



**July 9, 2014
Oakland, CA**

Stakeholder Workshop

Draft Statewide Permit Package

for

Drinking Water System Discharges

To Surface Waters

**Diana Messina, Supervising Engineer
State Water Resources Control Board**



Today's Meeting

- Purpose of proposed permit package
- Main Elements of permit
- State Board permit adoption process

What is an NPDES Permit?

- **National Pollutant Discharge Elimination System**
- Clean Water Act requires pollutant source discharges to waters of the U.S. (fishable and swimmable waters) to obtain an NPDES permit
- In California, the State and Regional Water Boards issue NPDES permits
- Many water purveyors have local agreements with storm water NPDES permittees for regulatory coverage

Clean Water Act Requirements

- Section 122.44(d)(1)(i) states NPDES permits shall include:

Limitations must control all pollutants parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality

Regional Board Basin Plan Objectives

- Basin Plans contain narrative toxicity objectives which generally state:

“all waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life;”

- Specific language varies among Basin Plans.
- Federal regulations require effluent limits for toxicity when a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a numeric or narrative objective within an applicable State water quality standard (40 Code of Federal Regulations 122.44(d)).

Basic Water Quality Concern

- Chemical – chlorine and pH
- Physical – turbidity, trash, sand, grit and sediment
- Erosion-related or scour-related concerns



California Toxic Rule (CTR)

- Federal Water Quality Criteria for California Surface Waters
- Implemented by State policy – “The State Implementation Policy” and via Basin Plans
- California Ocean Plan also implements toxicity provisions
- Example of CTR criteria compared to Max Contaminant Levels:
 - Copper: MCL 1000 ug/L, CTR 3.1 - 13 ug/L
 - Zinc: MCL 5000 ug/L, CTR 81 – 120 ug/L
 - Dichlorobromomethane: MCL 80 mg/L as TTHM, CTR 0.56 ug/L
 - Dibromochloromethane: MCL 80 mg/L as TTHM, CTR 0.41 ug/L

Resolution

Proposed Exception to State Implementation Policy and Ocean Plan

- Proposed resolution to “except” water purveyors from the California Toxic Rule and California Ocean Plan
- For discharges from system activities mandated by the Safe Drinking Water Act and California Health and Safety Code
- Exception must be implemented through this statewide permit, or any other NPDES permit (including storm water permits) that specifically excepts such mandatory discharges

Fundamental Principle



Safe Drinking Water

To provide an NPDES permit that allows water purveyors to conduct mandated responsibilities for protection of public health and safety

Permit

Implements Proposed Exception to State Implementation Policy and Ocean Plan

- Proposes a permit where priority pollutant regulation is not applicable (water purveyors excepted)
- Scope of permit is solely for discharges of system water due to activities mandated by the Safe Drinking Water Act and California Health and Safety Code

Regional Water Board Permits

- Various regional water board permits currently in place with varying requirements
- In 2008: Los Angeles Water Board issued draft permit for public comments (not adopted)
- Concurrently and since: Bay Area and Sacramento area purveyors began requesting an NPDES permit

Combined Water Board Effort

- 2013: Developing a multi-regional permit
 - Various Regional Water Board drafts issued
 - Variation of regulation for same type of discharges
- State Water Board staff took lead for one draft statewide permit
 - Proposes to serve as only permit for these type discharges

Draft Permit Overview

- Definition of Drinking Water System and Water Purveyor (p. 1)
- Who must apply for coverage. Who may apply for coverage (p. 4)
- Treated, potable and raw water to be discharged under permit (p. 5)
- Planned versus emergency (unplanned) discharges (p. 6)

Draft Permit Overview

- Application requirements (p. 8)
- Total Maximum Daily Load Application Supplement (p. 9)
- Resolution Implementation (p. 12)
- Transition to one statewide permit (p. 14)
- Effluent Limits and Discharge Specs (p. 15)

Discharges of Drinking Water System Water due to Mandated Duties and Emergencies



BMPs and Effluent Limitations

Section V.

- Effluent Limits and Discharge Specs (p. 15)
- BMPs
 - Planned Discharges
 - Emergency Discharges
- Super-chlorinated Discharges
 - Chlorine Limit 0.019 mg/L (p. 15-16)
 - Compliance determined with 0.10 mg/L Reporting Level (p. 20)

Effluent Limitations

Section V.

