

DEVELOPMENT OF QUALITY ASSURANCE RECOMMENDATIONS FOR THE *CERIODAPHNIA DUBIA* TOXICITY TEST

Stakeholder Advisory Committee Meeting #11

**Draft Meeting Minutes
Tuesday, March 28, 2023**

Held remotely via Zoom

List of Participants:

Facilitators:

- Alvina Mehinto (SCCWRP)
- Ken Schiff (SCCWRP)

Stakeholder Committee members:

- State Water Board - Katie Fong (SWRCB)
- US Environmental Protection Agency – Amelia Whitson (EPA Region 9)
- Regional Water Quality Control Boards - Veronica Cuevas (RWQCB4)
- Wastewater Agencies - Mitch Mysliwicz (Larry Walker Assoc/CASA)
- Stormwater Agencies - Jian Peng (Orange County Public Works/CASQA)
- Agriculture Organizations - Sarah Lopez (Central Coast Water Quality Preservation Inc)
- Private Laboratories -Peter Arth (Enthalpy Laboratories)
- Public Laboratories - Josh Westfall (Los Angeles County Sanitation Districts)
- Non-Governmental Agencies - Annelisa Moe (Heal the Bay)
- State Environmental Laboratory Accreditation Program - Steve Boggs (SWRCB)

The public meeting started at 9:04 AM

1- Opening remarks

Alvina Mehinto kicked off the meeting reviewing the agenda and Stakeholder Committee members providing self-introductions. She stated the goal of the meeting was for the Stakeholder Committee to vet the list of lab techniques proposed by the laboratories for standardization in the upcoming second intercalibration study and provide the Committee's recommendation to the Science Panel.

2- Approval of minutes from the last Stakeholder Committee meeting

Alvina had received only minor wording changes to the minutes from Committee members. Motioned by Mitch Mysliwicz and seconded by Josh Westfall, the Committee approved the minutes of their last meeting held on February 27, 2023.

3- Review of progress for Task 2

Alvina provided an overview of the activities performed since the last Committee meeting including: a) laboratory visits by members of the Science Panel, and b) the Roundtable workshop with ELAP accredited laboratories. After providing some procedural details of how these activities unfolded, a Committee member asked about the openness of the laboratories during these activities. Alvina emphasized that the laboratories visited remain anonymous. Ken Schiff stated the laboratories were engaging, communicative, and participated openly during both the Science Panel visits and the laboratory roundtable workshop.

4- Roundtable workshop

Alvina described the workshop process including the equal opportunity for each laboratory to describe their concerns and recommended priorities for standardization in the second intercalibration. The workshop was divided into four categories including culturing, food and feeding, testing, and documentation.

Alvina provided the list of items to standardize from the laboratories during the workshop:

- Limit age of adults used to start the test to 6-10 days old. Record which brood number is used to start the test.
- Quantify density of food in test chambers. Provide feeding methods.
- Food holding times of YCT \leq 7 days after thawing and algae \leq 21 days. Record creation date.
- Evaluate brood boards using common set of health criteria.
- Run test for 8 days AND record when labs would have ended the test.
- Document split broods on bench sheets at the time of observation.
- Document dilution water treatment system and holding time (checklist format).
- Renew test boards daily within a + or - 2-hr window from test initiation.
- Evaluate brood board health for 2 weeks prior to testing.
- Require randomization by blocking of known parentage AND randomization of cups on the test board.

And the list of items discussed, but not standardized:

- Age of animals used to initiate tests
- Surrogate for water quality
- Feeding methods

The Committee representatives from private and public laboratories were given the opportunity to speak on their sector's impressions of the roundtable. Peter Arth concurred the private laboratories were open during the conversations and the list of items to standardize for the next intercalibration was robust. He reminded the Committee that the outcome of the second intercalibration would not define the specific technique that was introducing variability since so many were being changed at one time.

Josh Westfall stated the public laboratories had positive reactions to the roundtable workshop and that a good list was developed based on good conversation amongst the laboratories. He had two questions for Alvina including lab attendance and consistency among labs on defining the term “healthy adult”. Alvina responded that all California accredited laboratories attended the workshop except one, which is also the same lab that will not be participating in the first or second intercalibration studies. Next, Alvina described the activities SCCWRP was tasked with at the workshop including creating some reference materials for a common definition of terms such as “healthy adult” to make sure all labs are scoring these comparably in the second intercalibration.

The Committee then discussed the workshop and the standardization list including interactions of Panelists with laboratories, prioritization among the listed topics, and the differences between standardization among controls vs test samples. The public asked questions regarding the openness of the laboratories, if any “ah-ha” moments were identified for differences among labs, and the differences between “recommendations” vs “requirements” in the final report from SCCWRP.

The Committee agreed to endorse the list of recommendations from the laboratories for the Science Panel.

5- Second intercomparison exercise

Alvina described the hypothesis, study design, and timeline of the second intercomparison exercise. In essence, the second intercalibration will mimic the first intercalibration specifically to see how intra- and inter-laboratory variability improves after standardizing the lab techniques agreed to by the laboratories at their workshop.

The Stakeholder Committee members agreed to endorse the same study design in round 2 as was used in round 1 to see how intra- and inter-laboratory variability improves after standardizing the lab techniques.

Jared Voskuhl from CASA addressed the Committee stated his member agencies desire to test a new type of sample, a sample with soft water with lower hardness than the moderately hard water tested in round 1. Several but not all members were agreeable to this new study design element. Alvina asked Committee members to consider this new study design element, including a specifically testable hypothesis, and provide these to her so she can discuss it with the Science Panel at their next meeting.

6- Questions from the Public (15min)

A remaining question from the public was a request to analyze the TST using the round 2 results. Ken stated the Science Panel did not recommend calculating the TST from round 1 results, but that he would ask again for round 2.

7- Schedule and Next Steps

Alvina described the schedule and next steps in the study. The next steps included completing the workplan and QAPP for the second intercalibration, preparing the laboratories for receiving and analyzing samples, data management and analysis, and creating the draft recommendations report. Testing should be starting in late April or early May, and the draft recommendations by late July.

The next Stakeholder Committee meeting will be April 13, 2023 at 1:00. The primary agenda item will be reviewing and providing recommendations to the Science Panel on the Workplan for the second intercalibration.

The meeting concluded at 10:30 AM.