

SAN FRANCISCO REGIONAL WATER AGENCY PARTNERS



August 19, 2014

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Subject: Comment Letter – Draft Drinking Water Systems General Permit and Resolution

Dear Ms. Townsend:

On behalf of the San Francisco Bay Regional Water Agency Partners (Agencies) comprised of the East Bay Municipal Utility District (EBMUD), Alameda County Water District (ACWD), California Water Service Company (Cal Water), Contra Costa Water District (CCWD), Marin Municipal Water District (MMWD), San Francisco Public Utilities Commission (SFPUC), San Jose Water Company (SJWC), and Zone 7 Water Agency (Zone 7) we respectfully submit these comments for your consideration on the State Water Resources Control Board's (SWRCB) Draft Drinking Water Systems General Permit and Resolution (Draft Permit).

The Agencies support issuance of a practical permit that is protective of water quality and that provides regulatory clarity and the standardization of compliance practices across the State of California for these de minimis low threat drinking water system discharges. As you may be aware, the Agencies have been actively engaged in obtaining a clear regulatory framework for these de minimis drinking water discharges and have supported an effort in the San Francisco Bay Region (Region 2), both technically and financially for the last two plus years. The Agencies appreciate the efforts of both the San Francisco Regional Water Quality Control Board (SFRWQCB) and SWRCB staff to work collaboratively on the framework for the proposed permits. The Agencies believe that these comments and recommendations will improve the Draft Permit by reducing costs of compliance while maintaining protection of water quality in the state (consistent with the intent of State Water Board Resolution No. 2013-0029) and will help to facilitate consistent and feasible industry standard Best Management Practices (BMPs) for water utilities.

COMMENTS AND RECOMMENDATIONS

STATEWIDE CONSISTENCY

The Agencies greatly appreciate the consistency across regions that the state-wide Draft Permit will bring, given that some of our members operate drinking water facilities in multiple Regions. The approach to regulate all water purveyors uniformly across the state is efficient and will support successful implementation of the requirements for those organizations that span multiple regional board jurisdictions and may otherwise face conflicting requirements. The Agencies recommend that the language be amended in the Monitoring and Reporting Program (MRP),

Section II.E. as shown below to maintain state-wide consistency for these discharges that have very similar characteristics:

- E. The State Water Board Deputy Director of Water Quality ~~or an Executive Officer of the appropriate Regional Water Board~~ may increase monitoring frequency at any time to ensure the protection of the beneficial uses of the receiving water.

DEFINITIONS

As the Draft Permit is currently written, the discharge definitions are unnecessarily confusing and require additional clarification. Discharges are divided into three separate categories “treated drinking water,” “potable water,” and “raw water.” These discharge distinctions are unnecessary. All three of these definitions can be streamlined, as is proposed in the revisions below.

The coverage of raw water from transmission system pipelines, tunnels, or surface water reservoirs is outside the scope of the NPDES permitting program. Transfers of raw water that convey or connect waters of the U.S. without subjecting the transferred water to intervening industrial, municipal, or commercial use are not subject to regulation under the NPDES permitting program (see the Federal Water Transfer Rule 40 C.F.R. § 122.3[i]). The permit should be revised to delete any references to coverage of these types of raw water discharges.

The Agencies propose the following revisions to Section I.A-C and Section II.A (pp. 5-7):

A. *Facilities Authorized To Discharge Under This Order*

This Order authorizes discharges of water from community drinking water systems (as defined in Table 1) that do not adversely affect or impact beneficial uses of receiving waters. Authorized discharges to waters of the U.S. pursuant to this Order are those from drinking water facilities including, but not limited to, municipal supply wells, transmission systems, water treatment facilities, treated drinking water distribution systems, and storage facilities.

