STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Xavier Fernandez)
MEETING DATE: December 10, 2008

ITEM: 5A

SUBJECT: Categorical Exception to the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* for Discharges from Drinking Water systems, San Francisco Bay Region—Adoption of Resolution

CHRONOLOGY: The Board has not considered this issue before.

DISCUSSION: This revised tentative resolution (Appendix A) would allow a categorical exception to the State Board's *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (as known as the State Implementation Plan or SIP) for drinking-water-related discharges from most drinking water treatment facilities and transmission and distribution systems in the San Francisco Bay Region.

The SIP specifies when discharge limits for toxic pollutants are necessary. Based on SIP protocols, discharge limits for trihalomethanes (byproducts of chlorine disinfection) and copper (often added as an algaecide) would be required for discharges from many drinking water treatment facilities and distribution systems. Existing permits that cover drinking water discharges do not contain trihalomethane and copper limits because, until now, data have been insufficient. Now that data are available, the need to impose new limits or grant an exception is clear. Many drinking water dischargers cannot comply with these limits without substantial capital investments in treatment.

The SIP allows Water Boards to grant categorical exceptions to the SIP requirements for certain drinking-water-related discharges as a means of establishing more flexible and protective requirements instead of the SIP requirements that in some cases lead to overly protective limits. Discharges that qualify for such an exception must be "short-term or seasonal" and meet a number of other conditions, including having California Environmental Quality Act (CEQA) documentation completed prior to a Board granting an exception.

The attached revised tentative resolution provides for a categorical exception to water quality objectives for specific trihalomethanes and copper. It addresses all requirements necessary to grant such an exception. A CEQA initial study and mitigated negative declaration (IS/MND) is attached to the revised tentative resolution.

We received comments (Appendix B) from the San Jose Water Company, the San Francisco Public Utilities Commission, the Alameda County Flood Control and Water Conservation District (Zone 7), and the East Bay Municipal Utility District and revised the tentative resolution as appropriate. We believe our responses (Appendix C) have fully resolved these issues.

RECOMMEND-
ACTION: Adopt the Revised Tentative Resolution

Appendices:
A. Revised Tentative Resolution
B. Comments
C. Response to Comments

APPENDIX A – REVISED TENTATIVE RESOLUTION

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

REVISED TENTATIVE RESOLUTION No. R2-2008-XXXX

CATEGORICAL EXCEPTION TO THE *POLICY FOR IMPLEMENTATION OF TOXICS STANDARDS FOR INLAND SURFACE WATERS, ENCLOSED BAYS, AND ESTUARIES OF CALIFORNIA* FOR DISCHARGES FROM DRINKING WATER SYSTEMS IN THE SAN FRANCISCO BAY REGION

WHEREAS the California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter "Regional Water Board"), finds that:

Background

1. In the San Francisco Bay Region, various water service providers discharge wastewater in the process of fulfilling statutory requirements under the federal Safe Drinking Water Act and the California Health and Safety Code.

2. Water service providers also discharge wastewater when they drain water supply reservoirs, canals, pipelines, or water treatment facilities for cleaning or maintenance.

3. In most cases, these discharges flow into inland surface waters, enclosed bays, or estuaries.

4. To the extent that these discharges are not simple water transfers (i.e., an activity that conveys or connects waters of the United States without introducing pollutants or subjecting the transferred water to intervening industrial, municipal, or commercial use [40 CFR 122.3]), they are subject to National Pollutant Discharge Elimination System (hereinafter "NPDES") permit requirements that implement priority pollutant water quality objectives contained in the National Toxics Rule, California Toxics Rule (hereinafter "CTR"), and *San Francisco Bay Basin (Region 2) Water Quality Control Plan* (hereinafter "Basin Plan").

5. The CTR and Basin Plan contain the copper and trihalomethanes water quality objectives presented in Attachment 1.

6. The State Water Resources Control Board adopted the most recent version of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (hereinafter "SIP") in February 2005; the California Office of Administrative Law approved it in May 2006.

7. The SIP establishes provisions to implement CTR and Basin Plan water quality standards for inland surface waters, enclosed bays, and estuaries, including methods for deriving NPDES permit effluent limits for wastewater discharges.

Categorical Exception

8. In many cases, the discharges from the drinking water systems described above cannot readily achieve copper and trihalomethanes effluent limits derived in accordance with the SIP.

9. The SIP allows the Regional Water Board to grant a categorical exception in such circumstances, stating:

> The [Regional Water Board] may, after compliance with the California Environmental Quality Act (CEQA), allow short-term or seasonal exceptions from meeting priority pollutant criteria/objectives if determined necessary to implement control measures…regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. Such categorical exceptions may also be granted for draining water supply reservoirs, canals, and pipelines for maintenance, for draining municipal storm water conveyances for cleaning and maintenance, or for draining water treatment facilities for cleaning or maintenance.

10. According to the SIP, to grant this exception the Regional Water Board must ensure that each discharger notifies potentially affected public and governmental agencies; describes its proposed action; provides a time schedule, monitoring plan, California Environmental Quality Act (hereinafter "CEQA") documentation, contingency plans, and residual waste disposal plans; identifies an alternate water supply, if needed; and upon completion of the project, provides certification by a qualified biologist that receiving water beneficial uses have been restored.

CEQA Documentation

11. With documentation obtained from several dischargers, the Regional Water Board prepared an Initial Study and Mitigated Negative Declaration (hereinafter "IS/MND") pursuant to CEQA, therein considering the potential environmental impacts of granting an exception to the copper and trihalomethanes water quality objectives in Attachment 1; the IS/MND is Attachment 2.

12. As considered in the IS/MND, the exception relates specifically to drinking-water-related discharges that are short-term or seasonal in nature, meaning that they occur no more than 2,200 hours per year (e.g., a continuous discharges lasting up to 3 months of the year or intermittent discharges lasting up to 6 hours per day all year long).

13. The IS/MND concluded that granting such an exception would have no significant adverse environmental impacts if a mitigation measure was implemented for certain types of discharges; specifically, mitigation would be necessary unless the discharges would (a) contain copper concentrations above water quality criteria no more frequently than once every three years on average or (b) flow back into the same water body where the water originated.

14. The Regional Water Board circulated the IS/MND among potentially interested organizations and individuals for review and comment for 30 days.

15. As a result of the comments received, Regional Water Board staff made minor, non-substantive changes to the IS/MND.

16. The Regional Water Board has considered the IS/MND. Based on the whole record (including the IS/MND and comments received) and the Regional Water Board's independent judgment and analysis, there is no substantial evidence that the project could have a significant effect on the environment.

NOW, THEREFORE BE IT RESOLVED that:

1. The Regional Water Board hereby adopts the IS/MND.

2. The Regional Water Board will grant exceptions from meeting the priority pollutant objectives listed in Attachment 1 when necessary to implement control measures conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code.

3. The Regional Water Board will grant exceptions from meeting the priority pollutant objectives listed in Attachment 1 when necessary to drain water supply reservoirs, canals, pipelines, or water treatment facilities for cleaning or maintenance.

4. The Regional Water Board will grant these exceptions only for "short-term or seasonal discharges," meaning discharges lasting no more than 2,200 hours per year, and those discharges consistent with what was evaluated in the IS/MND.

5. The Regional Water Board will apply these exceptions as appropriate on a permit-by-permit basis.

6. The Regional Water Board will apply these exceptions only when the following SIP conditions are met:

a. The discharger shall notify potentially affected public and governmental agencies.

b. The discharger shall submit a detailed description of the proposed action, including the proposed method of completing the action.

c. The discharger shall submit a time schedule.

d. The discharger shall submit a discharge and receiving water quality monitoring plan (before project initiation, during the project, and after project completion, with the appropriate quality assurance and quality control procedures).

e. The discharger shall submit contingency plans.

f. The discharger shall identify an alternate water supply (if needed).

g. The discharger shall submit residual waste disposal plans.

h. The discharger shall provide certification by a qualified biologist that the receiving water beneficial uses have been restored.

7. Unless a discharge (a) contains copper concentrations above water quality criteria no more frequently than once every three years on average or (b) flows back into the same water body where the water originated, the Regional Water Board will require the following mitigation measure from the IS/MND as a condition for granting an exception:

Mitigation Measure: Dischargers shall prepare and implement pollution minimization plans with the following:

- Best management practices (BMPs) that eliminate planned discharges and minimize unplanned discharges within 48 hours of applying copper-based herbicides to waterbodies;

- BMPs that eliminate or reduce to the extent feasible the use of copper-based herbicides by using less toxic methods for controlling algal blooms and reducing the use of copper-based herbicides to the lowest effective dose;

- Operational BMPs that avoid and minimize the number of discharges by retaining water within the drinking water system to the maximum extent possible;

- Inspection and maintenance BMPs that minimize the number of discharges by preventing leaks and breaks from pipelines, valves, tanks, and other drinking water system infrastructure;

- Training BMPs that minimize the frequency of accidental spills; and

- Annual submittal of a report documenting the review and evaluation of all BMPs to determine whether the BMPs are adequate, properly implemented, and maintained, and providing additional BMPs where necessary to reduce impacts to less-than-significant.

8. Reporting on and monitoring of the above mitigation measure shall be performed by the Regional Water Board as described in Attachment 3.

9. The Regional Water Board may modify or revoke any exception at any time, including but not limited to any such time when evidence suggests an actual or potential significant

environmental impact has been or could be caused by a discharge subject to an exception (e.g., beneficial uses not restored following a discharge).

10. The Regional Water Board may require monitoring and data collection as necessary to reevaluate the appropriateness of granting an exception.

11. This resolution shall not preclude allowing other exceptions, including exceptions for different pollutants, under other circumstances in the future. These additional exceptions may define the term "seasonal or short-term discharge" differently. Any additional exceptions must meet SIP requirements, including compliance with CEQA.

I, Bruce H. Wolfe, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on [date].

