

April 29, 2015

California Rural Water Association Expo

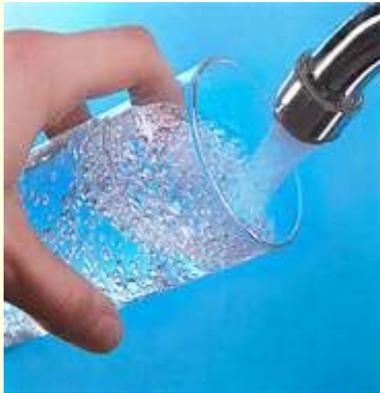
**Overview of the New Statewide Permit
for
Drinking Water System Discharges
To Surface Waters**

***Adopted by the State Water Resources Control Board
Currently In Effect***

***Diana Messina
Supervising Engineer***

Regulatory Compliance

Familiar to Drinking Water System Operators



Federal
Safe Drinking Water Act
and
California
Health and Safety Code



Administered through your Division of Drinking Water permit

***To assure Drinking Water System water served to your customers
is safe for their public health***

What is this New Statewide Permit?

An NPDES Permit based on the



Federal **Clean Water Act** and *California* **Water Code**



Administered through the Division of Water Quality

To assure that discharges from your drinking water systems that flow into surface waters are safe for beneficial uses of those waters, including aquatic life

**National Pollutant Discharge Elimination System
NPDES Permit**

Basic Water Quality Concerns from Drinking Water System Discharges

- **Toxicity from chlorine, metals & change in receiving water ambient pH**



- **Solids in form of sediment, turbidity, sand and trash**



Basic Water Quality Concerns from Discharge Velocities

- **Erosion and hydro-modification through scour**



Type of Discharges Covered by this Permit?

- Planned discharges resulting from activities mandated by the federal Safe Drinking Water Act, Health and Safety Code, and Division of Drinking Water Permit
- **Discharges from:**
 - **Transmission Systems and Lines**
 - **Supply wells**
 - **Water treatment plants or facilities (excluding filter backwash)**
 - **Distribution Systems**
 - **Storage Systems**
- Emergency and unplanned discharges

Types of Discharges Regulated By Permit

- Planned discharges that allow management practices to be put in place
- Whether routed to storm drain system or discharged directly to surface water



- Emergency discharges



How Does This Permit Serve A Water Purveyors Needs?

- This NPDES Permit provides water purveyors with required Clean Water Act regulatory coverage for mandated discharges and emergency discharges
 - The water purveyor is permitted by the State Water Board to discharge to waters of the U.S. per the requirements of the permit
 - This permit sets consistent water quality requirements for discharges statewide
 - This permit does not interfere with local storm water agency authority (this is not a permit to discharge into a storm drain)

What Else Does This Permit Do for Water Purveyors?

- This permit provides a regulatory exception to the California Toxic Rule
- The California Toxic Rule was established through federal regulations for California waters
 - Sets stringent criteria for 126 pollutants including metals and chlorine byproducts
- The State Water Board grants water purveyors that are covered under this permit an exception to California Toxic Rule
 - Note – this is not an exception to the Clean Water Act*
- The exception does not apply to commingled storm water

How To Comply With Permit Requirements

- Implement Best Management Practices to protect beneficial uses of receiving surface water



- Monitor
- Report annually
- Keep records



Permit Requires Existing Proven Management Practices

- Permit does not specify which Best Management Practices
- Select specific practices that protect beneficial uses from your discharge



Permit Requires Existing Proven Management Practices

- Same for ground water supply operations
- Select specific practices that protect beneficial uses from your discharge



Permit Acknowledges Coverage Under Existing MS4 Permits

State Water Board not requiring the following to enroll in statewide permit:

- **A water purveyor that is also a municipal storm water permittees**
- **A water purveyor that have an established local agreement with municipal storm water permittee, and concurrence with their regional water board**
- **A water purveyor whose discharges do not enter waters of the U.S.**

Permit Acknowledges Small System Challenges

- **State Water Board acknowledges difficulties small drinking water systems encounter due to lack of resources and remoteness**
- **State Water Board does not require systems of less than 1000 connections to enroll in new statewide permit**
- **State Water Board does not have the authority to waive small systems from Clean Water Act requirements**
- **State Water Board strongly encourages these small systems to enroll and obtain mandated Clean Water Act regulatory coverage**

Permit Addresses Local Cost Concerns

Simplified Notice of Intent Form

Application fee specific to community drinking water systems

<u>Service Connections</u>	<u>Application Fee Only</u>	<u>Application & Annual Fee</u>
<u>15-999</u>	<u>\$100</u>	
<u>1,000-9,999</u>		<u>\$500</u>
<u>10,000+</u>		<u>\$2,062</u>
<u>Transmission Only</u>		<u>\$2,062</u>

Simplified site map requirements

TMDL water bodies in Los Angeles and San Diego Regions

- 2 samples' laboratory analysis for parameters applicable to TMDLs

Use of Available Information

Mapping boundaries of the water system

<http://www.ehib.org/wsystemlist.jsp>

Information on the different water systems

<https://sdwis.waterboards.ca.gov/PDWW/>

Water Board's 303(d) 2012 integrated report map to facilitate the identification of impaired waters

http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml

Permit Addresses Local Cost Concerns

Compliance monitoring involves field monitoring only

Event monitoring for discharges with greater perceived threat

- **Discharges due to well development and rehabilitation**
- **Superchlorinated discharges**
- **Discharges greater than one acre-foot**

