

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF APRIL 18-19, 2024

Prepared on April 3, 2024

ITEM NUMBER: 6
SUBJECT: Statewide Aquatic Toxicity Provisions
STAFF CONTACTS: Harvey Packard, (805) 542-4639,
Harvey.packard@waterboards.ca.gov

KEY INFORMATION:

Location: Statewide Policy

ACTION: Information/Discussion

SUMMARY

The State Water Resources Control Board (State Water Board) recently approved new rules regarding toxicity that apply to our permitting efforts. Karen Mogus, chief deputy director in the State Water Board's Executive Office, will join the April 18 meeting to provide a presentation on this topic.

DISCUSSION

Background

Rulemaking for updated toxicity provisions of the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California* was completed in May 2023.

The updated provisions include the following:

- Consistent, statewide numeric water quality objectives for acute and chronic aquatic toxicity that are protective of California's waters from both known and unknown toxicants.
- A program of implementation to control toxicity in discharges to surface water.
- A consistent yet flexible framework for monitoring surface waters for possible toxicity.
- A statewide statistical approach for data analysis that is transparent, enhances confidence in the findings, and incentivizes valid, high-quality data.

What is Aquatic Toxicity?

Aquatic toxicity is a measurement of water quality that determines whether the water is safe for aquatic organisms. It is typically assessed by having fish, aquatic insects, aquatic plants, or algae live in a sample of the water of interest (e.g., wastewater effluent or river water) for a period of time, then measuring the organisms' survival, growth, or reproduction and comparing the measurements to those of the same types of organisms that were living in water that is safe (referred to as "control water").

The test is conducted in a laboratory and is functionally similar to having two aquariums, each with the same organisms, but with the water of interest in one aquarium and the control water in the other. If the organisms living in the water of interest perform similarly to those living in the control water, then the water of interest is considered non-toxic. If the organisms living in the water of interest do not survive, grow, or reproduce as well as those in the control water, then the water of interest is considered toxic.

Use of the Aquatic Toxicity Provisions

The majority of the implementation requirements in the provisions, including numeric effluent limitations, apply to publicly owned treatment works, industrial point-source dischargers, and other non-stormwater point-source dischargers with National Pollutant Discharge Elimination System permits.

The provisions do not apply to ocean water and non-enclosed bays, such as Monterey Bay. They also do not apply to groundwater. Ocean waters and non-enclosed bays have separate water quality control plan documents that include toxicity testing requirements.

More Information

Additional information is available on the State Water Board's aquatic toxicity provisions program page:

https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/aquatic_toxicity.html

r:\rb3\shared\board meetings\current agenda\2024\04_apr_18_19\item 6 - toxicity\tox provisions staff report.docx