_____

BRUCE H. WOLFE
Executive Officer

Attachment 1: Copper and Trihalomethanes Water Quality Objectives
Attachment 2: Initial Study / Mitigated Negative Declaration
Attachment 3: Mitigation Reporting and Monitoring Program

ATTACHMENT 1
Copper and Trihalomethanes Water Quality Objectives

CTR Trihalomethanes Water Quality Objectives

Trihalomethane	Human Health Objective (µg/L) (Consumption of Water and Organisms)
Bromoform	4.3
Chlorodibromomethane	0.41
Chloroform	NA
Dichlorobromomethane	0.56

Notes:
µg/L Micrograms per liter
NA Not Available

Basin Plan Copper Water Quality Objectives

Receiving Water	Aquatic Life Objective (µg/L)	
	Acute (1-Hour Average)	Chronic (4-Day Average)
Freshwater[1]	14	9.3
Salt Water[2]	5.8	3.7
Suisun Bay, San Pablo Bay, Central San Francisco Bay, and portion of Lower San Francisco Bay[3]	9.4	6.0
Portion of Lower San Francisco Bay and South San Francisco Bay[4]	10.8	6.9

Notes:
µg/L Micrograms per liter

1 The freshwater objectives for copper are based on hardness. The table values assume a hardness of 100 milligrams per liter of calcium carbonate ($CaCO_3$). At other hardnesses, the objectives must be calculated using the following formulas where H = ln(hardness): The 4-day average objective for copper is $e^{(0.8545H-1.702)}$. The 1-hour average for copper is $e^{(0.9422H-1.700)}$.

2 Unless site-specific objectives have been adopted, these objectives apply to all marine waters.

3 Site-specific objectives for estuarine waters contiguous with San Francisco Bay north of Hayward Shoals were adopted through Resolution R2-2007-0042. The Regional Water Board approved this resolution on June 13, 2007, the State Water Board approved it on January 15, 2008, and the California Office of Administrative Law approved it on May 12, 2008. These objectives are currently pending U.S. Environmental Protection Agency approval.

4 These site-specific objectives are listed in Basin Plan Table 3-3A for estuarine waters contiguous with San Francisco Bay south of Dumbarton Bridge.

ATTACHMENT 2
Initial Study / Mitigated Negative Declaration

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

1. **Project title:** Categorical Exception to the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries in California* (SIP) for Discharges from Drinking Water Systems.

2. **Lead agency name and address:**

   San Francisco Bay Regional Water Quality Control Board
   1515 Clay St., Ste. 1400
   Oakland, CA 94612

3. **Contact person and phone number:** Xavier Fernandez
   510-622-2300

4. **Project location:** The project location is the San Francisco Bay Region (Region) of the California Water Quality Control Board. The Region is 4,603 square miles and includes all or major portions of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties.

5. **Project sponsor's name and address:**

   San Francisco Bay Regional Water Quality Control Board
   1515 Clay St., Ste 1400
   Oakland, CA 94612

6. **General plan designation:** Not Applicable

7. **Zoning:** Not Applicable

8. **Description of project:** The San Francisco Bay Regional Water Quality Control Board (Regional Water Board) is proposing to grant a categorical exception to the SIP for drinking water system discharges that are short-term or seasonal in nature and that are conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. Discharges in this categorical exception also include draining water supply reservoirs, canals, pipelines, or water treatment facilities for cleaning or maintenance.

9. **Surrounding land uses and setting:** The proposed project would affect waterbodies throughout the Region, including the San Francisco Bay-Delta Estuary, drinking water reservoirs, and creeks receiving discharges from drinking water treatment facilities, transmission systems, or distribution systems. The Region includes a mix of residential, commercial, industrial, municipal, agricultural, and open space land uses.

10. **Other public agencies whose approval is required**: None.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology /Soils
☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality	☐ Land Use / Planning
☐ Mineral Resources	☐ Noise	☐ Population / Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities / Service Systems	☐ Mandatory Findings of Significance	

DETERMINATION:

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least

one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Bruce H. Wolfe, Executive Officer	Date

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A. PROJECT DESCRIPTION

I. CATEGORICAL EXCEPTION

The San Francisco Bay Regional Water Quality Control Board (Regional Water Board) is proposing to grant a categorical exception to the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP). The categorical exception would be for short-term or seasonal discharges of drinking water. The SIP allows the Regional Water Board to grant such an exception, stating:

> *The [Regional Water Board] may, after compliance with the California Environmental Quality Act (CEQA), allow short-term or seasonal exceptions from meeting priority pollutant criteria/objectives if determined necessary to implement control measures … regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. Such categorical exceptions may also be granted for draining water supply reservoirs, canals, and pipelines for maintenance, for draining municipal storm water conveyances for cleaning and maintenance, or for draining water treatment facilities for cleaning or maintenance.*

The State Water Resources Control Board (State Water Board) adopted the SIP on March 2, 2000. The SIP establishes provisions implementing priority pollutant criteria promulgated by the U.S. Environmental Protection Agency (USEPA) through the National Toxics Rule (NTR) and California Toxics Rule (CTR), and for priority pollutant objectives established in the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan). The SIP applies to discharges of toxic pollutants into the inland surface waters, enclosed bays and estuaries of California subject to regulation under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) and the federal Clean Water Act (CWA).

The proposed categorical exception would only apply to human health and aquatic life water quality objectives (WQOs) for trihalomethanes and copper shown in Tables 1 and 2. Trihalomethanes occur in drinking water as disinfection byproducts. Copper occurs naturally in water; however, the primary anthropogenic source in drinking water is the application of copper-based herbicides to control algal blooms in reservoirs and transmission canals.

Table 1: Trihalomethane Water Quality Objectives

Trihalomethane	Human Health Objective (µg/L) (Consumption of Water and Organisms)
Bromoform	4.3
Chlorodibromomethane	0.41
Chloroform	NA
Dichlorobromomethane	0.56

Notes:
µg/L Micrograms per liter NA Not available

Table 2: Copper Water Quality Objectives

Waterbody	Aquatic Life Objective (µg/L)	
	Acute (1-Hour Average)	Chronic (4-Day Average)
Freshwater[1]	14	9.3
Salt Water[2]	5.8	3.7
Suisun Bay, San Pablo Bay, Central San Francisco Bay, and portion of Lower San Francisco Bay[3]	9.4	6.0
Portion of Lower San Francisco Bay and South San Francisco Bay[4]	10.8	6.9

Notes:

µg/L Micrograms per liter

1 The freshwater objectives for copper are based on hardness. The table values assume a hardness of 100 milligrams per liter of calcium carbonate ($CaCO_3$). At other hardnesses, the objectives must be calculated using the following formulas where H = ln (hardness). The 4-day average objective for copper is $e^{(0.8545H-1.702)}$. The 1-hour average for copper is $e^{(0.9422H-1.700)}$.

2 Unless site-specific objectives have been adopted, these objectives apply to all marine waters.

3 The Regional Water Board adopted site-specific objectives for estuarine waters contiguous with San Francisco Bay north of Hayward Shoals through Resolution R2-2007-0042 (Regional Water Board 2007a). The Regional Water Board approved this resolution on June 13, 2007; the State Water Board approved it on January 15, 2008; and the California Office of Administrative Law approved it on May 12, 2008. These objectives are currently pending U.S. Environmental Protection Agency approval.

4 These site-specific objectives are listed in Basin Plan Table 3-3A (Regional Water Board 2007b) as site-specific objectives for estuarine waters contiguous with San Francisco Bay south of Dumbarton Bridge.

The proposed categorical exception would only apply to certain types of discharges, specifically discharges from surface water treatment facilities (Treatment Facility Discharges) and discharges from drinking water transmission and distribution systems (Transmission and Distribution System Discharges) as described below. In the San Francisco Bay Region (Region), Treatment Facility Discharges are currently covered by National Pollutant Discharge Elimination System (NPDES) General Permit No. CAG382001, Order No. R2-2003-0062. Transmission and Distribution System Discharges are covered as exemptions in NPDES permits for municipal separate storm sewer systems. None of these permits currently include limits for copper or trihalomethanes in drinking water discharges.

As stipulated in the SIP, the proposed categorical exception would only be granted for short-term or seasonal discharges. For the purposes of this analysis, “short-term or seasonal discharges” are defined as any discharge or combination of discharges occurring continuously or intermittently for no more than 2,200 hours per year. Examples of short-term or seasonal discharges include, but are not limited to, a single

continuous discharge of up to three months or daily discharges of up to 6 hours for an entire year.

The proposed categorical exception would only apply to Treatment Facility Discharges and Transmission and Distribution System Discharges that meet the following criteria:

a) They either (1) contain copper concentrations above water quality criteria no more frequently than once every 3 years on average, or (2) flow back into the reservoir that supplies the water to the facility; or

b) They occur in accordance with mitigation measures identified in this document.

In addition, as stipulated in the SIP, the following would be submitted to the Regional Water Board before an exception would be granted:

a) Time schedule;

b) Contingency plans;

c) Identification of alternate water supply (if needed); and

d) Residual Waste Disposal Plans.

Also in accordance with the SIP, the discharger would be required, upon completion of the discharge, to provide certification by a qualified biologist that receiving water beneficial uses have been restored.

II. TREATMENT FACILITY DISCHARGES

Treatment facilities treat water to control aesthetic problems (taste and odor), pathogens, and chemicals in drinking water. Water treatment processes normally include disinfection to reduce the number of pathogenic microorganisms in water. Chlorine gas, chlorine dioxide, sodium hypochlorite, ozone, and ultraviolet light are common disinfectants. Many treatment facilities add both ammonia and chlorine, either separately or simultaneously, to form chloramines. Chloramines are highly stable and can provide residual disinfecting power throughout a distribution system. Chloramination also produces fewer byproducts, such as chlorophenolic substances (which may cause objectionable taste and odor) and trihalomethanes (which are carcinogens), than free chlorination. To prevent algal blooms from affecting water quality, raw water may also be treated with copper sulfate or other copper-based herbicides in surface water reservoirs or transmission canals before delivery to surface water treatment facilities.

Operation of treatment facilities may result in planned or unplanned discharges. Such discharges can include filter backwash water, storage/settling basin water, treatment overflow, water from line breaks, water from leaks, and water from treatment unit dewatering. To characterize these discharges, Regional Water Board staff reviewed data 31 water treatment facilities operated by 13 drinking water agencies (East Bay Municipal Utilities District [EBMUD] and others 2008).

Each of these discharge types is described below.

