

STAFF WORKSHOP ON DRAFT POLICY FOR TOXICITY ASSESSMENT AND CONTROL

**Monday, August 22, 2011 – 1:00
p.m.**

Topics to Clarify

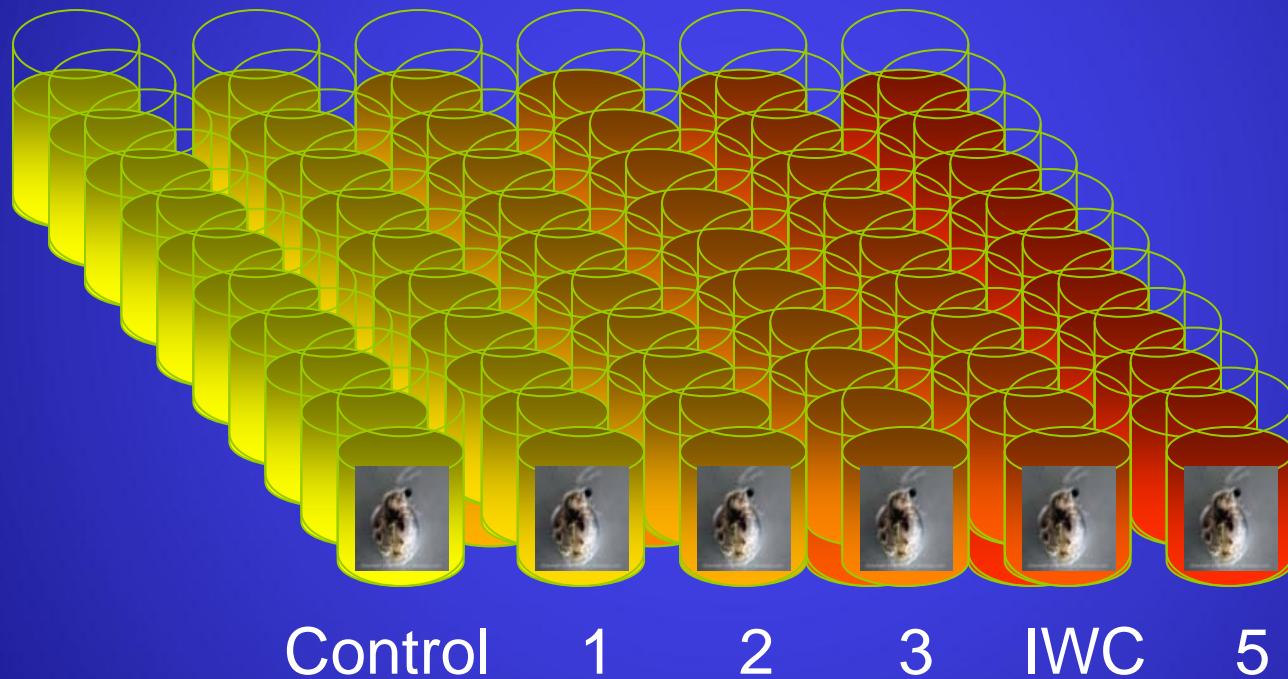
- Cost discussion
- Peer review of the TST
- TST analysis
- Policy Alternatives

Costs to Program

- The cost of conducting the toxicity test
 - TST is cheaper because a smaller test design is needed
- The frequency of testing
 - This is a policy decision for minimum frequency requirements
- Accelerated Monitoring/TRE Cost
 - No Difference from current approach

