Whole Effluent Toxicity Testing Expert Committee Meeting Summary
June 17, 2020 1:00 pm Eastern

1. Welcome and Announcements

Rami welcomed everyone to the meeting. Attendance is recorded in Attachment 1, below. Rami invited Rosana to introduce herself to the group. The minutes of May 20 were approved by acclamation. There were no changes to the agenda, which is in Attachment 2, below.

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2. Updates for Ongoing Activities

- PT Instructions for PT Providers (Ginger, Pete and Mark)
  - Mark provided a draft of this immediately prior to the meeting (see Attachment 3, below). The document is in two parts – instructions for running the PT samples and also recommended requirements to be placed into the standard, to ensure that the PT data are useful (i.e., comparable to other submitted data). Mark discussed the content of the document, and participants noted that if NOEC is removed from the PT reporting options (as this committee recommends), then some of the requirements would become irrelevant. We will need to check with the PT Expert Committee (PTEC) and the Consensus Standards Development Program and possibly the PT Program itself, to see whether those requirements are best placed in Module 7 (WET) or Module 1 (PT). NOTE: this document was shared with the PTEC as well as the PT Program Executive Committee, and a worthwhile email discussion looks very promising. Both PT groups will discuss the issues in their respective committee meetings and get back to Rami, Pete and Mark.
- Assessor Training Reviews (Stephen, Sarah, Elizabeth, Katie, John and Mike Chanov)
  - Rami will send the errata sheet to be added to the materials given to the trainees, as it was reviewed and okayed by all of the training reviewers
- Draft Outline for Data Interpretation Training (Teresa and Natalie)
  - Teresa hopes to get input from the SETAC WET workgroup meeting but believes that EPA needs to step back from this project and thus will send the outline for distribution to committee members
- Method Codes for WET Analyses (Michele, Ginger and maybe Teresa)
  - Ginger sent a rough draft, Teresa promised to work on this
- LAMS Clean-up for WET Methods (Rami, Michele and Elizabeth)
  - A back burner issue for now
- QC for Support Measurements (Michele and John, Marlene interacting w/ EPA)
  - Put the existing language into the draft revision and proceed
- Analyst IDOC Write-up (Rami)
  - Rami has started on this and discussed the way he plans to present the concept, as having the standard provide two options. The first would be a lab-defined protocol for individual analyst initial DOC and the other would be a more standardized protocol of documented training with two SRTs for each method, and the caveat that state requirements could essentially eliminate the first option

3. Revising the Module

Nearly all of the assigned revisions were provided by the volunteers and these were assembled into a draft module. Because of the complexity of the revision, no effort was made to create a "tracked changes" version, but eventually the final approved version will need to be compared in

some fashion with the 2009 version of the module, so that commenters can see what changes were made and where they occur in the document.

Participants began with discussion of sections 1.1-1.3.2. There is no volunteer yet to revise this introductory portion and the discussion made clear that some decision needs to be reached before it can be revised. The issue is whether the module should address only WET methods that are published and typically are the ones for which accreditation is granted, or if other scopes such as algal, sediment, soil and TIE testing should be specifically included. Participants were able to determine that bioaccumulation and biomonitoring are not going to fall into this module, as those are actually chemical analyses in a biological matrix, and could at some point warrant a separate module. This Module 7 will focus on examinations of the effect of unknown/mixed toxicants on live organisms, but the issue of whether tests beyond whole effluent toxicity should be specifically included remains to be decided since there are fewer published methods for those tests and they are often "investigational" methods.

Pete discussed his approach to the method selection and validation sections 1.4-1.5. He has reached out to the Chair of the Quality Systems Expert Committee for clarification of where the WET module can or should pick up from what is already in the more basic QS module (with which every accredited WET lab must comply already). The fundamental issue is whether a WET lab needs to validate promulgated methods or published methods (which may have had less stringent independent validation) and then also what steps should be taken towards demonstrating effectiveness of the "research" methods that are used for investigational purposes, and typically not accredited anyway. Pete will circulate the end product of his interactions with QS for the July meeting.

The July meeting will begin with discussion of demonstration of capability (DOC).

There was no new business. Chandra moved and Pete seconded that the meeting adjourn, and the time was 2:44 pm Eastern.

4. Next Meeting

The next teleconference meeting will be on Wednesday, July 15, 2020, at 1 pm Eastern. An agenda and any needed documents will be sent in advance.