1. **Filter backwash water discharge and storage/settling basin discharges:** Filters require periodic backwashing to remove accumulated solids. The backwash frequency depends on the quality of the incoming water and number of hours the filter has been in service. Many facilities recycle backwash water by pumping it into storage/settling basins, then back into the plant influent to be treated with raw water. However, a few facilities do not recycle their backwash water and instead discharge it intermittently or daily. The average daily volume of these planned discharges varies from about 20,000 gallons to 3,600,000 gallons, depending on the number of filters backwashed, the frequency of backwashing, the size of the filter, influent water quality, etc. Of the four facilities known to discharge on a daily basis, two typically discharge less than 800,000 gallons per day, and the other two typically discharge 1,500,000 gallons or more per day. The facility with the lowest volume of daily discharges only operates during the dry season. Two other facilities with daily discharges have up to 7 intermittent discharges per day (maximum duration of about 22 minutes) that return water to the reservoirs that supply water to the facilities. The other facility with daily discharges may discharge for up to 18 hours per day to a creek that drains to a drinking water reservoir (EBMUD and others 2008).

   Other reasons to discharge backwash or storage/settling basin water are operational errors or severe storm events that cause storage/settling basins to overflow. Some facilities divert all their wastewaters, such as backwash water, treatment unit rinse water, treatment unit overflows, and storm water runoff to storage/settling basins. Discharge from storage/settling basins consists of the various wastewaters accumulated in the basins. These unplanned and emergency discharges typically occur about once every 1 to 10 years, depending on the facility. The unplanned discharges generally occur over periods between 2 minutes and 9 hours (EBMUD and others 2008).

2. **Discharges from treatment unit overflow and broken waterlines within the treatment facility:** These are usually non-routine, unplanned discharges resulting from operational or instrument errors that cause one or several treatment units to overflow or drain to surface water either directly or through a storm sewer. The volume of these unplanned discharges varies from as little as 5 gallons up to 2,000,000 gallons depending on the cause and duration of the discharge. Most discharges occur over periods of less than 1 hour, but can occur for up to 24 hours. These unplanned discharges generally occur about once every 1 to 5 years (EBMUD and others 2008).

3. **Leakage water:** Some filters and other water treatment units include sub-drains to collect leaks. Collected leakage is normally diverted to backwash water settling basins and discharged with backwash water. Alternatively, a sub-drain may discharge leakage water directly to a storm sewer that drains into surface waters. In general, these discharges are unplanned and less than 50,000 gallons. The discharges also generally occur less than once every 4 years over periods

between 1 hour and 14 days. However, one facility discharges up to 2,500 gallons each day. This water is generated from the analyzers used to test turbidity and other water quality parameters before the water is distributed to customers (EBMUD and others 2008).

4. **Treatment unit dewatering/drainage water:** Occasionally, treatment units must be taken out of service for maintenance or for a seasonal facility shutdown. In this case, treatment units must be drained or dewatered. Drainage water may be diverted to a storage/settling basin before discharge, or may be discharged directly to surface water. Both maintenance activities and seasonal shut downs can generally be planned well in advance, thus allowing the drainage water to be dechlorinated or dechloraminated and pH adjusted, if necessary, before discharging. Only one facility is known to discharge to treatment unit drainage water to surface waters. Five times per year, this facility drains up to 2,200,000 gallons of treatment unit water back to the reservoir that supplies water to the facility. These discharges can last up to 12 hours (EBMUD and others 2008).

5. **Treatment system flushing water during start-up after facility shut-down:** When a seasonal facility is re-started, the treatment units and piping systems must be flushed. Water from system flushing may be diverted to a storage/settling basin before discharge, or may be discharged directly to surface water. Start ups are planned well in advance, and water flushed from the system is dechlorinated or dechloraminated and pH adjusted, if necessary, before discharging. Seasonal facilities discharge flushing water at least once a year (unless it can be recycled), and one facility discharges flushing water back to its supply reservoir up to 17 times per year. These planned discharges generally occur over periods between 2 hours and 1 day (EBMUD and others 2008).

6. **On-site water storage facility drainage:** Some facilities store treated potable water on-site, either for filter backwashing, later distribution to customers, or both. Occasionally, these water storage facilities require maintenance and need to be drained. The drainage water is sometimes discharged to surface water after being dechlorinated or dechloraminated and pH adjusted, if necessary. The volumes of these planned discharges ranges from less than 6,000 gallons up to 2,000,000 gallons. These planned discharges also generally occur several times per year over periods of a few minutes and up to 1.5 hours (EBMUD and others 2008).

III. TRANSMISSION AND DISTRIBUTION SYSTEM DISCHARGES

Drinking water transmission and distribution systems convey water from the point of origin to agricultural and urban consumers. Transmission systems consist of relatively few large canals, pipelines, tunnels, pump stations, and valve houses that transport water from the point of origin to local water storage reservoirs, treatment facilities and distribution systems. Water delivered to local reservoirs is stored for later delivery to consumers. Except for water from drinking water wells and the San Francisco Public Utilities Commission's (SFPUC's) Hetch Hetchy Reservoir, raw water is typically

delivered to a treatment facility before entering a distribution system for delivery to consumers. Water from drinking water wells and the SFPUC's Hetch Hetchy Reservoir enter directly into distribution systems because the untreated water meets drinking water standards and is disinfected within the transmission and distribution systems. To prevent algal blooms from affecting water quality, raw water may also be treated with copper sulfate or other copper-based herbicides at the point of origin or in canals during transmission.

Distribution systems consist of numerous smaller pipelines, pumps, and valves that deliver treated water to consumers. The water within distribution systems is often fluoridated for dental health, pH adjusted for corrosion control, and chloraminated to provide disinfection within the system and reduce disinfection byproducts, such as trihalomethanes.

The following types of discharges occur from drinking water transmission and distribution systems:

1. **Pipeline/Tunnel/Reservoir drainage for maintenance:** Occasionally, pipelines, tunnels, and reservoirs must be taken out of service for maintenance, including inspections, repairs, and construction upgrades. Maintenance activities can generally be planned in advance, and drainage water is dechlorinated or dechloraminated and pH adjusted, if necessary, before being discharged to storm drains or surface waters. In general, planned maintenance discharges from individual segments of transmission and distribution systems occur about once every 5 to 20 years, depending on factors associated with the pipelines and tunnels, such as age and material composition, and external factors, such as soil conditions. Planned maintenance discharges from individual reservoirs occur up to once every two years on average.

   Maintenance discharges generally occur over periods of less than 1 day to about 2 weeks depending on the size of the segment being drained. Volumes of maintenance discharges range from several thousand gallons up to about 13 million gallons, with the lowest volumes associated with distribution systems and the greatest volumes associated with transmission systems and reservoir discharges (EBMUD 2008; San Francisco Public Utilities Commission [SFPUC] 2008).

2. **Flushing of disinfection water from pipeline during start up:** Pipelines are periodically shut down for maintenance. In addition, some pipelines are shut down during the winter when water demand is relatively low. Before reactivation, the pipelines must be disinfected with hyperchlorinated water. This disinfection water is discharged to storm drains or surface waters to comply with State and Federal drinking water regulations. Reactivating pipelines can be planned in advance, and the disinfection water can be dechlorinated or dechloraminated and pH adjusted, if necessary, prior to discharging. Reactivation of pipelines after seasonal shut down typically results in a discharge once per year. Discharges of disinfection water from reactivating pipeline segments after maintenance occurs

on the same frequency, duration, and volumes as maintenance discharges, and typically occurs within a few weeks of the initial pipeline draining (SFPUC 2008).

3. **Water discharges to reservoirs:** Water discharged from transmission systems to reservoirs are part of general operations and can almost always be planned. These discharges may be of raw or treated water depending on the source of the water and transmission system operation practices. These events are typically seasonal and occur a few times per year. Discharges associated with water transfers usually occur over a period of 3 to 4 weeks and may be as much as 2,000,000,000 gallons. Raw water is often directly discharged to reservoirs. Treated water is dechlorinated or dechloraminated and pH adjusted, if necessary, prior to discharging to reservoirs (SFPUC 2008).

4. **Discharges from pipeline breaks/leaks, valve malfunctions, and other unplanned discharges:** Unplanned discharges occur when pipelines break or leak, valves malfunction, or other unanticipated events occur, such as noncompliance with drinking water standards or a hydraulic release to prevent pipeline rupture. The cause of pipeline breaks and leaks, valve malfunctions, and other unanticipated events is generally equipment failure or operator error; however, in extremely rare instances, a catastrophic event, such as an earthquake, landslide, fire, or other emergency, results in an unplanned discharge. The frequencies of discharges from pipeline breaks/leaks, valve malfunctions, or other unplanned discharges vary depending on location, age of infrastructure, maintenance schedule, and other factors. In general, unplanned discharges at individual locations occur less than every 3 years; however, discharges at a few locations occur about 2 to 3 times per year. The more frequent discharges are typically associated with noncompliance with drinking water standards in transmission system pipelines and generally last less than one day. Volumes of discharges range from several thousand gallons to millions of gallons, depending on the nature of the unplanned discharge. Unplanned discharges are typically not treated until human health and safety are secured at the site (SFPUC 2008).

B. ENVIRONMENTAL ANALYSIS

The CEQA Environmental Checklist and detailed explanations for all the environmental factors are included in Appendix A. Environmental factors requiring more substantial explanations (i.e., those addressing potentially significant adverse environmental effects unless mitigation is incorporated into the project) are provided below. These include biological resources, hydrology and water quality, and issues related to mandatory findings.

I. BIOLOGICAL RESOURCES

The following factor for Biological Resources from the Environmental Checklist (Appendix A) warrants detailed consideration as provided below:

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Trihalomethanes (THMs) do not pose substantial risks to aquatic organisms at the concentrations anticipated in drinking water discharges. In drinking water, THM concentrations are generally less than 80 micrograms per liter (µg/L) (California Integrated Water Quality System [CIWQS] 2008; SFPUC 2008). Although the Basin Plan and CTR contain no aquatic life water quality objectives (WQOs) for THMs, studies indicate that toxicity to aquatic life occurs at THM concentrations as low as 6,400 µg/L (USEPA 1980). Therefore, the available information indicates that aquatic toxicity from THMs occurs at much higher concentrations than are likely in drinking water discharges.

Unless mitigated, the proposed categorical exception for copper in drinking water discharges could pose risks to special status fish and amphibian species in the Region. Mitigation measures set forth below would ensure that copper-related risks to aquatic organisms, including special status species, would be less-than-significant.

