



FACT SHEET

PROPOSED GENERAL NPDES PERMIT FOR DISCHARGES FROM DRINKING WATER SYSTEMS

Overview of the Proposed Permit

Water purveyors are responsible for developing water supplies and providing drinking water to their communities and customers in accordance with statutory requirements of the federal Safe Drinking Water Act and the California Health and Safety Code. Mandatory system-development and system-maintenance activities often result in surface water discharges, either via storm drain systems or directly to a creek, river or lake.



Clean Water Act section 402 requires that a discharge of any pollutant, or combination of pollutants, to surface waters that are deemed waters of the United States, with certain exceptions, be regulated by a National Pollutant Discharge Elimination System (NPDES) permit. Some Regional Water Quality Control Boards (Regional Water Boards) regulate discharges of drinking water using region-wide general low threat NPDES permits that regulate a broad range of constituents, and not necessarily constituents of concern from these discharges.

Large and small municipalities have Municipal Separate Storm Sewer System (MS4) NPDES permits for discharge of storm water to waters of the United States. Some municipalities allow drinking water system discharges to enter their storm water system as authorized non-storm water discharges, typically through local agreements. Other MS4 permit holders do not allow such discharges to enter their storm water system unless that discharge is separately regulated by the Regional Water Board prior to entering the system.



Additionally, there are discharges from drinking water systems that enter surface waters directly, not via a storm water conveyance system that are unregulated.

What is the threat that potable water and treated drinking water poses when discharged to surface water?

Discharges of raw, potable water and treated drinking water have constituents of concern for surface water quality. Mandatory groundwater well development and maintenance activities require the flushing of sand and grit from the well screens prior to delivery of raw/potable water. The constituents of concern from well development and maintenance activities are suspended solids and turbidity, either in the water pumped or from erosion or debris-flushing caused by the flow. Such discharges potentially cause exceedances of standards established by the Water Boards to protect beneficial uses of the receiving water.



Drinking water served to the public must comply with Title 22 of the California Safe Drinking Water Act. Water that complies with Title 22 is highly treated as it is coagulated, filtered and disinfected per Title 22 standards. The California Department of Public Health requires water that is treated for public distribution to have a chlorine residual, for prevention of re-growth of bacteria or algae while in the distribution piping system. Although chlorine at these levels is safe for humans to consume, it is extremely toxic to aquatic life; therefore discharges of treated drinking water have the potential to cause an exceedance of toxicity thresholds for protection of aquatic life.

Discharges from distribution piping systems (such as fire hydrant flushing or back flow preventers) flow across street surfaces into storm water catchment facilities, pushing debris and oils into the storm drain system. Additionally, unintentional and unplanned discharges from pipe breaks that flow into surface water may cause erosion within their flow path and push sediment into the receiving water.

How are discharges from drinking water systems currently regulated?

The nine Regional Water Boards regulate drinking water system discharges per their discretion. Most Regional Water Boards regulate these discharges with “low threat” type general orders that regulate a suite of different discharges deemed a low threat to surface water quality. Some Regional Water Boards indirectly regulate these discharges by allowing the MS4 permit holders to locally regulate discharges that enter their systems. Other Regional Water Boards do not regulate these discharges.

How can this proposed permit be used to provide this high quality water for multiple benefits?

Integrated regional water management includes identifying all water resources as an integrated water supply component, including water conservation, water recycling, ground water management and replenishment, low impact development, and storm water capture. Discharges from water systems are high quality water that, during drought and non-drought periods, may serve as a component of integrated regional water management. Discharges from water systems are considered to be non-storm water discharges that may or may not be authorized under a storm water permit. When considered together with storm water capture and landscape sprinkler system overspray, discharges from drinking water systems are a significant amount of water to be considered within a watershed management effort.

When discharged to a municipal storm drain that drains to surface waters, federal NPDES permitting, monitoring and reporting requirements must apply; if discharged to land, the discharge is not subject to NPDES regulations, resulting in minimal regulation that may provide as a regulatory incentive. The reduction in the proposed requirements may serve as a regulatory incentive.

Why would a water purveyor want to have its own NPDES Permit?

We know that discharges from drinking water systems have a potential to cause an exceedance of water quality standards and may pose a threat to beneficial uses of surface water. Obtaining an NPDES permit assures a water purveyor that it will not be exposed to regulatory enforcement for discharging without a permit. (A Regional Water Board has the discretion to take enforcement for discharging without a permit.) Additionally, having a discharge that is regulated by, and complies with, a Water Board NPDES permit will help to protect the discharger from third party lawsuits aimed at violation of the Clean Water Act, section 402.