Attachment 1

WET Expert Committee Membership

Member	Affiliation	Email	Category	Term Expiration	Present
Ginger Briggs	Bio-Analytical Laboratories	bal@bioanalyticallabs.com	Lab	Dec. 2020 (2)	No
Chris Burbage	Hampton Roads Sanitation District	cburbage@hrsd.com	Lab	Dec. 2020 (2)	No
Kari Fleming	WI DNR	kari.fleming@wisconsin.gov	AB	Dec. 2020 (2)	No
Amy Hackman	Penn. Dept. Environ. Protection	ahackman@pa.gov	AB	Dec. 2020 (2)	No
Sarah Hughes	Shell Oil Co.	s.hughes@shell.com	Other	Dec. 2021 (1)	Yes
Pete De Lisle (Vice Chair)	Coastal Bioanalysts Inc.	pfd@coastalbio.com	Lab	Dec. 2020 (2)	Yes
Rami Naddy (Chair)	TRE Env. Strat. LLC	naddyrb.tre@gmail.com	Lab	Dec. 2020 (2)	Yes
Teresa Norberg-King	USEPA	norberg-king.teresa@epa.gov	Other (Affiliate)	Dec. 2020 (2)	Yes
Mark O'Neil	Environmental Enterprises USA, Inc.	moneil@eeusa.com	Lab	Dec. 2022 (1)	Yes
John Overbey	American Interplex Corp.	joverbey@americaninterplex.com	Lab	Dec 2020 (1)	No
Chris Pasch	Alan Plummer Associates, Inc.	cpasch@apaienv.com	Other	Dec. 2020 (2)	Yes
Michael Pfeil	Texas Comm. Environ. Quality	Michael.pfeil@tceq.texas.gov	AB	Dec. 2020 (2)	Yes
Michele Potter	New Jersey Dept. of Environ Protect.	Michele.Potter@dep.nj.gov	AB	Dec. 2020 (2)	No
Steven Rewa	Environmental Resources Management	steven.rewa@erm.com	Lab	Dec. 2020 (2)	No
Elizabeth West	LA DEQ LELAP	elizabeth.west@la.gov	AB	Dec. 2020 (2)	Yes
Associate Members					
Sylvia Bogdan	EPA R6	Bogdan.sylvia@epa.gov	Other (Assoc.)		No
Steve Boggs	CA ELAP	steve.boggs@waterboards.ca.gov	Other (Assoc.)		No
Dwayne Burkholder	PA DEP	dburkholde@pa.gov	AB (assoc.)		No

Antoine Chamsi	East Bay Municipal Utility District	antoine.chamsi@ebmud.com	Lab (Assoc.)		Yes
Thekkekalathil "Chandra" Chandrasekhar	FL DEP	Thekkekalathil.Chandrasekhar@dep.state.fl.us	Lab (Assoc.)		Yes
Michael Chanov	EA Eng., Sci. &Tech.	mchanov@eaest.com	Lab (Assoc.)		No
Stephen Clark	Pacific EcoRisk	slclark@pacificecorisk.com	Lab (Assoc.)		No (Krista Prosser)
Erin Consuegra	ERA LAB	econsuegra@eralab.com	Lab (Assoc.)		No
Kevin Dischler	Element Materials Technology	Kevin.dischler@element.com	Lab (Assoc.)		Yes
Monica Eues	CK Associates	Monica.eues@c-ka.com	Lab (Assoc.)		No
Nicole Fortin	Honolulu City Lab	nfortin@honolulu.gov	Lab (Assoc.)		No
Christina Henderson	Bio-Aquatic Testing, Inc.	chenderson@bio-aquatic.com	Lab (Assoc.)		No
David Johnston	Valero Refining Co - Benecia	david.johnston@valero.com	Lab (Assoc.)		Yes
Natalie Love	GEI Consultants	nlove@geiconsultants.com	Lab (Assoc.)		Yes
VelRey Lozano	USEPA Reg. 8	Lozano.VelRey@epa.gov	Other (Assoc.)		No
Rosana McConkey	WA Dept of Ecology	rosa461@ECY.WA.GOV	Non-NELAP AB (Assoc.)		Yes
Marlene Moore	Advanced Systems	mmoore@advancedsys.com	Other (assoc.)		No
Linda Nemeth		lkn1304@gmail.com	Other (assoc.)		No
Katie Payne	Enthalpy Analytical	katie.payne@enthalpy.com	Lab (Assoc.)		Yes
Christina Pottios	Los Angeles Cty Sanitation Districts	cpottios@lacsd.org	Lab (Assoc.)		No
Greg Savitske	US EPA OECA	Savitske.gregory@epa.gov	Other (Assoc.)		No
Justin Scott	Cove Sciences	justin@covesciences.com	Lab (Assoc.)		No
Lem Walker	USEPA OW/OST	Walker.lemuel@epa.gov	Other (Assoc.)		No
Craig Watts	Hydrosphere Research	cwatts@hydrosphere.net	Lab (Assoc.)		No
Bruce Weckworth	HRSD	Bruce.weckworth@hrsd.com	Lab (Assoc.)		No
Program Administrator: Lynn Bradley, lynn.bradley@nelac-institute.org					