Copper is a naturally occurring trace element generally present in surface waters. Studies of naturally occurring copper concentrations in the Region's creeks are limited, but copper concentrations measured for the Surface Water Ambient Monitoring Program and NPDES permits from relatively unimpacted areas ranged from 0.29 to 2.5 µg/L (Hanson Aggregates 2006; Regional Water Board 2007c,d; Yin 2008). These concentrations were primarily measured during the dry season and are probably lower than maximum concentrations during the wet season, when copper attached to sediment is picked up and carried when rain increases stream flows.

Although copper occurs naturally, the primary anthropogenic source of copper in drinking water is application of copper-based herbicides to control algal blooms that cause taste and odor problems. Copper application is done by both wholesale suppliers, such as the California Department of Water Resources, and local water agencies. In general, application of copper-based herbicides is greatest in the summer, when algal blooms are most prevalent. Copper is applied at concentrations of up to 1,000 µg/L or more.

Copper concentrations in drinking water discharges are expected to range from less than 1 µg/L up to about 380 µg/L. Potential effects of copper on aquatic species, including juvenile salmonids, include mortality, avoidance behavior, condensed growth, decreased sensory perception, and altered metabolism (Eisler 1998; Baldwin and others 2003). The CTR WQOs are intended to protect all aquatic life, including special status species, from these adverse effects. Therefore, allowing an exception to meeting the WQOs for copper could harm aquatic life if not for the considerations that follow.

The CTR WQOs are based on water quality criteria developed in accordance with USEPA guidelines (USEPA 1985a). Criteria based on the guidelines consider data that

meet minimum acceptability requirements, ensure that almost all organisms experience no mortality, and account for effects of acute (i.e. short-term) and chronic (i.e. long-term) exposure. Application of the USEPA guidelines results in two concentration-based criteria to protect aquatic life. One criterion protects aquatic life from effects of acute exposure and the other criterion protects aquatic life from chronic exposure. The acute criterion is a one-hour average not to be exceeded more than once every three years on average, and the chronic criterion is a four-day average not to be exceeded more than once every three years on average. The acute criterion is derived from LC_{50} data (chemical concentrations lethal to 50 percent of a test organism exposed for a given duration) representing numerous species of invertebrates, fish, and other organisms. A computation using these data conservatively estimates a concentration likely to have little or no effect on a wide range of species. The chronic criterion is derived from similar data using ratios between concentrations known to cause acute effects and concentrations known to result in chronic effects.

The CTR and Basin Plan WQOs are based on the 1984 copper criteria (USEPA 1985b) and, for estuarine water in the San Francisco Bay, more recent site-specific data (Regional Water Board 2007a,b). Freshwater criteria depend on the hardness of the receiving water. Copper toxicity is also known to vary with other properties, including temperature, dissolved organic compounds, suspended particles, pH, and various inorganic cations and anions, including those composing alkalinity. As a result, the USEPA updated its copper criteria in 2007 to incorporate these factors using a model to determine copper criteria based on site-specific conditions (USEPA 2007). The WQOs do not reflect this updated approach.

Many of the Treatment Facility Discharges and most of the Transmission and Distribution System Discharges occur less than once every 3 years. In addition, only 21 percent of samples from drinking water facilities exceeded freshwater chronic WQOs (assuming a hardness of 100 mg/L) (CIWQS 2008; EBMUD and others 2008; SFPUC 2008). Therefore, WQOs are not exceeded every time there is a discharge; WQOs are exceeded less often than the frequency of discharges. According to the 1984 and 2007 copper water quality criteria documents for acute and chronic exposures (USEPA 1985b, 2007), aquatic organisms and their uses are not expected to be unacceptably affected from discharges exceeding criteria less than once every 3 years on average. Therefore, the environmental impact would be less-than-significant for discharges that do not exceed copper criteria more than once every 3 years on average.

Regardless of discharge frequency, at least three treatment facilities discharge back to the waterbodies (e.g., reservoirs) that were the initial source of the water. Since the copper originated from these water bodies, these discharges would not change environmental conditions in the reservoirs. Therefore, impacts from discharging water back to these water bodies would be less-than-significant.

The discharges from at least three treatment facilities would exceed water quality criteria more than once every three years and would not flow to reservoirs that were the initial source of copper. For these facilities, mitigation would be required to reduce potential adverse effects to a less-than-significant level.

Mitigation includes modification of operational practices. For instance, monitoring results collected from one reservoir showed that copper concentrations declined from maximum concentrations between 47 and 296 µg/L to concentrations between 5.6 and 42 µg/L within 24 hours of copper-based herbicide applications (EBMUD and others 2008). Therefore, to reduce impacts to aquatic life, treatment facilities drawing from copper-treated water bodies should wait at least 48 hours before discharging to any surface water other than the reservoir from which it draws its water.

Operational practices can also be modified to reduce the use of copper-based herbicides. At least one water district has eliminated the use of copper-based herbicides by using alternative control methods (Ramadan 2008). Another water district has not had to control a major algal bloom with copper-based herbicides for the last 3 years (EBMUD and others 2008). Therefore, impacts from copper in the discharges can be reduced by minimizing the use of copper-based herbicides through integrated pest management that combine less toxic and non-toxic algal control methods with application of copper-based herbicides only when necessary and at the lowest effective dose.

Impacts from copper in discharges can be further reduced by modifying operational practices to reduce the frequency and duration of discharges, thereby avoiding and minimizing discharges. For instance, instead of discharging transmission system water that exceeds Safe Drinking Water Act standards, the water can sometimes be sent to a treatment facility for treatment and then returned to the transmission system. In addition, at least 15 treatment facilities have eliminated planned discharges using operational practices that retain water within the treatment facility. Furthermore, regular inspection and maintenance of treatment facilities and transmission and distribution pipelines can reduce the number of breaks and leaks, and training staff and contractors working at drinking water facilities can reduce accidental spills.

Therefore, unless a discharge (a) contains copper concentrations above water quality criteria no more frequently than once every three years on average or (b) flows back into the same water body where the water originated, the Regional Water Board would require the following mitigation measure as a condition for granting an exception:

Mitigation Measure: Dischargers shall prepare and implement pollution minimization plans with the following:

a) Best management practices (BMPs) that eliminate planned discharges and minimize unplanned discharges within 48 hours of applying copper-based herbicides to reservoirs;

b) BMPs that eliminate or reduce to the extent feasible the use of copper-based herbicides by using less toxic methods for controlling algal blooms and reducing the use of copper-based herbicides to the lowest effective dose;

c) Operational BMPs that avoid and minimize the number of discharges by retaining water within the drinking water system to the maximum extent possible;

d) Inspection and maintenance BMPs that minimize the number of discharges by preventing leaks and breaks from pipelines, valves, tanks, and other drinking water system infrastructure;

e) Training BMPs that minimize the frequency of accidental spills; and

f) Annual submittal of a report documenting the review and evaluation of all BMPs to determine whether the BMPs are adequate, properly implemented, and maintained, and proposing and implementing additional BMPs where necessary to reduce impacts to less-than-significant.

This mitigation measure would reduce impacts from copper in drinking water discharges by reducing the frequency of discharges exceeding water quality criteria sufficiently to ensure that any impacts to aquatic organisms, including special status species, would be less-than-significant. Facilities unable to implement this mitigation measure would not be granted the categorical exception.

II. HYDROLOGY AND WATER QUALITY

The following factors for hydrology and water quality from the Environmental Checklist (Appendix A) warrant detailed consideration as provided below.

a) Would the project violate any water quality standards or waste discharge requirements?

b) Would the project otherwise substantially degrade water quality?

Granting the categorical exception for drinking water discharges from surface water treatment facilities, drinking water transmission systems, and drinking water distribution systems would make inapplicable the objectives for THMs and copper listed in Tables 1 and 2. Since they would no longer apply, the project would not violate these water quality standards.

The potential for concentrations of copper to degrade water quality would be less-than-significant with mitigation. Any potential water quality impacts from copper would relate to aquatic life, and the potential impact of copper on aquatic life is discussed on page 8, and is less-than-significant with mitigation.

The potential for concentrations of THMs to degrade water quality would be less-than-significant. The potential water quality impacts of THMs relate to human health. THMs in water used to supply municipalities pose potential cancer risks. THMs form as disinfection byproducts when chlorine or chloramine reacts with naturally occurring organic matter in water. Chlorine and chloramine are used as disinfectants to comply with Safe Drinking Water Act disinfection requirements. The Safe Drinking Water Act disinfection requirements were promulgated to protect the public from waterborne pathogens.

The CTR contains WQOs for four THMs (Table 1): bromoform, chloroform, chlorodibromomethane, and dichlorobromomethane. These WQOs are more stringent than applicable drinking water standards (Maximum Contaminant Level = 80 µg/L for total THMs [California Code of Regulations, Title 22, Section 64533]), although both the WQOs and drinking water standards are intended to protect human health from the same THMs. This difference occurs because the drinking water standards used risk levels based on factors, such as the health benefits from disinfection of public drinking water, that were not used when developing the CTR WQOs. While the CTR WQOs are intended to ensure that drinking water sources contain water fit for consumption, the drinking water delivered to consumers is allowed to contain higher THM concentrations. The CTR WQOs are particularly over-stringent for short-term and seasonal discharges because these waters mix with other waters and THMs evaporate from surface waters prior to use as drinking water supplies. Additionally, the primary source of exposure to THMs is from drinking water delivered to the home. For decades, drinking water agencies have had no problems meeting protective human health standards for THMs in home-delivered water, and they will likely continue to meet these standards. NPDES permits would continue to protect municipal water supplies by including limits for total THMs based on Basin Plan Table 3-5 WQOs because the exception would not apply to these WQOs. Therefore, granting an exception to the SIP and setting aside CTR WQOs would be unlikely to pose a human health concern and any potential water quality impacts would be less-than-significant.

III. MANDATORY FINDINGS OF SIGNIFICANCE

The following factors for Mandatory Findings of Significance from the Environmental Checklist (Appendix A) warrant detailed consideration as provided below.

a) **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

b) **Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

c) **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

Granting the categorical exception would not degrade the quality of the environment. Potential biological impacts are discussed on page 7, and as explained there, they would be less-than-significant with mitigation. In addition, granting the categorical

exception would not involve earthmoving, demolition, or construction, so it would have no impact on important examples of the major periods of California history or prehistory.