This Order covers both planned and emergency discharges of water from drinking water facilities. Planned discharges are defined as discharges resulting from a water purveyor’s essential operations and activities undertaken to comply with the federal Safe Drinking Water Act, the California Health and Safety Code, State of California Drinking Water Regulations or essential operational or maintenance activities necessary to provide reliable and safe drinking water. Planned discharges include regularly scheduled, automated, and non-regularly scheduled activities that must take place to comply with mandated regulations that the water purveyor knows in advance will result in a discharge. Emergency discharges are defined as discharges that occur due to

system leakage, system failures or other emergencies, and the water purveyor is not aware of the discharge until after the discharge has commenced.

For the purposes of this Order discharges may be surface water or groundwater from drinking water aquifers.

B. Authorized Discharges

This Order authorizes planned and unplanned discharges of water from community drinking water systems, as defined above, due to activities mandated by law regarding the development, operation, maintenance, and rehabilitation of drinking water systems. Authorized discharges may include, but are not limited to, the following:

1. Planned Discharges:

- i. Water Treatment Plant (discharges of treated drinking water only).*
- ii. Distribution System Storage Tank or Reservoir releases.*
- iii. Distribution System Dewatering, Flushing, and Pressure Testing.*
- iv. Transmission system installation, cleaning, testing.*
- v. Fire Flow / Fire Hydrant Testing.*
- vi. Meter Testing.*
- vii. Automated Water Quality Analyzers.*
- viii. Pressure Relief Valves.*
- ix. Groundwater Supply Well Flushing.*
- x. Groundwater Well Development, Installation, Rehabilitation, and Testing.*
- xi. Other activities including unscheduled activities that must be undertaken to comply with mandates of the Federal Drinking Water Act and California Health and Safety Code.*

2. Emergency Discharges

- i. Emergency Drinking Water System Failures and Repairs including Transmission and Distribution System Failures and Repairs.*
- ii. Trench dewatering due to an emergency failure.*
- iii. Catastrophic events.*

II. PERMIT COVERAGE AND APPLICATION REQUIREMENTS

A. Permit Coverage

This Order provides regulatory coverage to water purveyors with existing and potential discharges from a community drinking water system that do not adversely affect

beneficial uses of the receiving water. Permit coverage may include discharges from work conducted by contractors on behalf of the water purveyor.

The following discharges are not covered by this Order:

- 1) Activities that convey or connect waters of the United States without subjecting the transferred water to intervening industrial, municipal, or commercial use (see Federal Water Transfer Rule (40 C.F.R. § 122.3[i]))*
- 2) Discharges of raw water from transmission system pipelines, tunnels, and surface water reservoirs.*
- 3) Discharge covered under a separate NPDES permit for discharges that the Regional Water Quality Control Board Executive Officer determines additional permit requirements are necessary to address Total Maximum Daily Loads (TMDL) with Waste Load Allocations (WLA) because the requirements of this Order are not consistent with the TMDL, or*
- 4) Discharges from other entities or individuals such as fire departments, construction and insurance companies that test potable water systems, street cleaners, or other users of a municipal storm water system that discharge to waters of the U.S.*

VOLUME THRESHOLDS FOR MONITORING

Per informal correspondence with SWRCB, staff we understand that direct discharges are considered to be discharges that do not flow through a constructed conveyance (such as a storm drain, canal, lined ditch, etc.) prior to reaching a receiving water. SWRCB staff is concerned that there is a higher possibility of erosion and unintended hydro modification from direct discharges. The Draft Permit would therefore require monitoring of all direct discharges, regardless of volume. However, erosion, sediment and hydro modification are typically associated with large volumes. The Agencies recommend that a volume threshold for direct discharges to waters of the U.S. be included in the Draft Permit.

The Agencies believe that this is unnecessarily restrictive and inconsistent with the overall tenor of the Permit to balance monitoring and reporting requirements with the relative threat to receiving water quality above a threshold volume of discharge and after implementation of BMPs. The Agencies support the 325,800 gallons per event monitoring threshold in Attachment E – Monitoring and Reporting Program Section II.A. 2 for planned direct or non-direct discharges. This volume represents a reasonable threshold for expending monitoring and reporting resources on discharges with a higher potential for impacts. This is also consistent one

week in advance notification threshold volume for planned discharges of 250,000 gallons per day or a total volume of 500,000 gallons or more in the Region 2 Municipal Regional Stormwater Permit (MRSP) (Order No. R2-2009-0074).

