lab should create and maintain documentation supporting the decision choices around each factor, providing traceability for the method development process.

So, V1M7 should specify that new methods specific to one lab would need to be fully validated by running five reference toxicant tests with the new method, obtaining successful completion rate for those SRTs, and evaluating the results against test acceptability criteria that were defined prior to and during method development (NOT post-development).

However, "standard" methods (those published by EPA, APHA, OECD, ASTM, Environment Canada and perhaps other groups) would need only verification that the laboratory can run them successfully, as they would already have undergone multi-lab validation prior to publication. Verification would be running the standard method successfully with a defined number of SRTs.

Another participant asked about how this scheme would fit into the QS checklist that's used for laboratory accreditation, when the lab uses only EPA published methods. That checklist is available at <https://nelac-institute.org/content/NELAP/qscheck2016-access.php>, or <https://nelac-institute.org/content/NELAP/qscheck2009-access.php> if the AB has not yet implemented the 2016 TNI Standard.

The Method Selection section 1.4 was not discussed.

NOTE: Pete provided revised draft language for section 1.5 shortly after the meeting, and that language (as incorporated into the updated draft) will be distributed with these minutes).

#### **4. QC Section 1.7**

With only fifteen minutes remaining in the meeting, Steve said that he was not ready to begin discussion of his proposed edits to this section.

However, several months ago, Elizabeth had volunteered to revise the introductory sections of V1M7 (sections 1.1 through 1.3.2) and since the meeting reminder was sent out, she had reviewed those sections and provided her input. While her revision of the draft module was not distributed prior to the meeting, she discussed her efforts briefly. After several attempts, she determined that there was no better way to revise section 1.1, and participants seemed to agree that keeping the broad coverage of WET, soil and sediment, and non-regulatory testing is desirable. She did recommend adding a definition for Standard Reference Toxicant, and provided a draft (strawman) for discussion. The version with Elizabeth's edits will be distributed with these minutes.

#### **5. New Business**

There was no new business.

Elizabeth moved and Chris Pasch seconded that the meeting be adjourned at 2:35 pm Eastern.

#### **6. Next Meeting**

The next teleconference meeting will be on Wednesday, February 17, 2020, at 1 pm Eastern. An agenda and any needed documents will be sent in advance.

For individuals registered for the winter conference, the joint committee meeting will be on Monday afternoon, January 25, at 2 pm Eastern.