Cumulative impacts are the combined impacts of similar projects, but since the proposed project encompasses the entire Region, there are no cumulative impacts beyond those of the project. The impacts of the project are fully considered in Sections B.I and B.II and Appendix A.

Granting the categorical exception would not cause any substantial adverse effects to human beings, either directly or indirectly. Potential human health impacts are discussed on page 11, and as explained there, they would be less-than-significant with mitigation.

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APPENDIX A: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☑
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☑
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☑
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☑
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☑
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☑	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☑
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☑
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☑
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☑
ii) Strong seismic ground shaking?	☐	☐	☐	☑
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☑
iv) Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☑
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☑
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☑
VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☑
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☑
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☑	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☑
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☑
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☑
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☑
f) Otherwise substantially degrade water quality?	☐	☑	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☑
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☑
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☑
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	☐	☐	☐	☑
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☑
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☑
XI. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☑
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☑
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☑
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☑
Police protection?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Schools?	☐	☐	☐	☑
Parks?	☐	☐	☐	☑
Other public facilities?	☐	☐	☐	☑
XIV. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☑
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☑
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	☑
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☑
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☑
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
e) Result in inadequate emergency access?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
f) Result in inadequate parking capacity?	☐	☐	☐	☑
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☑
XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☑
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☑
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☑
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☑
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☑	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☑	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☑	☐

DETAILED EXPLANATIONS

An explanation for each box checked on the environmental checklist is provided below:

I. Aesthetics

a-d) There would be no physical changes to the aesthetic environment resulting from granting the categorical exception. The categorical exception would not affect any scenic vista or resource, or degrade the existing visual character or quality of any site or its surroundings. It would not create any new source of light or glare.

II. Agriculture Resources

a-c) Granting the categorical exception would not cause conversion of farmland to non-agricultural use nor affect agricultural zoning or any Williamson Act contract.

III. Air Quality

a-e) Granting the categorical exception would not generate traffic-related emissions because it would not cause any change in population or employment. It would also not involve construction of any temporary or permanent emissions sources. For these reasons, no change in air emissions would occur, and granting the categorical exception would not conflict with applicable air quality plans, violate any air quality standard, contribute to any air quality violation, contribute to cumulative emissions, or expose sensitive receptors to ongoing pollutant emissions posing health risks.

IV. Biological Resources

a) Granting the categorical exception would not affect any candidate, sensitive, or special status species through habitat modifications because it would not involve earthmoving or construction. It could potentially affect aquatic and amphibious species that are candidate, sensitive, or special status species due to copper exposure. However, mitigation that minimizes concentrations of copper in the discharges, and the frequency and duration of the discharges, would mitigate this potential impact to a less-than-significant level (on page 10).

b) Granting the categorical exception would not result in modification or disturbance to riparian habitat or sensitive natural communities. Therefore, granting the categorical exception would not affect riparian habitats or sensitive communities.

c) Granting the categorical exception would not remove, fill, hydrologically alter, or otherwise degrade state and federally protected wetlands; therefore, it would not have an adverse effect on wetlands protected under the Porter Cologne Act and the Clean Water Act.

d) Granting the categorical exception would not involve landscape modifications, so it would not alter wildlife corridors, remove habitat, or interfere with the movement of any native resident or migratory fish or wildlife species.

e-f) Granting the categorical exception would not conflict with local policies or ordinances, including any applicable habitat conservation plans, natural community conservation plans, or other plans intended to protect biological resources. Therefore, the categorical exception would not conflict with local policies, ordinances, or adopted plans.

V. Cultural Resources

a-d) Granting the categorical exception would not involve any earthmoving, demolition, or construction; therefore, it would not adversely affect any historical, archaeological, or paleontological resource, including human remains.

VI. Geology and Soils

a-d) Granting the categorical exception would not involve the construction of habitable structures; therefore, it would not involve any human safety risks related to fault rupture, seismic ground-shaking, ground failure, or landslides. Granting the categorical exception would not result in soil erosion because it would not involve any earthmoving, demolition, or construction. It would also not create safety or property risks due to unstable or expansive soil.

e) Granting the categorical exception would not require wastewater disposal systems; therefore, it would not require soils capable of supporting the use of septic tanks or alternative wastewater disposal systems.

VII. Hazards and Hazardous Materials

a-b) Granting the categorical exception would not result in any increased transport, use, and disposal of hazardous materials or wastes, and therefore would not increase any potential for accidental releases of hazardous materials or wastes.

c-f) Granting the categorical exception would not result in hazardous materials being handled within 0.25 mile of a school, on a contaminated site included on the Cortese List, or near an airport or airstrip.

g) Granting the categorical exception would not interfere with any emergency response plans or emergency evacuation plans.

h) Granting the categorical exception would not affect the potential for wildland fires.

VIII. Hydrology and Water Quality

a) Granting the categorical exception would not violate waste discharge requirements because it would be incorporated into waste discharge requirements for drinking water facilities. As discussed on page 11, the project also would not violate any water quality standards.

b) Granting the categorical exception would not decrease groundwater supplies or interfere with groundwater recharge.

c-e) Granting the categorical exception would not affect existing drainage patterns or increase the amount of impervious surfaces in any watershed. Therefore, it would not increase the rate or amount of runoff, result in erosion, or exceed the capacity of storm water drainage systems. In addition, the categorical exception would not require any additional water entitlements because it would not induce population growth or development.

f) Granting the categorical exception would not degrade water quality because it would be granted for existing discharges and would not create a new source of

polluted runoff. In addition, mitigation would be required that would reduce impacts to a less-than-significant level (on page 11).

g-j) Granting the categorical exception would not result in housing or structures that would pose or be subject to flood hazards, or construction subject to risks due to inundation by seiche, tsunami, or mudflow.

IX. Land Use and Planning

a-c) Granting the categorical exception would not involve construction; therefore, it would not divide any established community. It would also not conflict with any land use plan, policy, or regulation, and would not conflict with any habitat conservation plan or natural community conservation plan.

X. Mineral Resources

a-b) Granting the categorical exception would not involve excavation or construction; therefore, it would not result in the loss of availability of any known mineral resources.

XI. Noise

a-d) Granting the categorical exception would not generate noise or ground borne vibration; therefore, it could not be inconsistent with local agency standards and would not cause any increase in ambient noise levels.

e-f) Granting the categorical exception would not generate aircraft noise. Therefore, it would not expose people living within an area subject to an airport land use plan or in the vicinity of a private airstrip to noise.

XII. Population and Housing

a-c) Granting the categorical exception would not affect the population of the Region or California. It would not induce growth through such means as constructing new housing or businesses, or by extending roads or infrastructure. Granting the categorical exception would also not displace any existing housing or any people that would need replacement housing.

XIII. Public Services

a) Granting the categorical exception would not affect populations or involve construction. As a result, granting the categorical exception would not affect service ratios, response times, or other performance objectives for any public services, including fire protection, police protection, schools, parks, or other public facilities.

XIV. Recreation

a-b) Granting the categorical exception would not affect the use of existing parks or recreational facilities because it would not affect populations. No recreational facilities would need to be constructed or expanded.

XV. Transportation/Traffic

a-b) Granting the categorical exception would not generate additional motor vehicle trips because it would not increase populations or provide employment. Therefore, granting the categorical exception would not increase traffic in relation to existing conditions. Levels of service would be unchanged.

c) Granting the categorical exception would not affect air traffic.

d) Granting the categorical exception would not result in hazardous design features or incompatible uses because it would not affect any roads or the uses of any roads.

e) Granting the categorical exception would not affect emergency access.

f) Granting the categorical exception would not affect parking demand or supply because it would not increase populations or provide employment.

g) Granting the categorical exception would not conflict with adopted policies, plans, or programs supporting alternative transportation because it would not generate motor vehicle trips.

XVI. Utilities and Service Systems

a) The Regional Water Board would only grant the categorical exception for drinking water discharges. As a result, granting the categorical exception would not relate to the Regional Water Board's wastewater treatment requirements.

b) Granting the categorical exception would not increase water demands or diminish supplies, and would not require the construction of new or expanded water or wastewater treatment facilities.

c) Urban runoff management agencies are unlikely to construct any new or expanded stormwater drainage facilities as a result of granting the categorical exception. The types of discharges subject to the categorical exception have already occurred for some time in the Region and additional Stormwater facilities are unnecessary.

d-e) Because granting the categorical exception would not increase populations or provide employment, it would not require an ongoing water supply. It would also not require ongoing wastewater treatment services.

f-g) Granting the categorical exception would not generate municipal solid waste and would not affect municipal solid waste generation or landfill capacities.

XVII. Mandatory Findings of Significance

a) Granting the categorical exception would not degrade the quality of the environment. Potential biological impacts are discussed on page 12, and as explained, these would be less-than-significant with mitigation. In addition, granting the categorical exception would not involve earthmoving, demolition or construction, so it would have no impact on important examples of the major periods of California history or prehistory.

b) Cumulative impacts are the combined impacts of similar projects, but since the proposed project encompasses the entire Region, there are no cumulative impacts beyond those of the project as mitigated. The impacts of the project are fully considered in the Initial Study.

c) Granting the categorical exception would not cause any substantial adverse effects to human beings, either directly or indirectly. Potential human health impacts are discussed on page 12, and as explained, these would be less-than-significant.

ATTACHMENT 3
Mitigation Reporting and Monitoring Program

Mitigation Measure	Unless a discharge (a) contains copper concentrations above water quality criteria no more frequently than once every three years on average or (b) flows back into the same water body where the water originated, the San Francisco Bay Regional Water Quality Control Board will require the following as a condition for granting an exception: Dischargers shall prepare and implement pollution minimization plans with the following: • Best management practices (BMPs) that eliminate planned discharges and minimize unplanned discharges within 48 hours of applying copper-based herbicides to waterbodies; • BMPs that eliminate or reduce to the extent feasible the use of copper-based herbicides by using less toxic methods for controlling algal blooms and reducing the use of copper-based herbicides to the lowest effective dose; • Operational BMPs that avoid and minimize the number of discharges by retaining water within the drinking water system to the maximum extent possible; • Inspection and maintenance BMPs that minimize the number of discharges by preventing leaks and breaks from pipelines, valves, tanks, and other drinking water system infrastructure; • Training BMPs that minimize the frequency of accidental spills; and • Annual submittal of a report documenting the review and evaluation of all BMPs to determine whether the BMPs are adequate, properly implemented, and maintained, and providing additional BMPs where necessary to reduce impacts to less-than-significant.
Time of Implementation	During Issuance and Reissuance of National Pollutant Discharge Elimination System (NPDES) Permits and Waste Discharge Requirements (WDRs)
Responsible Entity	San Francisco Bay Regional Water Quality Control Board
Compliance Verification	San Francisco Bay Regional Water Quality Control Board's review and adoption of NPDES Permits and WDRs

APPENDIX B – COMMENTS

San Jose Water Company

110 W. Taylor St.
San Jose, CA 95196-0001

October 8, 2008

Mr. Xavier Fernandez
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: SIP Exception Initial Study and Mitigated Negative Declaration

Dear Mr. Fernandez:

San Jose Water Company (SJWC) appreciates the opportunity to comment on the Initial Study and Mitigated Negative Declaration.