The Agencies propose that the Draft Permit include a volume threshold of 100,000 gallons for monitoring of direct discharges. The 100,000 gallons threshold has been used in prior NPDES permits as a trigger for notification. For example, the MRSP for Region 4 (R4-2014-0024) includes a RWQCB notification threshold for unplanned discharges events for volumes greater than or equal to 100,000 gallons. The Fact Sheet for the MRSP indicates that administrative BMPs such as managerial practices, operations and maintenance procedures or other measures to reduce or prevent potential pollutants from being discharged during these events are called for to effectively mitigate these discharges up to 100,000 gallons. Thus, monitoring of direct discharges less than 100,000 gallons is unnecessary since the administrative BMPs combined with field BMPs render these discharges low risk.

It is important to note that while monitoring of discharges below the volume threshold would not be required, the discharger would still be required to implement the appropriate BMPs. In summary - erosion, sediment transport and hydro modification are typically associated with larger volume unplanned direct discharges and therefore a volume threshold of at least 100,000 gallons should be used to trigger monitoring and notification.

REPRESENTATIVE MONITORING

The Agencies believe the representative monitoring approach is both protective of the environment and practical and therefore support this concept. However, this specific requirement needs some clarification as to how dischargers are expected to meet representative monitoring obligations.

UNPLANNED EVENT MONITORING

Regarding required discharge monitoring, the Draft Permit does not make any distinction between monitoring planned and unplanned events, the variability of these scenarios, and how the required responses are significantly different. Unplanned discharges are far more difficult to control than planned discharges due to their unpredictable nature and location. During an unplanned event, emergency response is initiated and implementing BMPs is the most critical action. During these emergency incidents, response staff is focused on stopping the leak as quickly as possible, protecting property, conserving water, protecting public health and the environment. These differences should be recognized in the Draft Permit and reflected in the required monitoring. The Agencies suggest that monitoring not be required for unplanned events, but responding staff should be focused on deployment of BMPs, which is consistent with earlier draft language circulated by State Board staff. Please amend the Draft Permit language in Section I.E. of the MRP as follows:

- E. The Discharger shall immediately deploy ~~monitor emergency discharges according to sections II and III below, if the discharge has the potential to adversely affect the beneficial uses of the surface water, but only after protection of public health, safety, and property is established, and best management practices are implemented, and if it is feasible to monitor.~~ once protection of public health, safety and property is established.

CHLORINE RESIDUAL COMPLIANCE DETERMINATION

The Agencies would like to preface their comments on the method for compliance determination with the proposed chlorine Numeric Effluent Limit (NEL) by noting that the agencies do not believe that the USEPA Water Quality Criteria (WQC) for chlorine residual (EPA 440/5-84-030, January 1985) is applicable to intermittent potable water system discharges. The 1985 WQC document states that “These criteria are intended to apply to situations of **continuous exposure** ...” (p. 2, emphasis supplied).

The Agencies believe that Draft Permit Section IX. Compliance Determination needs to be modified to state that compliance with effluent limitations is to be based on a Minimum Level (ML) or Reporting Level (RL) and not a Method Detection Limit (MDL) as stated in Section IX. The Agencies suggest that Section IX be modified as follows:

“A. *General*

Compliance with effluent limitations shall be determined using monitoring and reporting protocols defined in the Monitoring and Reporting Program of this Order. For purposes of reporting and administrative enforcement by the State and/or Regional Water Boards, the Discharger shall be deemed out of compliance with the effluent limitations if the constituent concentration or level is greater than the effluent limitation and greater than or equal to the minimum level (ML) or reporting level (RL) of the method used to determine compliance.

