Whole Effluent Toxicity Testing Expert Committee Meeting
October 16, 2024 1:00 pm Eastern

1. Welcome and Announcements

Teresa welcomed everyone to the meeting. Attendance is recorded in Attachment 1, below. The agenda was approved by unanimous consent. The minutes of September 18, 2024, were approved unanimously after a motion by Darrin, seconded by Chandra, with Beth abstaining due to her absence from that meeting.

2. Discussion with Craig Huff, Chair, PTPEC WET FoPT Subcommittee

Craig briefly explained the WET FoPT Subcommittee's Charter authorizes it to look at the five most recent DMRQA studies and recommend changes to the WET PT program, specifically the acceptance limits for WET PT results. Data from three WET PT providers (PTPs), from DMRQA studies 38 through 42, were examined but for LC50 and IC25 endpoints, the data are so scattered that the subcommittee cannot see a way to improve the performance. Although the specific conditions of testing (temperature, numbers of organisms, water type) are not reported with PT results, the suspicion is that not all WET labs are performing PTs the same way. A suggestion was that perhaps PTPs could specify the numbers of organisms for tests with LC50 and IC25 endpoints.

The following discussion points were made:

- Unless all labs control variables the same way, the scatter of results will continue.
- The DMRQA needs changes, as it still requires labs to follow the permit. Variables are not consistent across permits, and in order to have comparable data, all PTs must be run the same way.
- Perhaps setting minimum acceptance criteria is a way to move forward. If the criteria now are, for example, 2 – 25%, make the range no more than 10%.
- Setting tighter limits would cause more labs to fail the PT studies.
- Standard deviation data from the last six studies suggest that tighter limits would not cause more failures. One study's failure rate was 20%, another was 6%, and one study had 13-56% acceptance limit.
- It is unclear what "acceptance rate" actually means.
- The small size of each set of studies (each method/organism) is definitely a factor in the scatter.
- While narrowing the acceptance limit should let more labs pass their PTs, that solution is a Band-Aid and does not address the non-comparability of the data for each individual PT (method/organism).
- Having PTPs specify test conditions is a good way to address the problem.
- All agree that the current situation is "not fair" and undesirable.
- The problem is not how we look at the data but how the data are generated.
- At least we now have hard data showing that PTs as currently run and evaluated do not constitute a valid interlaboratory study.

Craig noted that the Subcommittee is scheduled to meet the following week, and he will send examples (by reply-to-all email) of the data he's discussing. Comments should be returned to him and Teresa, with a copy to Lynn.

3. Technical Specialist Qualifications for WET Labs

Teresa asked Lynn to explain the Technical Specialist (TS) qualification issue. WET agreed on desired qualifications, in early 2023, but now the scheme has changed so that the Quality

Systems module, V1M2, will have only one set of qualifications (instead of specifics for each of the technical modules, modules 3 - 7) and any additional or different qualification requirements will be placed in the technical modules. The thinking is that the Quality Management Systems Expert Committee is not qualified to defend the requirements established by other expert committees.

The qualifications set by WET, earlier, and the language proposed to be in V1M2 now, for Technical Specialists were compared, and are provided here as illustration. A new section 4 is being added to Modules 2 through 7 to address Technical Specialist qualifications.

Agreed-upon WET TS qualifications 2023	**Draft Qualifications – V1M2 Revision 2024**
Any technical specialist responsible for toxicity testing shall be a person with: an earned bachelor's degree in biological sciences, chemistry, physical sciences, environmental sciences or environmental engineering; successful completion of four (4) college-level biological or environmental science courses; and two (2) years of experience in all parts of the analysis of toxicity testing of environmental samples representative of the analyses for which the technical specialist will be responsible. An earned master's or doctoral degree in one of the above disciplines may be substituted for one (1) year of experience. Additional years of experience working in an environmental toxicity laboratory may be substituted for up to two (2) of the courses specified above. One (1) year of experience shall substitute for one (1) course.	A technical specialist must meet one set of the following minimum qualifications for which they are responsible, where the required experience is in each corresponding analytical discipline(s) and can occur simultaneously: a bachelor's, master's or doctoral degree and one (1) year of experience, four (4) college level STEM (science, technology, engineering, math) courses and three (3) years of experience, be a full-time employee of a drinking water or sewage treatment facility who holds a valid treatment plant operator's certificate appropriate to the nature and size of such facility and have two (2) years of experience, or TNI technical specialist credential for each analytical discipline and one (1) year of experience.

