

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

## Stakeholder Advisory Committee Meeting #12

### Draft Meeting Minutes April 13, 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 - absent
- Non-Governmental Agencies - Annelisa Moe (Heal the Bay)
- State Environmental Laboratory Accreditation Program - Steve Boggs (SWRCB)

The public meeting started at 1:04 PM

#### **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 draft Second Interlaboratory Calibration Workplan and QAPP.

#### **2- Approval of minutes from the last Stakeholder Committee meeting**

Alvina provided a short review of topics and outcomes from the last meeting on March 28, 2023. Motioned by Peter Arth and seconded by Annalisa Moe, the Committee approved the minutes of their last meeting.

#### **3- Draft Workplan for Second Intercalibration**

After providing a quick summary of progress to date on the project, Alvina gave an overview of the Draft Workplan and Quality Assurance Plan for the second intercalibration exercise. The primary goal was to quantify reduction in variability after standardizing and training laboratories in the second intercalibration compared to the first intercalibration exercise. Thus, the workplan remains largely unchanged, except for the items to be standardized across all laboratories, in order to most effectively quantify changes in variability. Eleven of the 12 laboratories that participated in the first intercalibration will participate in the second intercalibration exercise. Then, Alvina went on to itemize the 10 lab techniques and the 4 documentation topics to be standardized.

The Expert Science Panel had reviewed the draft document at their meeting on April 11, 2023, and unanimously agreed to the Workplan and the list of standardization with minor word changes. Alvina highlighted these minor modifications (**in bold**).

- Renew or terminate test boards daily at 24 hrs **within a 2-hr window (i.e., +/- 1 hour)**
- Quantify initial food density **and document feeding method to estimate density in test chambers.**
- Holding times of YCT  $\leq 7$  days after thawing and algae  $\leq 21$  days. **Use same batch for an entire testing round.**
- Evaluate brood boards for 2 weeks prior testing. **Organisms should be out of mass culture.**
- **Store reagents in desiccator at least one week prior to testing.**
- Use 6-10 days old adults to start the test.
- Use  $< 24$  hr old neonates produced within an 8-hr window. Record brood number used.
- Run test for 8 days.
- Use randomization by blocking of known parentage AND randomization of cups on the board.
- Document split broods on bench sheets at the time of observation is required.

The Stakeholder Committee asked questions and clarification on the Workplan and QAPP including food holding times, food quantification, timing of test end requirements, and guidance vs. EPA-approved method requirements. There was specific discussion about sample test timing from the laboratories, particularly the third round of testing. Peter Arth was asked to poll the contract laboratories if they preferred to test the last week of May (which potentially conflicts with the Memorial Day holiday) or the first week of June (which potentially conflicts with routine effluent testing).

Alvina finished with anticipated data analysis workflows and an example keystone graphic.

Stakeholder Committee members have until Monday April 17 at noon to provide written comments on the Workplan and QAPP.

#### **4- CASA Proposal for additional samples**

The California Association of Sanitation Agencies (CASA) provided a written proposal for testing additional samples of soft water and hard water in addition to the moderately hard water currently specified in Workplan. The written proposal had been given to both the Stakeholder Committee and the Science Panel. The Science Panel discussed the proposal and provided the following concerns:

- Hypothesis is different than the current hypothesis for the second ILS
- Existing study design is not compatible
- Not all laboratories have the testing capacity
- Ultimately agreed not to endorse these additional samples in the second ILS

And made the following recommendations:

- CASA Proposal could be tested separately from the ILS
- Existing studies may provide the additional information desired
- The testing manual should be used for guidance (e.g., hardness controls)
- Dischargers with known soft or hard water should work closely with their selected labs prior to sending samples

The Stakeholder Committee had an extended discussion on adding samples of varying hardness to the second intercalibration. One point of discussion focused on the study design disconnect between the CASA proposal to test responses to water of varying hardness and the design of the second intercalibration to test changes in variability; two different questions with two different study designs (e.g., # and types of samples to be tested). A second point of discussion was the need to address a statewide issue facing all dischargers. A third point of discussion was the level of effort required to analyze the additional samples relative to laboratory capacity. A fourth point of discussion was the lack of time to include the additional samples, A fifth point of discussion was the range of hardness the test organism can accommodate. Jared Voskuhl from CASA who recommended the additional samples and helped prepare the proposal was invited to speak and made the following points: a similar proposal was made to the Science Panel in the first round and was not recommended (*sic because there was insufficient lab capacity*), that existing data on hardness was not applicable in California, that conducting a study of varying hardness would not have the same impact (*sic on policy*) if conducted after this study was completed, and that he would like the Stakeholder Committee points presented to the Science Panel.

At an impasse, Alvina summarized the discussion and made the following recommendation: (1) the question being asked was an important question for the stakeholders, but could not be fit into the existing intercalibration as currently written, (2) Jared should revise the proposal to a standalone study including additional detail such as number and types of samples, and a schedule with deadlines, (3) the proposal and the Stakeholder Committee points will be presented to the Science Panel for consideration.

Alvina finished this agenda item with the proposed schedule for testing starting April 25 and the last round starting June 6.

## **5- Laboratory Training**

Alvina described the process and variety of techniques for laboratory training on the standardized items for the second intercalibration. The training sessions will occur in 1.5-hour blocks on April 19 and 20, 2023. The first session will review the guidance documents and the second will be for documentation and data submission.

#### **6- Questions from the Public (15min)**

Questions and comments from the public were addressed as each agenda item was presented. No additional questions or comments were raised during this agenda item.

#### **7- Schedule and Next Steps**

The Stakeholder Committee unanimously voted they were comfortable with the draft Workplan.

Alvina described the schedule and next steps in the study including:

- Distribution of the Final Workplan and QAPP on Tuesday April 18, 2023
- Lab training on April 19-20, 2023
- First round of sample testing to begin April 25, 2023

Action items from today included:

- Timing on the third round of sample testing from Peter
- Revised proposal for testing waters with varying hardness from Jared

The next Stakeholder Committee meeting is scheduled for May 16 at 1:00 PM. Alvina will email members prior to the meeting to ensure the meeting is necessary.

The meeting concluded at 2:30 PM.