EAST BAY MUNICIPAL UTILITY DISTRICT

August 18, 2014

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

Via E-mail: *commentletters@waterboards.ca.gov*

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

Dear Ms. Townsend:

The East Bay Municipal Utility District (District) appreciates the opportunity to submit comments on the State Water Resources Control Board's (SWRCB) Statewide National Pollutant Discharge Elimination System Permit for Drinking Water System Discharges to Surface Waters (Draft Permit).

The District provides safe, high quality drinking water to 1.3 million water customers in Alameda and Contra Costa Counties over a 325-square mile service area that has approximately 4,000 miles of distribution system pipe, 380,000 service connections, 30,000 hydrants, and just under 200 reservoirs. Additionally, the District operates water treatment, supply distribution and transmission systems in Amador and Calaveras counties for local customers in the Pardee Reservoir and Camanche Reservoir areas. Thus District facilities are regulated by both the San Francisco Bay (Region 2) and the Central Valley (Region 5) Regional Water Quality Control Boards. This draft permit will have a direct impact on the District and its operations.

The District, along with regional partners, has been actively engaged in obtaining a clear regulatory framework for de minimis drinking water discharges and has 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 District believes that the comments and recommendations provided herein 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 implementable industry standard best management practices for all water utilities.

COMMENTS AND RECOMMENDATIONS

Definitions

The District believes that the current definitions for the types of water discharges covered by the draft permit are unnecessarily complicated. They need to be simplified and should be consistent with widely recognized and understood industry terms. We would suggest that the draft permit should simply cover altered water that is intended for human consumption. That is to say, only water that has been changed in some way by adding a "pollutant," for example, adding chlorine for disinfection. If water has not been altered then it should not be covered unless it is a groundwater source, in which case unaltered groundwater should also be covered. We request amending the language and definitions in Section I.A., B. & C. as follows:

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.

~~**B. Discharge Definitions**~~

This Order covers both planned and emergency discharges of water from drinking water facilities and appurtenances.. 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, and CDPH regulations in order 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 and 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.

~~**1. Treated Drinking Water**~~

For the purposes of this Order, discharges may be treated ~~drinking water refers to treated ground or~~ surface water and treated or untreated groundwater. ~~water from drinking water distribution systems, that has been treated by a water treatment facility, and is suitable for human consumption in accordance with the drinking water regulations in Titles 17 and 22 of the California Code of Regulations, including compliance with the CDPH Primary Maximum Contaminant Levels (MCLs) and secondary MCLs as a running annual average). (sections 64431, 64444, and 64449, California Code of Regulations, title 22, division 4, chapter 15, articles 4, 5.5, and 16).~~

~~**2. Potable Water**~~

~~For the purposes of this Order, Potable water is defined as groundwater that may or may not have received treatment, and meets the following criteria:~~

~~a) Is suitable for human consumption,~~

~~b) Complies with the primary and secondary MCLs as a running annual average.~~

~~**3. Raw Water**~~

~~For the purposes of this Order, raw water is defined as untreated or partially treated surface water or groundwater dedicated for drinking water supply but is not suitable for human consumption. To be eligible for coverage under this Order, discharge of raw water may not cause or contribute to the receiving water exceeding a primary or secondary drinking water MCL, on a running annual average basis.~~

B ~~C~~. Authorized Discharges

This Order authorizes planned and emergency discharges of <u>treated surface water and treated or untreated groundwater</u> ~~raw, and potable or treated drinking water f~~rom 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:

Lastly, all references in the draft permit to "potable" water should be clarified to refer specifically to groundwater intended for drinking water.