Participants decided that the type of degree needs to be retained for WET TS, and that the four STEM courses (from draft V1M2 language) may be part of the college degree although they could be completed separately. Participants also agreed that an operator's certificate would not be acceptable for a WET lab, regardless of experience, but that once the TS credential becomes available, that would be acceptable with a year of experience.

4. Prepare for Committee Vote on Draft Module

Teresa will go through the module, remove all resolved comments, and highlight issues remaining to be addressed. The next steps will be:

- Double check for comment stragglers.
- Each member review the entire module for any questions or concerns you might have.
- Once all concerns are resolved, a committee vote must be taken to approve the draft module as "final" so that it can be published for comment. NOTE: Each voting member is required to vote, either "yes", "Yes with comment" or "No with comment". All "no" votes MUST include a comment of what the concern is, and the full committee must address that concern and re-vote. The reason for this level of approval is that, if there are no persuasive comments

submitted, the module as presented will become the final module for the revised complete standard.

One negative comment was raised, that the parenthetical reference to the use of thiosulfate in 7.1.2 should either be removed or changed from “must” to “may” as the EPA method does not mandate thiosulfate use; it can have damaging effects on organisms.

5. New Business

The meeting was adjourned by unanimous consent.

6. Next Meeting

The next teleconference meeting will be on **Wednesday, November 20, 2024, at 1 pm Eastern.** A Microsoft Teams link for screen-sharing or just a telephone option will be provided with the agenda and any needed documents, in advance of the meeting.

Attachment 1

WET Expert Committee Membership

Member	Affiliation	Email	Category	Term Expiration	Present
Beth Biller	VA DCLS	Beth.biller@dgs.virginia.gov	AB	Jan. 2026 (1)	Yes
Thekkekalathil "Chandra" Chandrasekhar	FL DEP	Thekkekalathil.Chandrasekhar@dep.state.fl.us	Lab	Jan. 2027 (2)	Yes
Stephen Clark (Vice Chair)	Pacific EcoRisk	slclark@pacificecorisk.com	Lab	Jan. 2027 (2)	No
Darrin Greenstein	Southern CA Coastal Water Research Proj.	Darring@sccwrp.org	Other	Jan. 2026 (1)	Yes
Christina Henderson	Bio-Aquatic Testing, Inc.	chenderson@bio-aquatic.com	Lab	Jan. 2026 (1)	Yes
Teresa Norberg-King (Chair)	USEPA (retired)	Norbe010@d.umn.edu	Other (Affiliate)	Jan. 2027	Yes
Katie Payne	Enthalpy Analytical	katie.payne@enthalpy.com	Lab	Jan. 2027 (1)	No
Caitie Van Sciver	NJ DEP	Caitie.VanSciver@dep.nj.gov	AB	Jan. 2027 (2)	Yes
Lyndsay Thomas	Coastal Bioanalysts, Inc.	lyndsay@coastalbio.com	Lab	Jan. 2026 (1)	Yes
Gretchen Welfinger	NY ELAP	gretchen.welfinger@health.ny.gov	AB	Jan. 2027 (1)	Yes
Elizabeth West	Retired	eawest1111@gmail.com	Other	Jan. 2027 (1)	Yes
Associate Members					
Steve Boggs	CA ELAP	steve.boggs@waterboards.ca.gov	AB (assoc.)		No
Sarah Brown	Cove Environmental	sarah@covesciences.com	Lab (assoc.)		No
Ginger Briggs	Bio-Analytical Laboratories	bal@bioanalyticallabs.com	Lab (assoc.)		No
Antoine Chamsi	East Bay Muni-cipal Utility Dist.	antoine.chamsi@ebmud.com	Lab (Assoc.)		Yes
MaryAnn Concepcion	SF Water	Mconcepcion@sfwater.org	Lab (Assoc.)		No
Laura Connolly	SF Water	leconnolly@sfwater.org	Lab (Assoc.)		No
Erin Consuegra	ERA Lab	econsuegra@eralab.com	Lab (Assoc.)		No
Helen Conrad	North Water Dist. Lab. Svcs.	helen.conrad@nwdls.com	Lab (Assoc.)		No

