SWRCB Toxicity Provisions

The State Water Resources Control Board (State Water Board) is planning to introduce new Toxicity Provisions into the State Implementation Plan (SIP), to require uniformity in how toxicity is regulated throughout the State of California. The two major changes are: 1) all toxicity tests will be interpreted by a new statistical method, the “Test of Significant Toxicity” (TST); and 2) enforceable chronic toxicity limits will be required for all agencies with reasonable potential.

What is the new TST Toxicity Statistical Test

- A statistical hypothesis test that assumes a sample is “toxic” unless statistically determined not to be “non-toxic”. The opposite of the more traditional NOEC statistical test.
- Demonstrated to result in an increase in identifying samples toxic for the Fathead Minnow and C. dubia chronic toxicity test with fewer toxicity exceedances for marine chronic toxicity test results.

Who can expect to get numeric chronic toxicity limits and what will those limits look like

- Reasonable Potential details are still being debated, but it is likely most, if not all dischargers will get numeric chronic limits
- Limits will consist of a monthly median based on the TST pass/fail using no more than three tests and a daily maximum/single test limit of a 50% survival effect.

State Water Board is proposing to conduct a study to evaluate the C.dubia chronic test

- The C. dubia test tends to incorrectly identify known non-toxic samples as “toxic” using the TST more frequently than the other species.
- State Water Board has committed to support conducting a study to evaluate this issue and implement procedures and guidance to minimize this occurrence.
- What will happen regarding assessing compliance while this study is being conducted is still being worked out.

POTW concerns

- Dischargers using C. dubia for chronic toxicity testing are likely to see an increase in the frequency of violating the numeric limit.
- Frequency of routine monitoring likely to increase for some small dischargers (quarterly monitoring minimum).
- Testing frequencies and challenges with meeting a monthly median limit
Preparing for the new Toxicity Provisions

- Evaluate your existing toxicity data using the new TST statistical procedure.
- Get involved, through CASA, SCAP, BACWA, and/or CVCWA on stakeholder groups working with State Water Board staff of the study design.
- Consider submitting comments, or coordinate with your Regional Association (SCAP, BACWA, CVCWA) to provide comments on draft proposals and study workplan design documents. The Associations and CASA plan to work with State Water Board staff to ensure that the final Toxicity Provisions are as workable as possible.