<u>Water Transfer Rule</u>
As you are aware, the Federal Water Transfer Rule (40 C.F.R. § 122.3[i]) exempts "water transfers" from regulation under the Clean Water Act; therefore, these discharges do not require NPDES permits. The draft permit currently includes the following language specific to this clarification in Section I. Scope of Statewide General Permit and Requirement for Regulatory Coverage:

> This Order is a National Pollutant Discharge Elimination System (NPDES) general permit that authorizes discharges from community drinking water systems, as defined in Table 1 and described in the Fact Sheet (Attachment F of this Order). In order to legally discharge, this Order requires enrollment of all water purveyors in California that discharge per the description above to waters of the U.S., unless otherwise exempt from the requirement to obtain an NPDES permit under federal law, in accordance with section I and II of this Order, with the exception of water purveyors that meet the following criteria:

The challenge with this language is that the way it is written it is addressed to the discharger, not the discharge. For example, the District does need to enroll in this permit, but we also need acknowledgment of the regulatory status of our water transfers. We propose a slight modification, as written below, to easily address this issue:

> This Order is a National Pollutant Discharge Elimination System (NPDES) general permit that authorizes discharges from community drinking water systems, as defined in Table 1 and described in the Fact Sheet (Attachment F of this Order). In order to legally discharge, this Order requires enrollment of all water purveyors in California that discharge per the description above to waters of the U.S., ~~unless otherwise~~ to the extent such discharges are not exempt from the requirement to obtain an NPDES permit under federal law, in accordance with section I and II of this Order, with the exception of water purveyors that meet the following criteria:

Monitoring for Planned vs. Unplanned Events

The draft permit does not make any distinction between monitoring of planned and unplanned events and the variability of these scenarios and how the required responses are significantly different. These differences need to be recognized in the draft permit and reflected in the required monitoring. Drinking water discharges from District facilities result from planned and unplanned events. Planned discharge examples include reservoir dewatering, pipeline dewatering, pipeline flushing, and hydrant testing. Unplanned discharge examples include water line and main breaks, illegal hydrant openings, accidental hydrant shearing by private vehicles, construction damage by contractors conducting other utility work, reservoir overflows, and emergency main flushing to address public health issues as required by drinking water regulations. Unplanned discharges are far more difficult to control than planned discharges due to their unpredictable nature and location. Unplanned water main breaks may be caused by a number of factors, including soil movement caused by landslides and fault creep, ground swelling during wet weather, soil corrosivity, pressure surges, and defective materials. When main breaks happen, an emergency response is initiated. Emergency response is not the same as a preplanned event that is scheduled and has had every detail preset. The District suggests that monitoring not be required for unplanned events, but should be focused on deployment of Best Management Practices (BMPs), which is consistent with earlier draft concept language circulated by State Board staff. Please amend the 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.~~ upon arrival at a site experiencing an unplanned discharge and take measures to minimize impacts to receiving waters after protection of public health, safety and property is established.

Direct Discharge De Minimis Volume Threshold

The District requests that the SWRCB staff add a low threshold volume for direct discharges under which no monitoring would be required because little to no risk to beneficial uses is feasible. The draft permit currently requires all direct discharges, regardless of size, to be monitored. The District recommends that a numeric de minimis volume threshold for planned direct discharges be established. There are many direct discharges where there are no or extremely low threats to beneficial uses and monitoring is overly burdensome and costly with no added benefit. As an example, picture a garden hose discharging a few gallons into a receiving water and what the risk associated with a discharge that small would practically be.

The existing Long Beach MS4 permit (Order No. R4-2014-0024), which provides regulatory coverage for essential drinking water discharges, includes a monitoring and reporting threshold of 100,000 gallons. This volume is commensurate with the widely acknowledged de minimis nature of these discharges. The District recommends that the SWRCB adopt a 100,000 gallon threshold in the draft permit to be consistent with existing similar permits for volume threshold for monitoring and reporting.

Turbidity Limit

The District believes implementation of the 10 NTU numeric effluent limit for turbidity in groundwater well discharges in the draft permit is not feasible or appropriate. Due to high variability in the flow rate, duration, and sediment load in these discharges, individual site constraints, and limited data make it difficult with any certainty to determine a reasonable action level that can be achieved with the given BMP technology. Further, the draft permit provides no technical explanation for the proposed 10 NTU limit, other than to globally reference regional basin plans. It is unclear to us where this number comes from. The SWRCB needs to conduct a reasonable potential analysis that demonstrates that short term, intermittent discharges of groundwater with varying turbidity concentrations have the potential to impact beneficial uses in order to propose a scientifically justifiable numeric limit.