Attachment 2

WET Expert Committee Meeting Agenda, June 17, 2020

- Welcome and Roll Call
- Approval of Minutes (May 20 minutes attached)
- BRIEF Status Updates for Ongoing Tasks
    - PT Instructions for PT Providers (update? -- Ginger, Pete and Mark)
    - Assessor Training Feedback (awaits delivery of errata sheet – Rami)
    - Draft Outline for Data Interpretation Training (awaiting Teresa's update of Natalie's draft)
    - Method Codes for WET Analyses (awaiting more input -- Michele, Ginger and maybe Teresa)
    - LAMS Clean-up for WET Methods (brought up at June NELAP AC meeting -- Rami, Michele and Elizabeth)
    - QC for Support Measurements (still on hold pending definitive info from EPA -- Michele and John, Marlene interacting w/ EPA)
    - Analyst IDOC Write-up (update? -- Rami)
- Revising the Module (new draft with all submitted draft revisions in place attached)
- New Business, if any
- Adjourn

Attachment 3

Suggested Proficiency Testing (PT) Instructions for PT Providers, Draft, June 17, 2020

These are suggested steps to standardize PT instructions for Whole Effluent Toxicity DMR-QA/PT testing to assure and increase the comparability and usefulness of the data generated the studies.

Suggested steps include:

1. Standardize the required number of replicates per test.
2. Standardize the required number of organisms per replicate.
3. Standardize and reduce the age range of test organisms used in the following tests:
    a. DMR-QA Test code 13 and 14 (EPA Method 2000): Pimephales acute tests reduce age range from 1 – 14 days down to 1 – 5 days with a 24 hr range in age.
    b. DMR-QA Test code 46 (EPA Method 2004): Cyprinodon acute test reduce age range from 1 – 14 days down to 1 – 5 (or other such consensus range) days with a 24 hr range in age.

The following additional suggested steps may be best placed into the TNI standard as requirements for the labs to implement.

1. Require labs to affirm that DMR-QA/PT tests were conducted according to the specified test conditions listed in the PT instructions.
2. Require labs to document if any deviations from required test conditions occurred and whether a deviation invalidated the test or not. Some deviations from test conditions would invalidate a test such as incorrect number of replicates used, incorrect number of test organisms per replicate, incorrect test organism age, etc. would not.
3. Require labs to document each test's test acceptability criteria data, for example:
    a. For the negative laboratory performance control in acute tests, document the % survival.
    b. For the negative laboratory performance control in chronic tests, document the % survival and the mean weight per surviving test organism or the mean 3rd-brood reproduction per surviving C. dubia.
4. Require labs to document the sublethal PMSD evaluation for tests where PMSD bounds are established in the EPA test method and when a chronic NOEC test endpoint was reported.
    a. If a test's PMSD is less than or equal to the lower PMSD bound for the test method reported, then the lab must document that the relative % difference from the control of each test concentration tested and that the % relative difference reported for the NOEC is greater than the lower PMSD bound.
    b. If a test's PMSD is above the maximum PMSD bound for the test method then the NOEC shall not be reported.
5. Require labs to document the evaluation of interrupted dose-response curves for tests where an interrupted dose-response occurs and an NOEC test endpoint is reported. The lab shall document the statistical significance or non-significance of every test concentration subsequently to the PMSD evaluation in #4 above
    a. Lab shall evaluation dose-response curves per EPA 821-B-00-004 Method Guidance and Recommendations for Whole Effluent (WET) Testing (40 CFR Part 136).
6. Require labs to document the source of test organisms used in a DMR-QA/PT test.