Discharges from drinking water systems, including discharges from water distribution systems and distribution system pipe breaks, are of a consistent nature throughout the state – water that is treated by a water treatment plant per Department of Public Health Title 22 standards and chlorinated to maintain a required minimum chlorine residual concentration. Having a common NPDES permit to specifically regulate these

discharges proposes to provide a consistent permitting mechanism for protection of beneficial uses of surface water from these discharges.

Fundamentals of the Draft Permit:

After conducting stakeholder outreach statewide, the State Water Resources Control Board (State Water Board) has develop a draft statewide drinking water system discharge permit that is intended to serve as a statewide permit. The fundamental principles of this statewide permit include:

- Regulatory efficiency and consistency
- Reduced cost of compliance
- Implement policy exceptions specifically for mandated water system activities

The intended benefit of the proposed permit is to provide water purveyors with increased regulatory certainty through a permit that implements effluent limits, best management practices and monitoring specific to the water quality threat of their drinking water discharges. Various Regional Water Boards have, or have been developing, similar permits for drinking water system discharges. Due to the similar nature of these discharges statewide, the State Water Board is proposing an efficient and consistent permit that will allow water purveyors to focus on their mandated responsibilities to deliver safe drinking water, and protect public health and safety.

The draft permit proposes to regulate discharges from the numerous activities water purveyors must perform to fulfil their responsibilities, including but not limited to the following:

1. Treated Drinking Water from:

- Storage Tanks and Reservoir Dewatering
- Distribution System Tank Dewatering
- Distribution System Flushing
- Distribution System Pipeline Dewatering, Disinfection, and Pressure Testing
- Fire Flow Testing
- Meter Testing
- Automated Water Quality Analyzers
- Urgent unscheduled operations to preserve water quality mandates.



2. Potable Water (including raw water dedicated specifically for drinking water systems) from:

- Groundwater Well Flushing
- Groundwater Well Rehabilitation
- Groundwater Well Development and Testing



3. Emergency Discharges (Potable and Treated Drinking Water):

- Emergency System Failure and Repairs
- Trench Dewatering
- Catastrophic Events



Additionally, a draft Resolution is proposed to provide water purveyors statewide an exception to the State Water Board's *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*¹ and the California Ocean Plan for compliance with California Toxics Rule² priority pollutant criteria/objectives. The above mentioned state policies allow this regulatory exception for discharges from activities necessary to implement control measures for drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. Such an exception will allow water purveyors statewide to go forward with their mandatory responsibilities to protect public health without the restrictions or concern of violation of the California Toxics Rule.

Current Stakeholder Involvement:

Through the development of regional NPDES permits, and the subsequent development of the statewide draft permit, staff from the State and Regional Water Boards have been receiving input and feedback from stakeholder statewide for the last few years. In the last eight months, State and Regional Water Boards staff held six stakeholder workshops to educate interested parties of the basic permitting requirements, and to collect direct feedback from stakeholders.

¹ The Water Board must comply with the California Environmental Quality Act (CEQA) prior to allowing a categorical exception from meeting priority pollutant criteria/objectives.

² On May 18, 2000, the EPA promulgated the California Toxics Rule containing numeric water quality criteria for priority toxic pollutants and other provisions for water quality standards to be applied to waters in the state of California. 40 C.F.R. § 131.38

The three biggest stakeholder concerns include:

- Cost to comply with an NPDES permit
- Inconsistent regulatory requirements for same quality discharges statewide
- Burdensome monitoring and reporting requirements that do not pose value towards protecting water quality
- Overlapping of regulatory permit requirements of storm water permits and permits from the Department of Public Health
- Discharges into water bodies with developed TMDLs

Proposed Permit Incorporating Stakeholder Concerns:

The proposed permit has been developed with all the feedback provided by water purveyors. This discharge-specific NPDES permit requires water purveyors either enroll in this statewide permit or work through their Regional Water Boards to receive concurrence that existing local agreements with municipal storm water permittees is sufficient. Once adopted, water purveyors that enroll in the proposed permit will:

- Implement best management practices that minimize erosion and debris into surface waters
- De-chlorinate chlorinated and superchlorinated water to lower chlorine concentrations to reporting levels of hand-held monitoring equipment,
- Implement immediate response activities that reflect due diligence when becoming aware of a discharge due to emergency system leaks, failures, and/or catastrophic events, and
- Incorporate discharges from drinking water systems into integrated water management effort for aquifer recharge, water reuse, and other multiple benefit options.

For further information, please visit our Water Board internet site at http://www.waterboards.ca.gov/water_issues/programs/npdes/drinkingwatersystems.shtml

Any person desiring to receive future notices concerning the draft Statewide General NPDES Permit for Drinking Water System Discharges must sign up for the Lyris email list. Interested persons are encouraged to subscribe to an email list serve for future notices about the General NPDES Permit for Drinking Water System Discharges at: http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml, (select *Discharges from Drinking Water Systems* under the *Water Quality Topics* category).