Amy Hackman	PA Dept. Environ. Prot.	ahackman@pa.gov	AB (assoc.)		No
Paul Junio	Pace Laboratories	paul.junio@pacelabs.com	Lab (Assoc.)		Yes
Arianna Krueger	Coastal Bioanalysts, Inc.	arianna@coastalbio.com	Lab (Assoc.)		No
Cody Medley	Pace Labs	Cody.medley@pacelabs.com	Lab (Assoc.)		No
Kathi Mitchell	RMB Environ-mental Labora-tories, Inc.	Kathleen.Mitchell@rmbel.info	Lab (Assoc.)		No
Marlene Moore	Advanced Systems	mmoore@advancedsys.com	Other (assoc.)		No
Rami Naddy	TRE Env. Strat. LLC	naddyrb.tre@gmail.com	Lab (Assoc.)		No
John Overbey	Eurofins Arkansas	joverbey@et.eurofinsus.com	Lab (Assoc.)		No
Michele Potter	NJ Dept. of Environ Protect.	Michele.Potter@dep.nj.gov	AB (assoc.)		No
Christina Pottios	Los Angeles Cty. Sanitation Districts	cpottios@lacsd.org	Lab (Assoc.)		Yes
Jessica Redifer	EA Eng., Sci. &Tech.	jredifer@eaest.com	Lab (Assoc.)		Yes
Mary Ann Rempel-Hester	EcoAnalysts, Inc.	mrempel@ecoanalysts.com	Lab (Assoc.)		Yes
Greg Savitske	US EPA OECA	Savitske.gregory@epa.gov	Other (Assoc.)		No
Justin Seikel	NEORSD	seikelj@neorsd.org	Lab (Assoc.)		Yes
Cavan Smith	NEORSD	SmithCavan@neorsd.org	Lab (Assoc.)		Yes
Alex Tite	EnviroScience	atite@enviroscienceinc.com	Lab (Assoc.)		No
Elizabeth Turner	Eurofins	elizabeth.turner@et.eurofinsus.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
Jennifer Whitaker	Trinity River Authority of TX	whitakerj@trinityra.org	Lab (Assoc.)		Yes
Guest: Craig Huff, Chair, PTPEC WET FoPT Subcommittee, craig_huff@waters.com					
Program Administrator: Lynn Bradley, lynn.bradley@nelac-institute.org					

Attachment 2 – Agenda, October 16, 2024

- Welcome and Roll Call
- Approval of Agenda
- Approval of Minutes (September minutes attached)
- Discussion with Craig Huff, Chair, PTPEC WET FoPT Subcommittee
- Technical Specialist Qualifications for WET Labs (required new section 4 of draft module, attached)
    - Review Consensus TS Qualification Requirements from 2023 (attached as "preferred qualifications")
    - Consider Language Intended for Quality Management Systems Module (inserted in draft V1M7, see full text in file QMS language)
    - Determine Whether V1M7 Needs Additional WET Qualifications, or if QMS Language is Sufficient
    - Resolve Remaining Few Comments in Draft Module
- Prepare for Committee Vote on Draft Module
- New Business, if any
- Adjourn