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

Stakeholder Advisory Committee
for *Ceriodaphnia dubia* Quality Assurance Study

Minutes of Meeting #6

Held remotely on Wednesday, April 6, 2022, 1:00 PM to 2:30 PM

List of Participants:

Facilitators:

- Alvina Mehinto and Ken Schiff (SCCWRP)

Stakeholder Committee members:

- State Water Board - Katie Fong (SWRCB)
- USEPA - Amelia Whitson (EPA Region IX)
- Regional Water Quality Control Boards - Veronica Cuevas (RWQCB4)
- Wastewater Agencies - Mitch Mysliwiec (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 - Jeff Miller (Aqua-Science Laboratories)
- Public Laboratories - Josh Westfall (Los Angeles County Sanitation Districts)
- Non-Governmental Agencies - Annelisa Moe (Heal the Bay)

There were 30 online attendees.

Agenda Item #1 – **Opening remarks, self-introductions, and review of the agenda**

Alvina Mehinto of SCCWRP called the meeting to order at 1:04 PM and welcomed the attendees. The Stakeholder Committee members provided roll-call attendance.

Agenda Item #2 – Minutes of Stakeholder Committee meeting #5

Veronica Cuevas requested the addition of ionic composition to the minutes as a parameter to consider in subsequent lab testing. The amended minutes were approved by the Stakeholder Committee.

Agenda Item #3 – Proposed testing plan

Alvina provided a summary of the study goals, approach and progress to date on the *C. dubia* QA evaluation study. After a brief review of the work accomplished so far (including historical database created, and data analyses performed), Alvina presented the proposed testing plan to assess and improve consistency and comparability amongst CA-accredited laboratories. Her

goal was to collect Stakeholder's feedback on the study questions and proposed feedback before it is presented to the Expert Science Panel.

Stakeholders suggested several edits to the questions and hypothesis for clarity. The first question which read "Does standardization improve *C. dubia* test results?" was revised to clarify that the intent is to improve variability in test results within and amongst labs. To avoid confusion, testable hypotheses were revised to describes split samples as "test samples" instead of "control samples". Overall, Stakeholder Committee members agreed that the modified questions and testable hypotheses were consistent with the study goals. The Stakeholder Committee discussed the need for a robust study design with power analysis for sample size, and clear measures of success, and requested to hear from the Science Panel on these issues.

Alvina described the proposed testing phases to answer the study questions. These included: 1) baseline testing performed by all labs using their own SOP, 2) optimization phase to evaluate and standardize select parameters (e.g., age window of neonates at test initiation) by a subset of laboratories, and 3) confirmation testing by all labs using the standardized lab practice(s). Stakeholder Advisory Committee discussion focused on the sequence of events and ensuring that each testing phase would be analyzed and discussed by the Science Panel and participating laboratories before developing a detailed study design for the subsequent phases. Alvina presented three options for the optimization phase including: 1) evaluating more lab practices, but using fewer labs, 2) optimizing fewer lab practices, but utilizing more laboratories, or 3) letting the Expert Science Panel decide how many lab practices and labs. Most Stakeholder Committee members indicated that multiple labs assessing fewer lab practices was preferable compared to few labs testing numerous practices. However, the Stakeholder Committee agreed that results of the baseline testing are needed before making a final decision on the path forward. The Stakeholders also discussed the need for biostatistician's input to ensure that appropriate testing replication is achieved.

In summary, the Stakeholder Committee endorsed the revised questions and study approach. There was no consensus on the recommended approach for the optimization, instead the Stakeholder Committee agreed that results of the baseline testing and discussion amongst laboratories and Expert Science Panel should be used to guide the design of subsequent testing.

Agenda Item #4 – Schedule and Next Steps

The next step for SCCWRP is to: 1) revise the PowerPoint materials based on Stakeholders' feedback to clarify sequence of events for the testing phase 2) present this draft study design to the Expert Science Panel; 3) after approval from the Expert Science Panel, draft the baseline study design document and send to the Stakeholder Committee for review.

Agenda Item #5 – Public Comments

The public comments were addressed live during each of the individual agenda items.

The meeting adjourned at 2:23 PM.