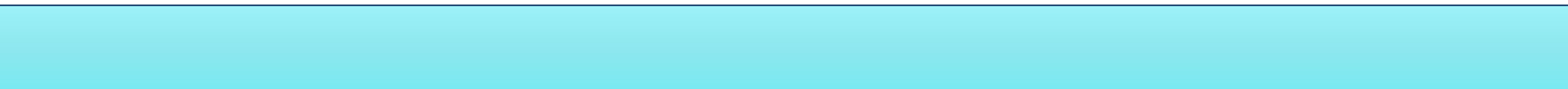




# **Board Workshop: First Revised Draft of the Toxicity Provisions**

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October 3, 2019



# Purpose of the Workshop

1. Share changes made to draft Toxicity Provisions since last Board Hearing in November 2018
2. Discuss pending issues
3. Receive direction from the Board

# Overview of Toxicity Provisions

The Provisions would establish:

- Numeric water quality objectives for chronic and acute toxicity
- A single statistical approach (Test of Significant Toxicity or TST) for assessing toxicity data
- A Program of implementation focused on non-storm water NPDES dischargers
- The statewide Inland Surface Waters, Enclosed Bays, and Estuaries of California Plan

# Background

- **October 19, 2018** – Release of draft Toxicity Provisions
- **December 21, 2018** – Conclusion of public comment period
- **July 25, 2019** – Release of First Revised Draft
- **August 2019** – 3 staff-led workshops on First Revised Draft
- Numerous meetings with stakeholders to discuss potential changes

# 2019 First Revised Draft

## **No changes include:**

- Test of Significant Toxicity
- Analysis of data only from the instream waste concentration (IWC) and control to assess compliance

# 2019 First Revised Draft

## **Revisions include:**

- Allow use of data generated prior to the effective date of Provisions to determine most sensitive species
- Allow non-continuous dischargers to use fewer than four sets of tests to conduct species sensitivity screening
- Provide permitting authority discretion to determine when to require reasonable potential analysis for acute toxicity

# 2019 First Revised Draft

## **Revisions include:**

- Allow reduced chronic toxicity monitoring frequency when existing permits lack chronic toxicity effluent limitations
- Allow reduced monitoring frequency during a toxicity reduction evaluation (TRE) when toxicity testing is conducted as part of the TRE
- Allow a replacement MMEL compliance test when Test Acceptability Criteria have not been met

# 2019 First Revised Draft

## **Revisions include:**

- Remove exemption for POTWs serving small disadvantaged communities
- Add exemptions for drinking water systems, biological and residual pesticide discharges, and natural gas facilities



# Propose Resolution Language

- Direct staff to address aquatic toxicity issues related to storm water in the STORMS program
- Direct staff to coordinate a study to evaluate sources of possible variability in the *C. dubia* test method

# Three Outstanding Issues

1. Determining which discharges should have chronic toxicity effluent limitations
2. How reasonable potential is determined
3. *C. dubia* chronic reproduction test

# 1. Determining which Discharges Should Have Chronic Toxicity Effluent Limitations

## Option #1

- No change; establish chronic toxicity effluent limitations for POTWs  $\geq 5$  MGD and require reasonable potential analysis for POTWs  $< 5$  MGD, non-POTWs, and non-storm water NPDES dischargers

## Option #2

- Establish chronic toxicity effluent limitations for all non-storm water NPDES dischargers

## Option #3

- Require reasonable potential analysis to determine whether to establish chronic toxicity effluent limitations for all non-storm water NPDES dischargers

## 2. How Reasonable Potential is Determined

### Option #1

- No change; determine reasonable potential on any “fail” at the instream waste concentration or a percent effect  $> 10\%$

### Option #2

- Determine reasonable potential on any “fail” at the instream waste concentration or a higher percent effect
  - Example: 15% or 20%

### Option #3

- Determine reasonable potential solely on any “fail” at the instream waste concentration

# General Principles of *Ceriodaphnia dubia* Study

- Conduct the study to evaluate sources of possible variability in following the *C. dubia* methods and identify ways to minimize that variability
- Involve labs, stakeholders, Regional Boards, and external experts
- Complete in timely manner

### 3. *Ceriodaphnia dubia* Chronic Reproduction Test

#### Option #1

- No change; use *C. dubia* to assess compliance with effluent limitations

#### Option #2

- Use *C. dubia* as a monitoring/toxicity reduction evaluation trigger but not for compliance and use the second most sensitive species to assess compliance until the end of the study or until a specified future date

#### Option #3

- Do not use *C. dubia* as a monitoring/toxicity reduction evaluation trigger or for compliance until the end of the study or until a specified future date

### 3. *Ceriodaphnia dubia* Chronic Reproduction Test

#### Option #4

- Non-storm water NPDES dischargers that have existing permits that include MMELs for *C. dubia* will be subject to the Toxicity Provisions (including the potential for a numeric effluent limitation for *C. dubia*).

### 3. *Ceriodaphnia dubia* Chronic Reproduction Test

#### Option #4 (continued)

- All non-storm water NPDES dischargers that do not have MMELs shall conduct the species sensitivity screening as required by the proposed Toxicity Provisions
  - Should *C. dubia* be identified as the most sensitive species, the permitting authority would include the MDEL, but not the MMEL for *C. dubia* in the reissued permit
  - Routine monitoring and MMEL compliance tests would apply as a trigger for additional tests and TREs but not result in an MMEL violation
  - At the conclusion of the study or some specified future date, the permitting authority would include *C. dubia* MMELs in permits as indicated in the Toxicity Provisions



### 3. *Ceriodaphnia dubia* Chronic Reproduction Test

#### Option #4 (continued)

- Additional considerations to be determined:
  - How to address existing permits that include an MMEL for species other than *C. dubia*, when, upon permit renewal, *C. dubia* is found to be the most sensitive species?

# Additional Concerns

- Recycled Water Discharges
  - Recycled water discharges to agricultural conveyances
  - Recycled water discharges to drinking water supply reservoirs
  - Aquatic beneficial uses designated in these waterbodies still need to be protected
  - Concern regarding public perception of recycled water

# Additional Data Analysis Needed

- Addition of appendix to Staff Report summarizing recent data and publications:
  - Recent performance of California labs: Fox et al. 2019 and additional data
  - Summary of recent compliance data using TST approach
  - Assessment of probabilities of test fails and violations
- 30-day limited public comment period

# Project Timeline

October 3, 2019

Board Workshop

Fall 2019

Release of new appendix for 30-day limited comment period

Fall 2019

Release of 2<sup>nd</sup> Revised Draft Provisions, Staff Report and Response to Comments

First Quarter 2020

State Water Board Consideration



# Questions?