SJWC's Saratoga Water Treatment Plant (WTP) treats water from Saratoga Creek. Filter backwash water is settled in an on-site basin and the supernatant is returned to Saratoga Creek (creek discharge). The creek discharge is covered under the General Permit. The water receives no chemical treatment prior to filtration, and the creek discharge has historically been excellent quality, with turbidity less than or equal to 1.0 NTU and total suspended solids less than or equal to 5 mg/L.

The creek discharge avoids a sewer discharge, which would travel to the San Jose/Santa Clara Water Pollution Control Plant and increase freshwater discharge to the South Bay.

The WTP operates seasonally; i.e., during the rainy season, since it depends on creek flow. Therefore, the creek discharge is also seasonal. The rainy season varies in length, from three to four months in a dry (water) year like 2007-08 to six to seven months in a wet (water) year like 2005-06. In 2006, the discharge operated for 3,233 hours.

SJWC respectfully requests that the "seasonal" definition be amended to cover the rainy season, and that "year" be defined as the California Department of Water Resources (DWR) Water Year (October 1 through September 30), rather than the calendar year.

Thank you,

Monique VanderMarck

Monique VanderMarck, P.E.
Director of Water Quality

SAN FRANCISCO PUBLIC UTILITIES COMMISSION
OFFICE OF THE ASSISTANT GENERAL MANAGER – WATER ENTERPRISE
1155 Market Street, 11th Floor, San Francisco, CA 94103 • Tel. (415) 934-5787 • Fax (415) 934-5751

October 10, 2008

Mr. Bruce Wolfe
Executive Officer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612
ATTN: Xavier Fernandez

Comments via email: xafernandez@waterboards.ca.gov

RE: Categorical Exception to the SIP for Drinking Water Discharges, Resolution No. R2-2008-XXXX (Tentative) and Initial Study/Mitigated Negative Declaration

Dear Mr. Wolfe:

We appreciate the opportunity to review the tentative resolution and mitigated negative declaration (MND) which support a categorical exception to the State Implementation Policy (SIP). This categorical exception will apply to drinking water facilities in Region 2 in a similar manner to the categorical exceptions adopted or being adopted in other Regions.

Permits issued to San Francisco incorporating the categorical exception could potentially have a major impact on our operations and future compliance status. We have reviewed the resolution and MND document carefully and have the following general comments:

- **Completion of CEQA by the Board.** By preparing the initial study and MND, the San Francisco Water Board has provided a substantial benefit to the Bay Area water agencies. San Francisco and the other agencies will not need to prepare separate CEQA documentation for the categorical exception since the Board will have addressed this requirement.

- **Full applicability of the MND and resulting permits to water supply facilities**. Our understanding of the SIP is that the categorical exception for water supply facilities was intended to be applied broadly. That is, the intent is to make this exception available to all legally-mandated activities to supply and protect drinking water. As currently drafted, the resolution and MND cover some but not all SFPUC drinking water facilities. Consequently, SFPUC is presented with the option of discharging with no permit or making extremely costly facility

modifications. Therefore, it is of utmost importance to San Francisco that the SIP exception be applied to all drinking water facilities, and not just a subset of those facilities.

We note that until recently, permits were not issued for discharges from drinking water systems. The NPDES permit program has been in place since the Clean Water Act was passed in 1972, however these discharges were not considered "discharge of a pollutant" and consequently were not subject to the Act. As mandated by the Safe Drinking Water Act, source waters and drinking water in distribution systems are both relatively pollutant-free. Dechlorination is implemented to protect receiving waters, as necessary.

While we understand that the interpretation of the regulatory status of these drinking water discharges has changed, we believe that the risk from these discharges remains very small, particularly in systems which add only disinfectant. For this reason it is essential that the resolution and mitigated negative declaration (MND) support a categorical exception that does not to result in excessive costs or major changes to operations. In addition, monitoring and other requirements of the subsequent permits should not be overly burdensome.

Our detailed comments are enclosed. We hope to continue our productive working relationship with the Board. If you have any questions on these comments, please contact me or Jim Salerno at 415 554-3207. We are also available to meet at your convenience.

Very truly yours,

Michael P. Carlin
Assistant General Manager
Water Enterprise

cc: Lila Tang, San Francisco Regional Water Quality Control Board
Catherine Ma, California Department of Health Services

Enclosure: *as noted*

Comments

Tentative Resolution approving a Categorical Exception to the SIP for Drinking Water Discharges, and Initial Study/Mitigated Negative Declaration

Transmitted Sept. 10, 2008; posted

Tentative Resolution *(many of these comments also pertain to the IS/MND)*

1. Pollutants addressed by exception. Page 2, item 11 (and elsewhere) – "*granting an exception to the copper and trihalomethanes water quality objectives…*"

> *Comment:* As allowed by the SIP, the exception should pertain to all objectives in the California Toxics Rule/NTR/Basin Plan. For example, effluent limitations could be required for priority pollutants which are at times exceeded in the receiving water present and are present in the discharges due to natural sources at levels below water quality objectives. (The SIP requires effluent limits in these situations.) For example, the Board apparently intends to place limitations and extensive monitoring on nickel even though nickel is present at background concentrations and at concentrations much lower than levels of concern. The categorical exception therefore should pertain to all priority pollutant criteria/objectives. At a minimum, nickel should be included.

2. Application of "short term or seasonal". Page 2, item 12 (and elsewhere) –

"*As considered in the IS/MND, the exception relates specifically to drinking-water-related discharges that are short-term or seasonal in nature, meaning that they occur no more than 2,200 hours per year (e.g., a continuous discharges lasting up to 3 months of the year or intermittent discharges lasting up to 6 hours per day all year long).*"

> *Comment:* This definition of what discharges can and cannot be covered by the exception is not present in the SIP and presents an artificial constraint on the applicability of the IS/MND and the resulting permits. More specifically, the definition established in Resolution and IS/MND potentially has a major adverse impact by requiring the construction of control facilities to meet the trihalomethane objectives that will still pertain to at least one San Francisco facility and, apparently, to facilities at water purveyors. These control facilities will not provide any additional protection to the environment or public health but will be costly and disruptive.

The categorical exception was intended to apply to all water supply facilities, not just some of them. This interpretation is supported by the 2000 SIP Functional Equivalent Document which states that categorical exemptions for legally-mandated activities to protect drinking water and other resources "are not expected to impose additional costs on dischargers." (See Attachment A.) However, if the Board adopts the IS/MND and subsequent permits with the proposed definition, then very substantial costs would be imposed on drinking water dischargers for existing discharges and water transfers.

Alternative approaches are available including the following:

- Modify the current definition as follows:

  For the purposes of this analysis, "short-term or seasonal discharges" are defined as any discharge or combination of discharges occurring continuously or intermittently for no more than 2,200 hours per year. An exception from the trihalomethane criteria will also apply to non-continuous discharges to reservoirs for longer intervals. Examples of short-term or seasonal discharges include, but are not limited to, a single continuous discharge of up to three months or daily discharges of up to 6 hours for an entire year. [*additions are underlined*]

- Apply the short-term/seasonal definition to the category or sector of water supply and distribution system discharges. For example:

  "The potable water discharges under this permit are *mostly* intermittent, short duration, high flow discharges that comply with California Department of Health and Safety Maximum Contaminant Levels, for protection of human health." [*emphasis added*]. *From Order No. R5-2008-0081*.[1] See also Lahontan low-threat permit: "Many of the discharges contemplated under this Order are of short duration or intermittent…"

- Include all potable water discharges within the scope which are *non-continuous*, i.e., not meeting the definition of "continuous discharge" at 40 CFR 122.2.

[1] This Central Valley Region Permit applies to "low threat" discharges that are less than 4 months in duration or have an average dry weather flow less than 0.25 MGD. Those discharging more than 4 months have increased monitoring requirements.

- Do not define the terms in the IS/MND but leave them to the discretion of the permit writer.

As noted in the cover letter, this is a key issue for the SFPUC. Changing this definition for future permits will be difficult, if not impossible; it should be adjusted now in the Resolution and IS/MND.

3. Case-by-case exceptions. Page 3, item 4 (and elsewhere) –.

"4. The Regional Water Board will apply these exceptions on a case-by-case basis."

Comment: This is a categorical exception; why would it be applied case-by-case? The SIP has separate provisions for case-by-case exceptions (Section 5.3, item 2).

4. Copper criteria. Page 4, item 6 (and elsewhere) – *"6. Unless a discharge (a) contains copper concentrations above water quality criteria no more frequently than once every three years on average or (b) flows back into the same reservoir where the water originated, the Regional Water Board will require the following mitigation measures from the IS/MND as conditions for granting an exception: [etc]"*

Comment: The water quality criteria being applied in the requirement above are those from the California Toxics Rule and the Basin Plan. It is inappropriate to grant an exception to copper, one of the key objectives, and then to reintroduce these criteria as applicable to copper. We understand that this "re-application" of copper criteria is done in the context of CEQA but it undermines the intent of the exception provision in SIP. It is recognized that the EPA recommended copper criteria on which the objectives are based are not valid. As noted in the IS, EPA has issued new recommended copper criteria which take into account dissolved carbon and other constituents which control copper toxicity.

Initial Study/Mitigated Negative Declaration

5. Determination of impact. Page ii, item 6 (and elsewhere) – The box checked is:

"*I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.*"

Comment: We disagree that the initial study has established that the discharge could have a significant effect. These discharges are ongoing. The Board action will not have any physical effect (except potentially for treatment

controls needed if the definition is not expanded). Therefore, the proposed action – approving the categorical exception - cannot possibly have a significant effect on the environment.