B. *Total Residual Chlorine*

Field measurements for total residual chlorine shall be made using U.S. EPA-approved methods described in 40 C.F.R. § 136.3. The ML or RL of the method used to determine compliance with the total chlorine residual effluent limitations must be 0.1 mg/L. A discharge monitoring result with a total residual chlorine concentration greater than or equal to 0.1 mg/L shall be deemed out of compliance with a chlorine effluent limitation. Due to other possible interferences of these handheld devices, if readings are false positives, these will not be evaluated for compliance if explanation of cause is provided.”

The above suggestion is consistent with the definitions of ML and RL in Draft Permit Attachment A (p. A-2) and with the State Implementation Policy (Appendix 4). The Agencies also request that throughout the permit where the 0.019 mg/L effluent limit is referenced that a

footnote be added to describe the compliance determination method with this effluent limit. The agencies suggest the following language for the footnote:

“The ML used to determine compliance with the total chlorine residual effluent limitation is 0.1 mg/L. A discharge monitoring result with a total residual chlorine concentration greater than or equal to 0.1 mg/L shall be deemed out of compliance with the total residual chlorine effluent limitation.”

Lastly, the Draft Permit does not provide a technical justification for the proposed chlorine residual 0.1 mg/L ML value. The Agencies provided the SWRCB and Region 2 staff with copies of a study performed by the State of Missouri that supported their adoption of a 0.13 mg/L ML for chlorine residual using handheld instruments. The 0.13 mg/L was included in the Draft Permit (Draft Permit) issued by Region 2 and the Agencies request that the Draft Permit ML for chlorine residual, and all associated references, be changed to 0.13 mg/L.

TURBIDITY REQUIREMENTS

The Agencies recommend that the Draft Permit be amended to remove the turbidity NEL and require appropriate BMP deployment to the maximum extent practicable (MEP), documentation of such deployment and to retain and make all pertinent records of deployment available upon request for regulatory review.

The agencies also recommend that the turbidity requirements in the body of the Draft Permit should explicitly state that they are applicable only to discharges related to groundwater wells (which is consistent with what is stated in the Fact Sheet (p. F-9 to F-10)).

Additionally, the Agencies seek clarification on the rationale for the turbidity limit in the Fact Sheet and feel that BMP requirements are more appropriate. There is no readily available means to translate the turbidity objectives into numeric Water Quality Based Effluent Limits (WQBELs) appropriate for the many receiving waters. The Draft Permit contains minimal rationale for inclusion of numeric turbidity effluent limits or for the basis for the proposed 10 NTU limit. The Fact Sheet (p. F-56) simply provides the conclusory statements that:

“This Order imposes numeric WQBELs for total chlorine residual and turbidity because it is feasible to calculate numeric WQBELs for these pollutants. Also, field test kits are readily available to measure them, so it is feasible to collect representative total chlorine and turbidity data.”

The mere existence of a water quality objective for a given constituent does not constitute sufficient grounds for imposition of a numeric WQBEL. Similarly, the availability of a test method, in this case field test kits, does not constitute sufficient grounds for imposition of numeric WQBELs.

Consequently, the Agencies believe to require a discharger to reduce pollutants to levels consistently below a WQBEL (or a numeric action level) using BMPs is to require the implementation of technology based practices that are not available to the industry.

pH MONITORING

The Agencies believe that the Draft Permit need not address the pH of discharges based on the following comments:

- 1) The pH of the water that may be discharged under the Draft Permit is already accurately characterized by the water agencies through the monitoring performed as described in item 1 above. The water agencies offer to provide the SWRCB with pH data, from their existing regulatory monitoring, in their annual reporting to the SWRCB.
- 2) Monitoring of the discharges for pH is not practical. This is because accurate pH readings require frequent instrument calibrations and calibration checks. pH field measurements are typically performed by laboratory personnel in an accredited laboratory or in the field by water treatment and distribution operators certified by the Division of Drinking Water. The crews charged with repairing and maintaining a water agency's infrastructure typically do not possess the required training or certifications to perform NPDES compliance analyses, with the exception of chlorine residual. Monitoring of drinking water discharges for pH would place an additional labor burden that would only yield information that is already collected under regulatory and operational programs.
- 3) Water agencies that serve water above the 6.5 to 8.5 pH range, do so for corrosion control reasons and must obtain approval from the Division of Drinking Water for their corrosion control plan. For these water agencies there are no practical and cost effective BMPs available that effectively adjust pH.