**Attachment 1**

**WET Expert Committee Membership**

<b>Member</b>	<b>Affiliation</b>	<b>Email</b>	<b>Category</b>	<b>Term Expiration</b>	<b>Present</b>
Ginger Briggs	Bio-Analytical Laboratories	<a href="mailto:bal@bioanalyticallabs.com">bal@bioanalyticallabs.com</a>	Lab	Jan. 2021 (2)	Yes
Chris Burbage	Hampton Roads Sanitation District	<a href="mailto:cburbage@hrsd.com">cburbage@hrsd.com</a>	Lab	Jan. 2021 (2)	No
Kari Fleming	WI DNR	<a href="mailto:kari.fleming@wisconsin.gov">kari.fleming@wisconsin.gov</a>	AB	Jan. 2021 (2)	Yes
Amy Hackman	PA Dept. Environ. Prot.	<a href="mailto:ahackman@pa.gov">ahackman@pa.gov</a>	AB	Jan. 2021 (2)	No
Sarah Hughes	Shell Oil Co.	<a href="mailto:s.hughes@shell.com">s.hughes@shell.com</a>	Other	Jan. 2022 (1)	Yes
Pete De Lisle (Vice Chair)	Coastal Bioanalysts Inc.	<a href="mailto:pfd@coastalbio.com">pfd@coastalbio.com</a>	Lab	Jan. 2021 (2)	Yes
Rami Naddy (Chair)	TRE Env. Strat. LLC	<a href="mailto:naddyrb.tre@gmail.com">naddyrb.tre@gmail.com</a>	Lab	Jan. 2021 (2)	Yes
Teresa Norberg-King	USEPA	<a href="mailto:norberg-king.teresa@epa.gov">norberg-king.teresa@epa.gov</a>	Other (Affiliate)	Jan. 2021 (2)	No
Mark O'Neil	Environmental Enterprises USA, Inc.	<a href="mailto:moneil@eeusa.com">moneil@eeusa.com</a>	Lab	Jan. 2021 (1)	No
John Overbey	American Interplex Corp.	<a href="mailto:joverbey@americaninterplex.com">joverbey@americaninterplex.com</a>	Lab	Jan. 2021 (1)	Yes
Chris Pasch	Alan Plummer Associates, Inc.	<a href="mailto:cpasch@apaienv.com">cpasch@apaienv.com</a>	Other	Jan. 2021 (2)	Yes
Michael Pfeil	Texas Comm. Environ. Quality	<a href="mailto:Michael.pfeil@tceq.texas.gov">Michael.pfeil@tceq.texas.gov</a>	AB	Jan. 2021 (2)	Yes
Michele Potter	NJ Dept. of Environ Protect.	<a href="mailto:Michele.Potter@dep.nj.gov">Michele.Potter@dep.nj.gov</a>	AB	Jan. 2021 (2)	No
Steven Rewa	Env. Resources Management	<a href="mailto:steven.rewa@erm.com">steven.rewa@erm.com</a>	Lab	Jan. 2021 (2)	Yes
Elizabeth West	LA DEQ LELAP	<a href="mailto:elizabeth.west@la.gov">elizabeth.west@la.gov</a>	AB	Jan. 2021 (2)	Yes
<b>Associate Members</b>					
Sylvia Bogdan	EPA R6	<a href="mailto:Bogdan.sylvia@epa.gov">Bogdan.sylvia@epa.gov</a>	Other (Assoc.)		No
Steve Boggs	CA ELAP	<a href="mailto:steve.boggs@waterboards.ca.gov">steve.boggs@waterboards.ca.gov</a>	Other (Assoc.)		Yes
Dwayne Burkholder	PA DEP	<a href="mailto:dburkholde@pa.gov">dburkholde@pa.gov</a>	AB (assoc.)		No
David Caldwell	OK DEQ	<a href="mailto:David.caldwell@deq.ok.gov">David.caldwell@deq.ok.gov</a>	AB (assoc.)		Yes