It would be more effective to take an iterative, adaptive approach, whereby permittees implement mechanisms to evaluate the performance of BMPs, formally document their use and make adjustments as necessary to protect water quality. At this time, the District recommends that the draft permit be amended to delete the turbidity effluent limit of 10 NTU and instead require appropriate BMP deployment to the maximum extent practicable, documentation of such deployment and documented evaluation of said BMPs and make all records of deployment and evaluation available for regulatory review.

Chlorine Residual Effluent Limit

The draft permit includes an effluent limitation for total chlorine residual of 0.019 mg/L (Section V. Effluent Limitations and Discharge Specifications). Compliance is based on a total measurable chlorine residual of less than 0.10 mg/L (Section IX. Compliance Determination, B. Total Residual Chlorine). State Board staff has explained that the 0.019 mg/L figure is based on USEPA testing applicable to continuous extended exposure discharges. This basis is not

sufficient for deriving water quality criteria for organisms exposed to episodic intermittent discharges of chlorine. Further, it is unclear what the basis is for a numeric effluent limit for chlorine residual; the draft permit provides no documentation of actual water quality problems caused by the thousands of essential drinking water system discharges that occur every year throughout the Region. There is also no information presented demonstrating that Numeric Effluent Limits (NELs) have been appropriately calculated or that they would be any more effective than benchmarks or action levels in ensuring that BMPs are effectively implemented for protecting water quality. The District suggests that the numeric effluent limit NEL for chlorine residual proposed in this permit be eliminated and replaced by an action level.

pH Monitoring

The District does not believe that the draft permit needs to address the pH of discharges as Water Treatment Plant effluent and distribution systems are already monitored under the Surface Water Treatment regulations and the Lead and Copper Rule. It would be far more efficient for the District to provide the SWRCB with pH data, from our existing regulatory monitoring, in our annual reporting to the SWRCB.

Water agencies including the District, that serve water above 8.5 pH, do so for corrosion control reasons. Corrosion prevention keeps metals from leaching into the water supply which is necessary to meet MCLs and also minimizes the occurrence of leaks and breaks in the infrastructure. No safe practical and cost effective BMPs are available to adjust pH.

Lastly, monitoring of the discharges for pH is not practical. 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. Monitoring of drinking water discharges for pH would place an additional labor burden that would not yield information that could not already be obtained from reporting pH values already collected under regulatory and operational programs. Furthermore, there is no practical way to adjust pH in the field. Hauling acid and/or caustic materials into the public right of way would pose serious life, health and safety risks to people and potentially the environment.

The District has no knowledge of any pH related impairments of receiving water beneficial uses related to discharges from our discharge activities. The District requests removal of all pH related monitoring from the draft permit.

Reservoir Filling and Underdrain Seepage

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 include reservoir filling and

seepage from underdrains of water storage reservoirs that have been deliberately engineered for public safety. These required activities would not be covered. The District believes that these discharges do not have reasonable potential to exceed water quality objectives and are indeed de minimis and also need regulatory coverage. The District recommends that de minimis long term and/or continuous discharges be included in the scope of the draft permit and be included under the umbrella of the representative monitoring program.

Water Treatment Plant Coverage

The District currently has an NPDES permit covering discharges within the boundaries of its water treatment plants. The District supports the incorporation of Water Treatment Plant discharges into the draft permit. We understand from SWRCB staff that the new permit's coverage, however, may not include all discharges from Water Treatment Plants. This lack of full coverage puts the District in a position where we will have to juggle multiple NPDES permits overlaying one another for the same infrastructure which 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 back wash discharges that are part of the treatment process. The solids are settled out and the decanted water is either recirculated or discharged. In the case of the District, this discharge goes in to one of our reservoirs, a receiving water with designated beneficial uses, that will again go back in to the system to be used for drinking water at a later date. The District supports monitoring this discharge but does not want to segregate different waste streams from the same site to meet different permits and their inconsistent requirements. The District requests revising the Water Treatment Plant coverage to include all discharges from Water Treatment Plants, not just the treated water intended to go directly in to the distribution system as these are also low risk discharges.

The District appreciates the opportunity to provide comments on the State Water Resources Control Board's Statewide National Pollutant Discharge Elimination System 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 510-287-0412 or via email at cjohanne@ebmud.com.

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