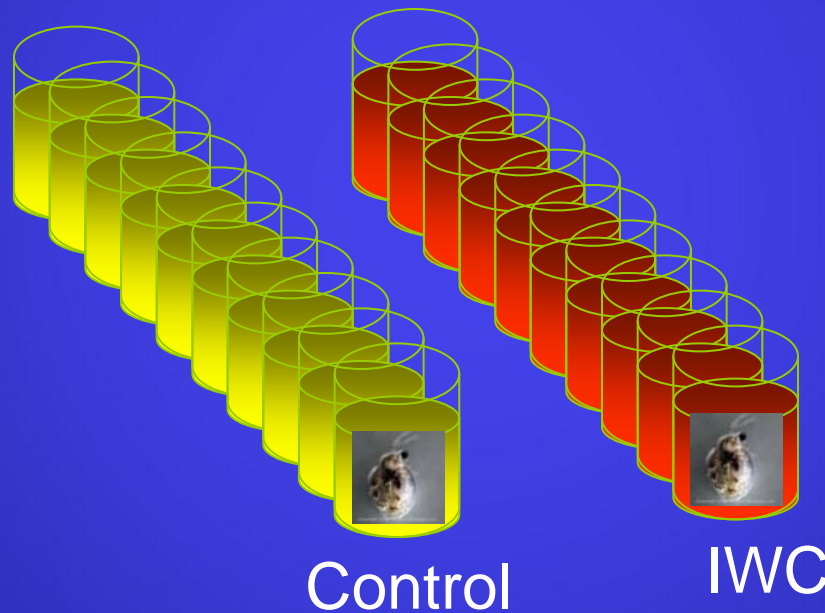
Ceriodaphnia dubia chronic test

Current Approach
60 organisms total



Ceriodaphnia dubia chronic test

TST Approach
20 organisms total



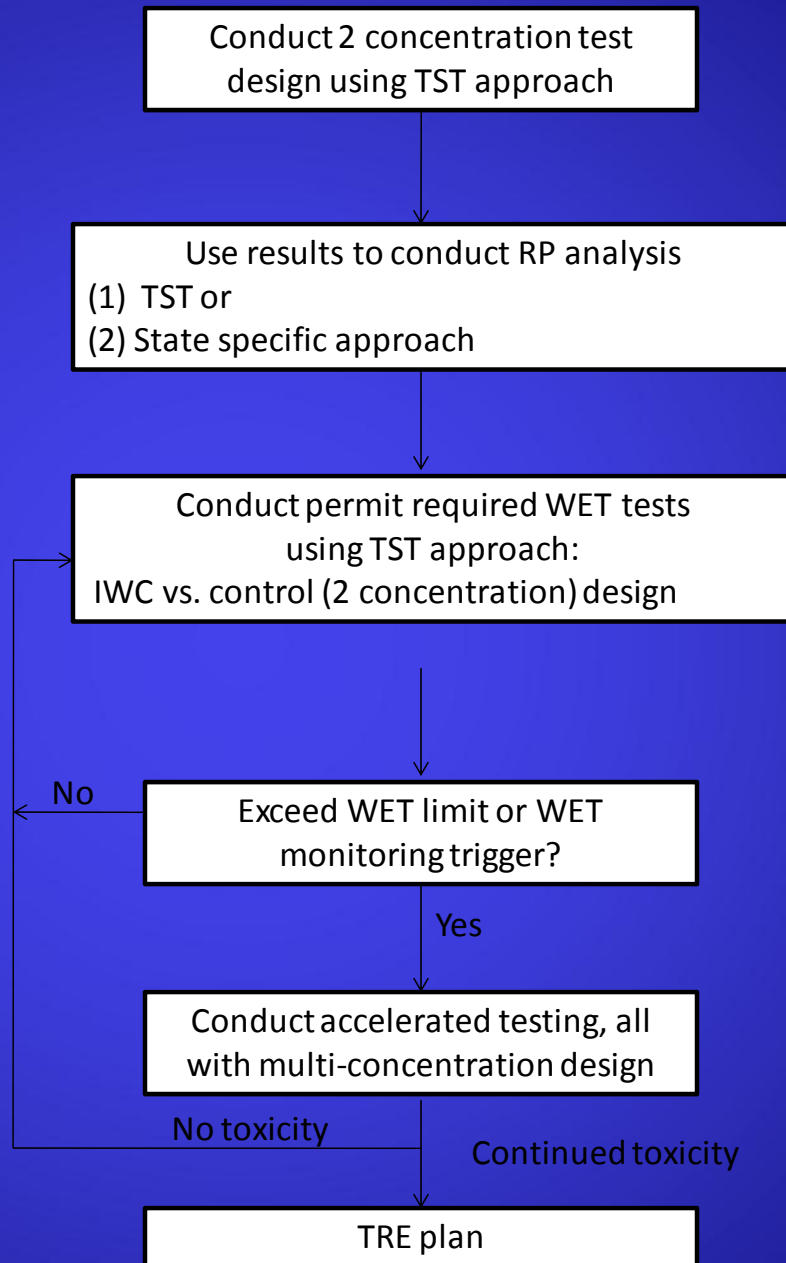
Mandatory Minimum Penalties

- If the permit contains an effluent limitation for any toxic pollutants on US EPA's list of toxic pollutants found in 40 CFR part 302, then mandatory penalties would not be assessed under section 13385.

Peer Review Process

- International Peer Reviewed Journal-
Environmental Toxicology & Chemistry
 - Erickson and McDonald (1995): established the premise for using TST in WET data analysis
- EPA External Peer Review Process
- Publication of the TST approach
Environmental Toxicology & Chemistry
 - Denton, Diamond, Zheng. (2011)

Role of TST in Proposed CA WET Policy



Terminology

- *False Positive Rate* – The 5% false positive rate established in the TST
- *Fail Below RMD* – Samples that result in a fail, despite an effect level below the regulatory management decisions (RMD)

Board Member Comments

What's Been Happening Since the November Board Workshop?