WATER TREATMENT PLANT COVERAGE

The Agencies support the incorporation of Water Treatment Plant discharges into the Draft Permit. We understand from SWRCB Board staff that the coverage however may not include all discharges from Water Treatment Plants. This lack of full coverage puts Dischargers in a position where they could have multiple NPDES permits for the same infrastructure and this is likely to lead to unintended non-compliance due to confusion of which requirements apply when. Water Treatment Plants, may in some cases have filter backwash discharges that are part of the treatment process. The solids are settled out and the decanted water is either recirculated or discharged. Many times the discharge goes back into a receiving water, with designated beneficial uses, that will again go back in to the system to be treated and used for drinking water at a later date. The Agencies support monitoring these types of discharges, but do not want to segregate different waste streams to meet obligations in different permit that might not be consistent. The Agencies recommend revising Water Treatment Plant coverage to include all

discharges from Water Treatment Plants, not just the treated water as these are also low risk discharges.

RECOMMENDED BMPs

The Agencies appreciate the reference to the AWWA guidance manual for the BMPs recommended to mitigate discharges. These BMPs are the industry standard. They are proven to be effective and have been successfully implemented. Per Provision VIII.C.2.d., “the Discharger may implement proven BMPs per updated approved guidance established by industry experts such as the *2014 Edition of the BMP Manual for Drinking Water System Releases* (or subsequent updates thereto), published by the California-Nevada Section of the American Water Works Association or other professional associations or entities, to comply with the requirements of this Order.” Similar references are also made in Effluent Limitations and Discharge Specifications Provision V.A and in Attachment C. Example Best Management Practices. Further, the Agencies support the inclusion of procedures approved by the AWWA, or other professional drinking water industry associations, as appropriate QA/QC protocol per Attachment E, General Monitoring Provision I.B.

These references to established industry guidance are appropriate as it has not been shown that additional measures improve protection of beneficial uses.

BMPs CANNOT MEET MCLs

The BMPs available to the Dischargers are not intended to treat or control the discharges such that they meet DPH’s Maximum Contaminant Levels (MCLs). The BMPs are a tool utilized to minimize adverse environmental impacts to the Maximum Extent Practicable (MEP).

The Agencies recommend revising Effluent Limitation A, on page 15, to read:

“The Discharger shall implement the BMP procedures and measures as specified in Provision VIII.C.2, or equivalent proven BMPs provided by professional associations or institutes such as the American Water Works Association, ~~for all discharges to comply with DPH’s MCLs and to assure that to protect~~ beneficial uses of the receiving water body(ies). are not adversely affected.”

NOTICE OF INTENT (NOI) REQUIREMENTS

The Agencies believe the information requested in the NOI has limited value and may not be readily available. The agencies recommend that Section II.B.c be amended as follows:

- c. Site Map Information.** A site map schematic showing the following items:
- i. The boundaries of the water purveyor’s service area(s),
 - ii. The location and general un-detailed layout of the community water system(s) facilities,

- ~~iii. The location and general un-detailed alignment of the receiving surface water(s);~~
- ~~iv. The general location of representative monitoring sites, with reference to parameters to be monitored at each site.~~
- ~~v. A description of the multiple uses or beneficial reuse that the discharges served (i.e. ground water recharge, irrigation), if applicable.~~
- ~~vi. Identification of the portion of the community water system that discharges within a 300-foot conveyance distance from the receiving water(s) and/or within a 300-foot radius of the receiving water(s).~~

We recommend moving the requirements to identify monitoring locations and receiving to annual Self-Monitoring Reports (p. E-7) B2.