- **Potable Water** (p. 16)
 - Turbidity Limit of 10 NTUs or more stringent Basin Plan Objective
- **Planned Discharges Within 300 feet**
 - Inland waters:
 - Chlorine Limit of 0.019 mg/L
 - Ocean waters:
 - Chlorine Limit of 0.008 mg/L
 - Turbidity Limit of 225 NTU
- **Compliance Determination** (p. 19-20)
 - At 0.10 mg/L reporting level for chlorine field meters
 - At method detection level for turbidity

Basis of Chlorine and Turbidity Effluent Limitations

Section V.

- Chlorine Effluent Limit of 0.019 mg/L
 - U.S. EPA acute criteria for chlorine toxicity
<http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm>
- Planned Discharges Within 300 feet
http://www.vita-d-chlor.com/specs/AWWARFDechlorGuides.html#inland_waters
- Chlorine Reporting Level of 0.10 mg/L
 - Verification from various water purveyors
- Turbidity Limit of 10 NTUs
 - Highest worse-case turbidity objective in inland basin plan



Promoting Multiple Benefits

Section VI.



- Ground water recharge
- Discharge to low impact development



- Reuse



Attachments

- Attachment A – Definitions
- Attachment B
 - Notice of Intent Form
 - Notice of Non-Applicability
- Attachment C – Best Management Practices
- Attachment D – Std Federal Provisions
- Attachment E – Monitoring and Reporting
- Attachment F – Fact Sheet
- Attachment G – Reserved for TMDLs
- Attachment H – Regional Board Map

Proposed Monitoring and Reporting

Attachment E

- Effluent monitoring at discharge location only
 - No lab analysis except for TMDL-related monitoring
 - Event monitoring and representative monitoring
 - Annual reporting and non-compliance reporting
 - Monitoring for emergency discharges only when feasible
- Receiving water monitoring
 - For direct and non-compliant discharges
 - Visual receiving water monitoring



Proposed Monitoring and Reporting

Attachment E – Section I - IV.

A. Event effluent monitoring – Once per event

- Direct discharges
- All discharges greater than 325,850 gallons (1 acre-foot) per event

B. Representative effluent monitoring – Once per year

- Other non-direct planned discharges (traveling via storm drain or other conveyance system)
- Representative monitoring for discharges with same general water source, treatment and series of implemented BMPs.

Proposed Notification Requirements

Attachment E – Section V - VI.

V. Post Notification to CA Office of Emergency Services

- Emergency or non-compliant Discharges
- Within 24-hours of becoming aware



VI. Pre-Notification to Regional Water Board

- Discharges greater than 325,850 gallons
- Three days prior to planned event
- 24-hour retroactive of urgent planned event

Proposed Reporting Requirements

Attachment E – Section VII.

- General Reporting
- Annual self-monitoring reports
 - Monitoring period of Jan 1 thru Dec 31
 - Due to State Water Board March 1st of each year
- Information will be stored in CA Integrated Water Quality System (CIWQS) database

Fact Sheet

Attachment F

- Legal and technical rationale of permit requirements
- An enforceable part of the permit
- Information will be stored in CA Integrated Water Quality System (CIWQS) database

Proposed TMDL-based Requirements

Attachment G

- TMDLs that imply drinking water systems as a source of receiving water impairment only exist in the Los Angeles and San Diego Regional Water Board jurisdictions
- Current placeholder for implementation of TMDLs that identify discharges from drinking water systems as a contributor to the impairment

Permit Package Adoption Process

- ✓ Development of Draft Resolution and Draft Permit

- ❑ Public Comment Period thru August 19, 2014
 - ❑ Further Stakeholder Meetings
 - ❑ State Board Public Hearing – August 5, 2014

- ❑ Issue Revised Draft Resolution, Revised Draft Permit and Response to Comments
 - ❑ 10 days prior to Adoption Meeting
 - ❑ Revisions must be an outgrowth of public comments
 - ❑ Support comments just as important

- ❑ State Water Board Consideration of Adoption – September 23, 2014

For Further Information

Contact

Diana Messina

diana.messina@waterboards.ca.gov