The lack of effect has been the reason that these discharges, for the most part, have not been permitted since the Clean Water Act came into effect in 1972.

6. Copper sources. Page 1 – "*Copper occurs naturally in water; however, the primary source in water supply is the application of copper-based herbicides to control algal blooms in reservoirs and transmission canals*."

Comment: Virtually all waters have some copper in them due to natural sources, which is the primary source. The *highest concentrations* are due to treatment. It should be noted that natural sources can cause exceedances of the standards, particularly in wet weather.

7. "4. Discharges from pipeline breaks/leaks, valve malfunctions, and other unplanned discharges." Page 7 – "*In general, unplanned discharges at individual locations occur less than every 3 years; however, discharges at a few locations occur about 2 to 3 times per year. The more frequent discharges are typically associated with noncompliance with drinking water standards in transmission system pipelines and generally last less than one day. Volumes of discharges range from several thousand gallons to millions of gallons, depending on the nature of the unplanned discharge. Unplanned discharges are typically not treated until human health and safety are secured at the site."*

Comment: It would be appropriate to classify the larger unplanned discharges as "Emergency Discharges." These are generally flows with elevated turbidity that could overwhelm the treatment facilities and potentially threaten public health.

8. THM risk. Page 12 (and elsewhere) – "*Therefore, granting an exception to the SIP and setting aside CTR WQOs would be unlikely to pose a human health concern. Further assurance could be provided by requiring dischargers to comply with Mitigation Measure 2, below.*"

Comment: By identifying a potential risk and the need for mitigation, this statement unnecessarily alarms the public.

The risk from THMs in the discharges is not just unlikely, it is non-existent. The THMs in the discharge are likely to be non-detectable soon after discharge due to volatilization and dilution. There is no potential for these THMs to persist in the waterway until the water is extracted and pumped

through a treatment facility – and to affect water consumers. Consequently no mitigation is necessary.

9. Checklist – Mandatory Findings of Significance: <u>human health</u>. Page 25 – "*b) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?* "

<u>*Comment*</u>: This should also be checked no impact because not even a speculative impact has been demonstrated.

Attachment A – State Implementation Policy 2000 Final Function Equivalent Document (FED)

Text regarding Categorical Exceptions in the FED[2].

Pages: V-164, 165

Categorical exceptions would allow temporary, short-term, or seasonal exceedance of water quality standards for categories of discharges, such as, discharges incidental to pest control or resource management activities. The rescinded ISWP/EBEP referred to this type of exception as a "variance". …. The rescinded ISWP/EBEP also stated that RWQCBs could, "after compliance with CEQA, allow short-term or seasonal variances from plan provisions, if determined necessary, to implement control measures regarding drinking water which are being conducted to fulfill statutory requirements under the Federal Safe Drinking Water Act or the California Health and Safety Code" and "[s]uch variances may also be granted for draining water supply reservoirs, canals, and pipelines for maintenance, for draining municipal storm water conveyances for cleaning or maintenance, or for draining water treatment facilities for cleaning or maintenance." The Toxicity Task Force recommended that the language of the rescinded ISWP/EBEP be retained.

State and local agencies with statutorily-required resource management or pest control responsibilities would be the primary recipients of categorical exceptions to allow them flexibility in meeting their mandates. If such agencies are not granted categorical exceptions from water quality standards, most would have to substantially change their practices to labor intensive, longer term, higher cost alternatives. In some cases, alternative methods of pest management may not be available.

Page: V-166 [Analysis of Issues and Alternatives]

Alternative 2. Allow the RWQCBs to grant categorical short-term or seasonal exceptions for resource management and pest control activities provided certain conditions are met. Under this alternative, a RWQCB could allow exceedance of the CTR criteria or toxicity objective for a limited period of time for statutorily-mandated resource management and pest control activities if the following conditions are met:

- The discharger must: notify potentially affected public and governmental agencies and provide a detailed description of the proposed action, including the proposed method of completing the action, time schedule, discharge and receiving water quality monitoring plan (before project initiation, during the project, and after project completion, with the appropriate quality assurance and quality control procedures), project CEQA documentation, contingency plans, identification of

[2] Not all references to categorical exceptions are included. The *State Implementation Policy* 2000 Final Function Equivalent Document (FED) is posted online.

alternate water supply (if needed), residual waste disposal plans, and, upon completion of the project, certification by a qualified biologist that the receiving water beneficial uses have been restored.

This alternative provides flexibility to the RWQCBs and the resource management agencies, and the specified conditions for approval would ensure long-term protection of beneficial uses. Categorical exceptions would allow exceedance of one or more CTR criteria or the toxicity objective and may result in impairment of beneficial use(s) during the span of the exceptions. The specified conditions could nominally increase resource/pest management agency costs for increased monitoring and documentation.

[***This is the selected alternative***]

Page: VI-30 [Environmental Effects]

3. Differences between proposed Policy and RWQCB practices. Regarding categorical exemptions for legally-mandated activities to protect drinking water and other resources,
RWQCBs typically allow these activities to go forward, using various mechanisms. The proposed Policy would likewise allow these activities under a consistent, statewide exception.

Page: VI-31 [Environmental Effects]

5. Potentially significant environmental effects. It is unlikely that there will be potentially significant effects due to the categorical exception provisions of the proposed Policy because this is not a change from existing practices and additional safeguards are established.

Page: VIII-3 [Economic Considerations]

Exceptions, such as categorical exemptions for legally-mandated activities to protect drinking water and other resources, are typically allowed by RWQCBs so these provisions are not expected to impose additional costs on dischargers. [*emphasis added*]

Attachment B – Related draft or final permits

Related permits in other Regions:

- **Central Valley**: Order No. R5-2008-0081/NPDES Permit No. CAG995001, Adopted on 12 June 2008,

- **Los Angeles**: Discharges from Potable Water Distribution and Water Supply Systems Order No. R4-2008-xxxx, NPDES No. CAG994005. tentative order

- **San Diego**: General Waste Discharge Requirements for Discharge of Hydrostatic Test Water & Potable Water to Surface Waters & Storm Drains or Other Conveyance Systems, San Diego Region. Order R9-2002-0020

- **Santa Ana**: General Waste Discharge Requirements for Discharges to Surface Waters That Pose An Insignificant (De Minimus) Threat to Water Quality; Order NO. R8-2006-0004; and R8-2003-0061, NPDES No. CAG998001

- **Lahontan:** Renewed WDR and NPDES General Permit for Limited Threat Discharges to Surface Waters.

- **Central Coast**: apparently none

- **North Coast:** apparently none

- **Colorado River:** apparently none

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7
100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551-9486 • PHONE (925) 454-5000

October 10, 2008

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1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: Tentative Resolution and Mitigated Negative Declaration to Grant Categorical Exception to the *Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries in California (SIP)* for Discharges from Drinking Water Systems in the San Francisco Bay Region

Dear Mr. Fernandez:

Zone 7 Water Agency (Zone 7) has reviewed the referenced tentative resolution and CEQA document in the context that Zone 7's water treatment facilities are currently covered under the existing Region-Wide NPDES General Permit for Discharges from Surface Water Treatment Facilities for Potable Supply, NPDES Permit No. CAG382001. Zone 7 has been covered under this general permit since January 2004. We offer the following comments for your consideration.

Tentative Resolution

1. Item 8 on the Tentative Resolution states that "[i]n many cases, discharges from drinking water systems … cannot readily achieve copper and trihalomethanes effluent limits derived in accordance with the SIP." This must be qualified by the fact that discharges from drinking water systems are not continuous but are intermittent (i.e. short-term) and seasonal. Moreover, drinking water systems are regulated under the federal Safe Drinking Water Act and the California Health and Safety Code. Because discharges are intermittent and water treatment processes are required to meet other federal and state regulations, exceedences in copper and trihalomethanes limits set forth in the State Implementation Plan (SIP) would not significantly impact beneficial uses. Therefore, discharges from drinking water systems for these constituents would be eligible for categorical exception provided in the SIP.

2. Unlike with the copper effluent limitations, there are no specific discussions on trihalomethanes (THM) in this resolution. There should be a brief discussion in the CEQA documentation and resolution sections reflecting the fact that the effluent limitations in the California Toxics Rule (CTR) for THMs are significantly lower than the drinking water limitations for the same constituents. The proposed THM effluent limitations, which were promulgated to protect human health, are at least two orders of magnitude lower than the actual limits in finished drinking water served to the public. In effect, the water utilities will

be required to meet a higher health standard for receiving waters [that might also be used as a municipal source water] than for people. This will create two different public health standards for THMs. Further, this limitation will not meaningfully protect human health since raw receiving waters would not be consumed by the public. This type of discussion will lend support as to why drinking water system short-term and seasonal discharges should be exempt from the THMs effluent limitations set forth in the CTR.

3. Item 5, under the "Now, Therefore Be It Resolved" section, provides that exemptions will be applied so long as the listed conditions are met. The conditions essentially require a water agency to notify potentially affected public and governmental agencies provide a detailed report for the proposed action including: schedule, monitoring plan, contingency plans, disposal plans, and subsequent certification of a qualified biologist that beneficial uses have been restored. These conditions appear to apply to planned discharges; however this is not clear in the existing language.

Attachment 2 – Initial Study/Mitigated Negative Declaration

1. On page 3, under Section II. Treatment Facility Discharges,

    a. As a point of clarification, in the second to the last sentence in the first paragraph that starts with "Chloramination also produces…", add "just free" before "chlorination."

    b. The first sentence of the second paragraphs implies that operation of treatment facilities *always* result in discharges. However, this is not the case as most water treatment facilities do not discharge as part of their treatment process. Instead, most water treatment facilities discharges are unplanned or done in emergency situations. The first sentence should read as follows:

        "Discharges, planned or unplanned, may occur from operation of water treatment facilities. Discharges may include: filter backwash water…"

    c. This section should include a summary of where the data cited in this section comes from, particularly the total number of facilities that were surveyed. This will provide context in the subsequent summaries of the discharge types.