Please amend Section II.B.c .iv to apply to planned discharges only and to read as follows:

- iv. The general location of representative monitoring sites for planned discharges, with reference to parameters to be monitored at each site.

We recommend deleting Section II.B.c .vi “Identification of the portion of the community water system that discharges within a 300-foot conveyance distance from the receiving water(s) and/or within a 300-foot radius of the receiving water(s)” because it will have very limited value and the SWRCB’s focus should be where discharges actually happen which will be self-reported. Further it may be impossible to get access to such maps from MS4 permittees.

CONTINUOUS DISCHARGES

The Draft Permit provides coverage for “short-term or seasonal discharges of potable water and treated drinking water” as indicated in Section I. of the permit. This limited scope provides a gap in coverage for similarly de minimis discharges that run on a continuous basis to meet regulatory requirements for life, health and safety. Examples of such discharges would include reservoir filling and seepage from underdrains of water storage reservoirs that have been deliberately engineered for dam protection. The Agencies believe that these discharges do not have reasonable potential to exceed water quality objectives and are indeed de minimis and need coverage. The Agencies recommend that de minimis long term and/or continuous discharges be included in the scope of the Draft Permit and be included as part of the representative monitoring program.

MCLs, SIP and OCEAN PLAN CATEGORICAL EXEMPTIONS

The Agencies generally support the analysis provided in the draft Resolution and the Initial Study/Mitigated Negative Declaration (IS/MND) that grants 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 (SIP)* and the *California Ocean Plan* for compliance with California Toxics Rule (CTR) and Ocean Plan priority pollutant

criteria/objectives. These exceptions will allow water purveyors statewide to proceed with mandated responsibilities to protect public health without conflicting restrictions or concern of violating elements of the California Toxics Rule.

The exceptions are granted to all CTR and Ocean Plan criteria for which the pollutant criteria are more stringent than an associated MCL, or do not have a current MCL. This approach appears to be responsible for the Draft Permit including requirements in several places for discharges to comply with all primary and secondary MCLs and/or to not cause receiving waters to exceed primary and secondary MCLs. As noted elsewhere in this comment letter, broadly referencing compliance with MCLs, particularly secondary (aesthetic) MCLs could have unintended compliance implications. For example, receiving waters themselves may not always comply with MCLs. Certain water purveyor discharges may not always comply with MCLs. The Agencies request that SWRCB staff review the Draft Permit’s references to MCLs and whether they need to be retained.

The Agencies support the clarification of the definition of “completion of the project” regarding the SIP exception criteria and requirements for when a biologist certification is required that beneficial uses have been restored (Draft Resolution Whereas 15):

“For drinking water system discharges, completion of the project is when the water purveyor ceases discharges from its drinking water system, or when the State and/or Regional Water Board terminates NPDES permit coverage for the discharge(s), whichever is sooner. Thus the certification by a qualified biologist must be submitted after a water purveyor completely and permanently stops discharging from a drinking water system, or when the Water Boards cease permitting the discharge to waters of the U.S.”

The Agencies also support statements in the IS/MND regarding coverage of emergency discharges and the definition of existing conditions (Executive Summary p. ii):

“The subject discharges are both planned and emergency discharges. This document does not analyze the environmental impact of emergency discharges; such discharges fit within the regulatory definition of an emergency and are statutorily exempt from CEQA. Planned routine discharges from existing water supply system are part of the existing condition that serves as the baseline for the enclosed analysis. As compared to existing conditions, there is no significant effect on the environment due to routinely occurring planned discharges. Also as analyzed in this document, discharges from new or expanded drinking water systems will have ‘no effect’ or ‘no significant effect with mitigation’ on the environment.”

The Agencies appreciate the opportunity to provide comments on the SWRCB Statewide National Pollutant Discharge Elimination System (NPDES) Permit for Drinking Water System

Discharges to Surface Waters and we look forward to continuing to work with you to implement a meaningful program to protect water quality. If you have any comments or questions regarding the content of this letter, please feel free to contact me at 510-287-1256 or via email at mambrose@ebmud.com.



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