- 2 successful workshops on TST with labs and permittees (50+ attendees for each)
- Completed the Test Drive
- Creating a “How To” guide for labs and permittees
- Updated Excel TST calculator version 1.4 with suggestions from regulated community
- Created Fact Sheet on Policy

Today's Workshop

- Review of “Test Drive” & clarification of TST
 - Dr. Jerry Diamond
- Comments on Test Drive
- Review of Prevailing Comments & Policy Alternatives
- Comments on Policy Alternatives

Draft Policy for Toxicity Assessment and Control: Comments and Alternatives



Summary

- Prevailing Comments
- Proposed Alternatives
- Next Steps

Prevailing Comments

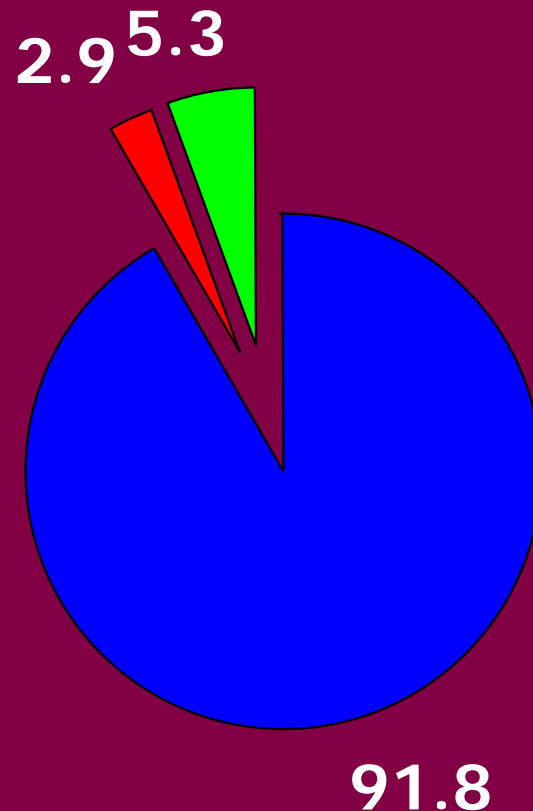
103 comment letters were received

Staff reviewed letters, summarized the common themes, and provided responses

Proposed Alternatives



Accuracy of TST



False Positive Rate –
The 5% false positive rate established in the TST

Fail Below RMD –
Samples that result in a fail, despite an effect level below the regulatory management decisions (RMD)

■ TST (Toxic) ■ NOEC (Toxic) ■ Both (Non-Toxic)

Effluent Limitations

1. Increase Test Replicates

Dischargers would be required to conduct more test replicates than the established minimum

A sample that “fails” using the TST will trigger accelerated monitoring

2. Establish MDELs and AMELs for Toxicity

Effluent limits expressed as maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs)

Chronic/Acute RMD established as MDELs

If samples “fail” with effect level below the chronic or acute RMD – 2 additional tests

2. Establish MDELs and AMELs for Toxicity

Compliance with the AMEL might be demonstrated when:

- *Option 1* – 2 of the 3 monthly tests are a "pass"
- *Option 2* – the average effect level is less than the Chronic and Acute RMDs

3. Adopt Tiered Accelerated Monitoring

Chronic and Acute RMDs would be established as effluent limits

Samples that “fail” with effect level above RMDs would be a violation

3. Adopt Tiered Accelerated Monitoring

- *Tier 1 accelerated monitoring:* A sample “fails” with effect level below RMD – 2 additional tests within calendar month
- *Tier 2 accelerated monitoring:* A sample “fails” during Tier 1 – 6, 5-concentration tests over a period of 12 weeks

Storm Water & Channelized Discharger Provisions

1. Improve Cross-References

Further clarify the cross-references to Section A by explicitly stating applicable provisions

2. Remove Cross-References

Cross-references in sections B and C would be replaced with new sub-sections that distinctly state applicable provisions

3. Create Individual Policy

Sections B and C would be removed entirely

Staff would develop a separate toxicity policy dedicated exclusively to storm water and channelized dischargers

Small, Disadvantaged Communities

1. Grant Discretionary Authority

The Regional Water Boards would exempt these communities at their discretion

2. Modify Policy's Major POTW Class

The draft Policy's "major POTW" classification would be changed to five MGD or more

3. Exclude Small, Disadvantaged Communities

Qualifying communities would be exempt from the draft Policy entirely

	NPDES/WDR Dischargers	Storm Water Dischargers	Channelized Dischargers	Ambient Waters
Water Quality Objectives	N/A	N/A	N/A	Yes
Reasonable Potential Analysis	Yes	Permitting Authority Decision	Permitting Authority Decision	N/A
Effluent Limitations	Yes	Permitting Authority Decision	Permitting Authority Decision	N/A
Accelerated Monitoring	Yes	Permitting Authority Decision	Permitting Authority Decision	N/A
Routine Monitoring	Yes	Yes	Yes	N/A
Use of TST Approach	Yes	Yes	Yes	Technically Feasible

Questions & Comments



Next Steps

A Hearing pursuant to California Water Code section 13244 is anticipated by late 2011/early 2012

A formal comment period will close on or shortly after the Hearing

An Adoption Meeting will take place after comment responses are posted