Antoine Chamsi	East Bay Municipal Utility Dist.	<a href="mailto:antoine.chamsi@ebmud.com">antoine.chamsi@ebmud.com</a>	Lab (Assoc.)		Yes
Thekkekalathil "Chandra" Chandrasekhar	FL DEP	<a href="mailto:Thekkekalathil.Chandrasekhar@dep.state.fl.us">Thekkekalathil.Chandrasekhar@dep.state.fl.us</a>	Lab (Assoc.)		Yes
Michael Chanov	EA Eng., Sci. &Tech.	<a href="mailto:mchanov@eaest.com">mchanov@eaest.com</a>	Lab (Assoc.)		No
Stephen Clark	Pacific EcoRisk	<a href="mailto:slclark@pacificecorisk.com">slclark@pacificecorisk.com</a>	Lab (Assoc.)		Yes
Erin Consuegra	ERA LAB	<a href="mailto:econsuegra@eralab.com">econsuegra@eralab.com</a>	Lab (Assoc.)		No
Kevin Dischler	Element Materials Technology	<a href="mailto:Kevin.dischler@element.com">Kevin.dischler@element.com</a>	Lab (Assoc.)		No
Monica Eues	CK Associates	<a href="mailto:Monica.eues@c-ka.com">Monica.eues@c-ka.com</a>	Lab (Assoc.)		No
Nicole Fortin	Honolulu City Lab	<a href="mailto:nfortin@honolulu.gov">nfortin@honolulu.gov</a>	Lab (Assoc.)		No
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David Johnston	Valero Refining Co - Benecia	<a href="mailto:david.johnston@valero.com">david.johnston@valero.com</a>	Lab (Assoc.)		No
Paul Junio	Northern Lake Service, Inc.	<a href="mailto:paulj@nslslab.com">paulj@nslslab.com</a>	Lab (Assoc.)		No
Natalie Love	GEI Consultants	<a href="mailto:nlove@geiconsultants.com">nlove@geiconsultants.com</a>	Lab (Assoc.)		Yes
VelRey Lozano	USEPA Reg. 8	<a href="mailto:Lozano.VelRey@epa.gov">Lozano.VelRey@epa.gov</a>	Other (Assoc.)		No
Rosana McConkey	WA Dept of Ecology	<a href="mailto:rosa461@ECY.WA.GOV">rosa461@ECY.WA.GOV</a>	Non-NELAP AB (Assoc.)		Yes
Marlene Moore	Advanced Systems	<a href="mailto:mmoore@advancedsys.com">mmoore@advancedsys.com</a>	Other (assoc.)		No
Ila Meyer-Fritzsche	VA DCLS	<a href="mailto:ila.meyer-fritzsche@dgs.virginia.gov">ila.meyer-fritzsche@dgs.virginia.gov</a>	AB (assoc.)		Yes
Linda Nemeth		<a href="mailto:lkn1304@gmail.com">lkn1304@gmail.com</a>	Other (assoc.)		No
Katie Payne	Enthalpy Analytical	<a href="mailto:katie.payne@enthalpy.com">katie.payne@enthalpy.com</a>	Lab (Assoc.)		Yes
Christina Pottios	Los Angeles Cty Sanitation Districts	<a href="mailto:cpottios@lacsds.org">cpottios@lacsds.org</a>	Lab (Assoc.)		No
Greg Savitske	US EPA OECA	<a href="mailto:Savitske.gregory@epa.gov">Savitske.gregory@epa.gov</a>	Other (Assoc.)		No
Justin Scott	Cove Sciences	<a href="mailto:justin@covesciences.com">justin@covesciences.com</a>	Lab (Assoc.)		No
Caitie Van Sciver	NJ DEP	<a href="mailto:Caitie.VanSciver@dep.nj.gov">Caitie.VanSciver@dep.nj.gov</a>	AB (assoc.)		Yes

Lem Walker	USEPA OW/OST	<a href="mailto:Walker.lemuel@epa.gov">Walker.lemuel@epa.gov</a>	Other (Assoc.)		No
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Bruce Weckworth	HRSD	<a href="mailto:Bruce.weckworth@hrsd.com">Bruce.weckworth@hrsd.com</a>	Lab (Assoc.)		No
Tom Widera	Pace Labs	<a href="mailto:Thomas.Widera@pacelabs.com">Thomas.Widera@pacelabs.com</a>	Lab (Assoc.)		Yes
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## Attachment 2

### Meeting Agenda for January 20, 2021

- Welcome and Roll Call
- Approval of Agenda and Minutes (December minutes attached)
- Updates
  - CSDEC Chair has confirmed all newly elected members to take effect after conference
  - DOC presentation to NELAP Accreditation Council (Rami & Pete, returning to AC in April, final documents attached FYI only)
  - Plans for joint meeting w/ PTPEC/PTEC [Monday afternoon, January 25, 2 pm Eastern]
  - Assessor Training Errata Sheet – feedback promised by mid-January; nothing received yet.
  - Draft Outline for Data Interpretation Training – (Katie, Rami, Stephen and John with Natalie and Teresa)
  - Method Codes for WET Analyses (Michele, Ginger and maybe Teresa) – resume in February/March
  - LAMS Clean-up for WET Methods (Rami, Michele and Elizabeth) – still on hold
- Review Revisions to §1.5, Method Validation (see attached draft module, Pete contributed the edits)
- Review revisions to §1.7, Essential QC, time permitting (refer to draft module, Steve contributed the edits)
- New Business, if any
- Adjourn