

UTILITY OPERATIONS OVERVIEW

Operations, BMPs, and the Statewide Permit for Discharges from Drinking Water Systems

Bay Area Regional Implementation Workshop
on the Statewide NPDES Permit
For Discharges From Drinking Water Systems
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SFPUC SYSTEM OVERVIEW

Large System

- over 200 miles of pipeline in Bay Area system
- approximately 160 miles of pipeline upcountry
- 3 potable water treatment plants in Bay Area
- spans over Regs. 2 and 5
- average pipeline size 60 in.
- mostly pre-stressed concrete
- planned & unplanned discharges
- large volume discharges



SFPUC NPDES PERMITS OVERVIEW

INDIVIDUAL TRANSMISSION SYSTEM PERMIT (Reg 2)

- Became Effective 2009 (Mar)
- Expired 2014 (Feb)

GENERAL PERMIT FOR DISCHARGES FROM SURFACE WATER TREATMENT FACILITIES FOR POTABLE SUPPLY (Reg 2)

- Became Effective 2010 (Mar)
- Expired 2015 (Feb)

SFPUC NPDES PERMITS OVERVIEW

INDIVIDUAL PERMIT FOR DISCHARGES FROM THE PULGAS DECHLORAMINATION FACILITY (Reg. 2)

- Became Effective 2014 (Apr)
- Expires 2019 (Mar)

LOW THREAT (Reg. 5)

- Became Effective 2013 (May)
- Expires 2018 (May)

MS4 PERMIT (Reg. 2)

- Became Effective 2013 (July)
- Expires 2018 (June)



OVERVIEW OF PLANNED DISCHARGES

- Transmission and Distribution System Discharges
- Groundwater
- Potable Water Treatment Plants (no filter backwash)



PLANNED DISCHARGES

TRANSMISSION AND DISTRIBUTION SYSTEMS

- Discharges to surface waters (e.g. creeks, lakes, SF Bay)
- Storm Drains
- Maintenance and repair, inspection, improvements

PLANNED DISCHARGES

BMPs - TRANSMISSION AND DISTRIBUTION

Control releases

Prevent and reduce impacts (envt'l & property)

Best tools available

Conservation/Reuse

AWWA Guidelines

Examples in Statewide Permit (Attachment C)

PLANNED DISCHARGES

BMPs - TRANSMISSION AND DISTRIBUTION

SOPs and training

Dechlor

- dechlor tablets; dechlor mats
- chemical addition in-line or drips
- additional contact time
- dilution

Cessation of Discharge



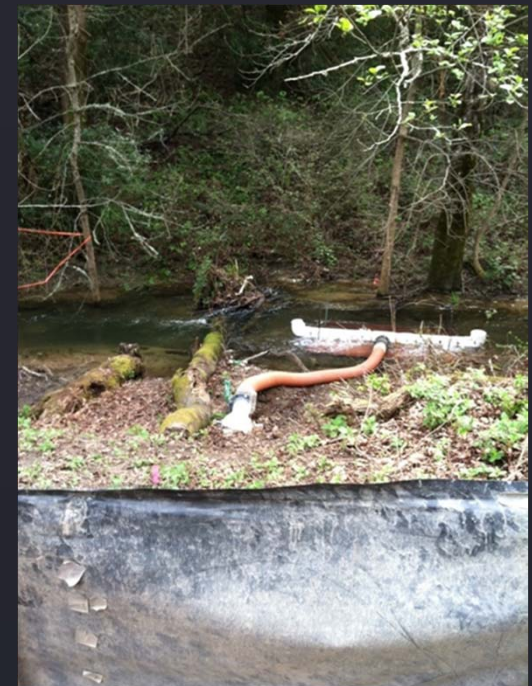
PLANNED DISCHARGES

BMPs - TRANSMISSION AND DISTRIBUTION

Sanitary sewer

Erosion/Hydromodification & Sediment Control

- diffuser
- sandbags, straw wattles, filter bags
- slower discharge rates





PLANNED DISCHARGES

GROUNDWATER

- Groundwater supply well flushing or pump-to-waste
- Groundwater well development, rehabilitation, and testing
- Groundwater monitoring for purpose of supply well development, rehabilitation, and testing

PLANNED DISCHARGES

BMPs - GROUNDWATER

- Baker tanks
- filtration systems
- sanitary sewer
- land application
- discharge to areas of reuse or groundwater recharge





SOUND WALL



LAND APPLICATION

PLANNED DISCHARGES

POTABLE WATER TREATMENT PLANTS

- Back to headworks
- Filter backwashes



EMERGENCY / UNPLANNED DISCHARGES

- transmission line breaks, leaks
- distribution/main breaks
- hydrant leaks/shearing
- treatment plant overflows
(chlorinated water)
- monitoring only if feasible
 - safety considerations
 - human health & property



EMERGENCY/UNPLANNED DISCHARGES

BMPs

- AWWA Guidelines
- Examples in Statewide Permit (Attachment C)
- SOPs & training
- Dechlor
- Erosion and sediment control







NOTIFICATIONS

PRE-DISCHARGE (planned discharges)

- RWQCB & MS4 operator
 - 3 days prior
 - all discharges > 1 acre foot

POST-DISCHARGE (planned or unplanned)

- RWQCB & MS4 operator
 - 24 hours (oral)
 - 5 day (written)
- Resource Agencies (not required by Permit)
- Other gov't agencies as appropriate



MAJOR TAKEAWAYS

- Treatment Redundancy
- Monitoring Redundancy (when feasible)
- Dilution
- Sanitary Sewer
- Create SOPs
- Regular and required training
- Improved communications (internal & external)
- Review your systems



QUESTIONS?



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