Once-per-year representative monitoring

- **One representative monitoring sample represents other discharges of same:**
 - **general source**
 - **treatment and**
 - **management practices**

Permit Addresses Local Cost Concerns

Visual receiving water monitoring only for direct discharges that are non-compliant

No monitoring for emergency discharges or non-surface water discharges

Annual reporting to State Board (statewide database)

Immediate reporting when non-compliance may potentially adversely impact beneficial uses of receiving waters

Pre-notification to Regional Water Quality Control Board of large size discharges

Post notification of emergency discharges

How to Comply with the Permit

By September 1, 2015

Submit a Completed Application Package (Att. B-1 of permit)

Or

Submit a Completed *Notice of Non-Applicability*

(Att. B-2 of permit)

- The water purveyor is a storm water (MS4) permittee that holds a storm water NPDES permit (i.e. City, County)*
- The water purveyor has an established local agreement with the storm drain agency and all your system discharges enter the storm drain system (no direct discharges to surface waters)*
- The water system does not discharge to a water of the U.S.*
The discharge to a water of the U.S. is federally exempt

Promoting Multiple Uses for these Good Quality Discharges



Incentives to work with storm water entity to route water to:

- **Ground water recharge facilities**
- **Low impact development facilities**



- **Reuse**



Promoting Multiple Uses for these Good Quality Discharges



Incentive to routing water for beneficial use or reuse

- Permit coverage also serves as waste discharge requirements
- No monitoring for portions of discharges that do not discharge to surface waters (waters of the U.S.)



Note – discharge to a dry creek bed is a discharge to a water of the U.S. and an NPDES discharge. Not considered a beneficial use per this discussion.

Seeking Collaboration Among Local Drinking/Storm Water Agency

Large volume discharges create un-natural pulses in storm drain systems during dry weather creating high-concentration storm water

Solution - Route flows to green streets, parking lots, other low impact development (LID) infrastructure

During drought

Difficult to view discharges as *de minimus* discharges in terms of needed water supply

Drinking water discharges may serve as conservation when routed to LID, especially those systems that overlay ground water basins and fractured bedrock

Continue Integrating local water management

Incentivized through CA Water Action Plan (Actions 2 & 10) and Proposition 1 funding incentives

Permit Implementation Outreach

Division of Water Quality staff conducting workshops statewide

sending informational letter to all water purveyors

requesting Associations to ask water purveyors if they are aware of this new permit and the immediate requirements

Direct them to our staff and program website:

http://www.waterboards.ca.gov/water_issues/programs/npdes/drinkingwatersystems.shtml

Let them know of Division of Water Quality Staff Workshops

Let us know of the need for further workshops

**For Further Information
Come to a Permit Implementation Workshop or
Request a Permit Implementation Workshop in Your
Area**

www.waterboards.ca.gov/water_issues/programs/npdes/drinkingwatersystems.shtml

Contact

Renan Jauregui

renan.jauregui@waterboards.ca.gov

Russell Norman

russell.norman@waterboards.ca.gov

Diana Messina

diana.messina@waterboards.ca.gov

Additional Background Information

For Information Only

TMDL Implementation

Section K of Fact Sheet summarizes existing TMDLs that apply to water purveyors

Los Angeles and San Diego Regional Water Board TMDLs directly and indirectly reference waste load allocations to water purveyors exclusively

Permit Fact Sheet concludes that water purveyors are not a source of the pollutant impairment

- Additional application monitoring to be evaluated

Why 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

Others do not, or storm water permittees requiring separate permit

Clean Water Act Requirements

Section 122.44(d)(1)(i) states NPDES permits shall include appropriate effluent limitations:

*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*

For drinking water system discharges, pollutants of concern include chlorine, chlorine byproducts, pH, solids

Toxicity Standards

Toxicity (i.e. chlorine, byproducts, metals)

Regional Board 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 when a discharge has a reasonable potential*

causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a generic or narrative objective within an applicable State water quality standard (40 Code of Federal Regulations 122.44(d)).

or Discharges Into TMDL Water Bodies

TMDL – Total Maximum Daily Load

the water quality in a surface water is polluted and does not support its beneficial uses, the Regional Water Quality Control Board adopts a TMDL

A TMDL is state regulation that allocates how much of that pollutant different types of dischargers can contribute to that water body to restore its water quality

Attachment F, Section III.K. lists the water bodies in which If water purveyors are included in a TMDL

Lab analysis of subject TMDL pollutant is required for discharges into that impaired water body

NPDES Permit Application Checklist

- Notice of Intent form completed and signed for each CDWS
- Application fee payable to the SWRCB included

<u>Service Connections</u>	<u>Application Fee Only</u>	<u>Application & Annual Fee</u>
<u>15-999</u>	<u>\$100</u>	
<u>1,000-9,999</u>		<u>\$500</u>
<u>10,000+</u>		<u>\$2,062</u>
<u>Transmission Only</u>		<u>\$2,062</u>

- Site information provided
 - Option of providing general location of the facilities or the boundaries of the service area(s)
 - Need only to show the named receiving waters and the major named downstream waters
 - For discharges within 300 feet of a water body, the Discharger is only expected to submit the representative distance of 300 feet on both sides of the named water bodies or indicate the entire service area is within 300 feet from a water body.
- TMDL Waterbody information completed and submitted
 - 2 samples' laboratory analysis for parameters listed in Table F-2 for each applicable TMDL waterbody representative of the discharges
 - The estimated minimum and maximum discharge volume per discharge event and estimated average annual discharge volume going to the TMDL waterbody.
 - Description of TMDL specific BMPs if any