2. On page 4, item 1. Filter backwash water discharge and storage/settling basin discharges, the fourth sentence "[m]ost facilities discharge backwash water intermittently;" is confusing with the preceding sentence that states that many facilities recycle their backwash water to their headworks to be treated with the influent raw water. In addition, there is no definition on what Regional Water Board considers as "intermittent". The plain meaning, as defined in Merriam-Webster, of "intermittent" is coming and going at intervals or not continuous. This adds more confusion with the subsequent sentence that states that a few facilities discharge on a daily basis. Although discharges can happen on a daily basis, such discharges can also fall within the "intermittent" definition if discharges occur once or sporadically throughout

the day. Therefore, we recommend deleting the fourth sentence entirely so as to avoid confusion.

3. On the same page, at the end of the first sentence in item 2, replace "sewer" with "drain."

4. On the same page, the third sentence under item 3. Leakage water, should be rewritten as follows: "Alternatively, a sub-drain may discharge leakage water directly to a storm drain that drains into surface waters."

5. On page 5, in the first sentence on item 6. On-site water storage facility drainage, change "clean" water to "treated potable" water.

6. On page 12, under Mitigation Measure 2, there is a reference to Table 3-5 of the Basin Plan. We recommend attaching this table as an appendix to this IS/MND.

We appreciate the opportunity to comment on this document. If you have any questions or comments, please feel free to contact me at your earliest convenience at 925-454-5036 or via e-mail at mlim@zone7water.com.

Sincerely,

Mary D. Lim
Environmental Services Program Manager
Zone 7 Water Agency

Cc: Bill Johnson, John Madigan, and Lou Gonzales - RWQCB
Jill Duerig, Vince Wong, Conrad Tona

EAST BAY
MUNICIPAL UTILITY DISTRICT

October 10, 2008

San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612
ATTN: Xavier Fernandez

RE: Comments on Tentative Resolution R2-2008-XXXX for Categorical Exception to the SIP for Drinking Water Discharges

Dear Mr. Fernandez,

Thank you for the opportunity to comment on the tentative resolution and mitigated negative declaration (MND) to grant a categorical exception to the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP) for Discharges from Drinking Water Systems in the San Francisco Bay Region.

We greatly appreciate the time and efforts that you and other Regional Board staff have put forth in working with Bay Area water utilities to understand and address our concerns, as well as your efforts in preparing the initial study and MND. Our understanding of the SIP is that the categorical exception was intended to be applied broadly. As currently written, permits issued to the District that incorporate the categorical exception could have a major impact upon our operations and future compliance status and leave no option except to construct extremely costly facility modifications. Therefore, we request that the SIP exception be applied to the category or sector of water supply, treatment, and distribution system discharges as a whole. Our specific comments follow.

The applicability of the term "short-term or seasonal" discharges. The SIP allows the RWQCB to allow *short-term or seasonal exceptions from meeting the priority pollutant criteria/objectives if determined to be necessary to implement control measures to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health & Safety Code*. In the tentative resolution, the RWQCB defines "short-term or seasonal discharges" as discharges lasting no more than 2,200 hours per year.

This definition of short term and seasonal discharges is not currently in the SIP, contrary to the intent of the SIP, and inconsistent with determinations made by other Regions. It is also inconsistent with the terms "dry season" (April 16 through October 14) and "wet season" (October 15 through April 15), which are frequently used by the RWQCB. In the Los Angeles RWQCB tentative order for *Discharges from Potable Water Distribution and Water Supply Systems to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties* (General NPDES Permit No. CAG994005), the approach taken was a sector-wide approach since potable

water is considered to be a *de minimus* source of pollution and as a group, discharges are generally short-term in nature. We request that a similar sector-wide approach be taken in Region 2.

The District is particularly concerned about major adverse cost impacts that could result from having to construct control facilities to meet the proposed trihalomethane (THM) objectives. In our view, there are no significant environmental risks associated with THMs, and furthermore, THMs are likely to be non-detectable soon after discharge due to volatilization, mixing, and diffusion. THMs are already closely regulated throughout our raw water and water treatment and distribution systems to protect public health. It is also important to recognize that the District may need to increase chlorine dosage rates significantly within our raw water systems in the near future in order to control invasive species (e.g., Quagga mussels). Such competing needs between public health and environmental protection must be carefully balanced. Constructing facilities to mitigate THMs in discharges would not provide any additional protection to the environment or human health and would be costly and disruptive.

In summary, and based on these considerations, the District requests that the Regional Board reconsider the applicability of the exception and revise the current definition of "short term or seasonal" to more broadly apply to water supply, treatment, and distribution as a whole.

The applicability of EPA's NPDES Water Transfer Rule. As stated in the Federal Register, Volume 73, No. 115 dated Friday, June 13, 2008, water transfers used for providing public water supply are generally excluded from NPDES permit requirements. In this rulemaking, EPA stated that "in instances where a water transfer facility does itself introduce pollutants into the water being transferred, the scope of the required NPDES permit would only be for those added pollutants. Such a permit would not require the water transfer facility to address pollutants that may have been in the donor waterbody and are being transferred." 73 Fed. Reg. 33697. 33705.

EBMUD's principal source of raw untreated drinking water is Pardee Reservoir, which is a water of the United States and which contains naturally occurring pollutants such as metals and total suspended solids. EBMUD transfers the raw water from Pardee Reservoir (located in Calaveras County) to various facilities and other waters of the United States located in the East Bay (Contra Costa County) via its Mokelumne and Lafayette Aqueducts. We are also currently constructing facilities that would provide us the capacity for future water transfers from the Sacramento River.

EBMUD does not use copper sulfate to treat its raw water, but it does add sodium hypochlorite (bleach) to meet drinking water requirements and calcium oxide (liquid lime) to protect the aqueducts from corrosion. Thus, the scope of any required NPDES permit applicable to our water transfers should address pollutants associated with the use of bleach and liquid lime (e.g., chlorine residual and pH); however, the permit should not address pollutants already in the donor waterbody, such as metals and total suspended solids from Pardee Reservoir. Similarly, the scope of the NPDES permit for future water transfers from the Sacramento River should be limited only to added pollutants.

Should you have any questions, please contact me at (510) 287-0456.

Sincerely,

JOHN H. SCHROETER, P.E.
Manager of Environmental Compliance

JHS:sjs

cc: M. Ambrose
C. Chan
S. Suzuki

APPENDIX C – RESPONSES TO COMMENTS

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

RESPONSE TO WRITTEN COMMENTS FOR ITEM 5A

December 10, 2008

THE STATE IMPLEMENTATION POLICY EXCEPTION FOR DISCHARGES FROM DRINKING WATER SYSTEMS IN THE SAN FRANCISCO BAY REGION

I. San Jose Water Company (SJWC) - October 8, 2008

II. San Francisco Public Utilities Commission (SFPUC) - October 10, 2008

III. Alameda County Flood Control and Water Conservation District, Zone 7 (Zone 7) - October 10, 2008

IV. East Bay Municipal Utility District (EBMUD) - October 10, 2008

I. San Jose Water Company (SJWC) - October 8, 2008

SJWC provided two specific comments. Responses to these comments are provided below.

SJWC Comment 1

The WTP operates seasonally; i.e., during the rainy season, since it depends on creek flow. Therefore, the creek discharge is also seasonal. The rainy season varies in length, from three to four months in a dry (water) year like 2007-08 to six to seven months in a wet (water) year like 2005-06. In 2006, the discharge operated for 3,233 hours. SJWC respectfully requests that the "seasonal" definition be amended to cover the rainy season….

Response to SJWC Comment 1

We do not propose to change the definition of a "seasonal or short-term" discharge in the tentative resolution. The term "short-term or seasonal" was defined to establish a clear project description for the Initial Study/Mitigated Negative Declaration (IS/MND). A clear project description was needed to evaluate environmental effects caused by the project in accordance with the California Environmental Quality Act (CEQA). Revising the definition of "short-term or seasonal" in the IS/MND would require reevaluating the potential environmental impacts described in the IS/MND, which in turn would require recirculation of the IS/MND. In addition, this definition covers 28 of 31 drinking water treatment facilities.

Although SJWC's discharges may not be "short-term or seasonal" as defined in the resolution, it has other compliance strategies to consider. SJWC could potentially comply with the SIP by discharging to the sanitary sewer for a portion of the year, seeking intake water credits as allowed under SIP Section 1.4.4, developing a site-specific water effects ratio for copper, or collecting hardness data to refine the assumptions used to determine the copper objective. Moreover, we revised the resolution to include the following statement:

> This resolution shall not preclude allowing other exceptions, including exceptions for different pollutants, under other circumstances in the future. These additional exceptions may define the term "seasonal or short-term discharge" differently. Any additional exceptions must meet SIP requirements, including compliance with CEQA.

SJWC Comment 2

SJWC respectfully requests… that "year" be defined as the California Department of Water Resources (DWR) Water Year (October 1 through September 30) rather than the calendar year.

Response to SJ Water Co. Comment 2

We replaced the reference to "calendar year" in the resolution with the more general term "year." The resolution to grant the SIP exception will be used to develop provisions in future NPDES permits, but it does not need to define when a year starts and stops. NPDES permits can specify whether the calendar year or California Department of Water Resources' Water Year is to be used to calculate the annual discharge durations.

II. San Francisco Public Utilities Commission (SFPUC) - October 10, 2008

SFPUC provided two general comments in its cover letter, four specific comments on the main text of the Tentative Resolution, and five specific comments on Attachment 2, Initial Study/Mitigated Negative Declaration, of the Tentative Resolution. Responses to the SFPUC's general and specific comments are provided below.

SFPUC General Comments

SFPUC Comment 1: Completion of CEQA by the Board.

By preparing the initial study and MND, the San Francisco Water Board has provided a substantial benefit to the Bay Area water agencies. San Francisco and the other agencies will not need to prepare separate CEQA documentation for the categorical exception since the Board will have addressed this requirement.

Response to SFPUC Comment 1

We acknowledge and appreciate SFPUC's recognition of our efforts.

SFPUC Comment 2: Full applicability of the MND and resulting permits to water supply facilities.

Our understanding of the SIP is that the categorical exception for water supply facilities was intended to be applied broadly. That is, the intent is to make this exception available to all legally-mandated activities to supply and protect drinking water. As currently drafted, the resolution and MND cover some but not all SFPUC drinking water facilities. Consequently, SFPUC is presented with the option of discharging with no permit or making extremely costly facility modifications. Therefore, it is of utmost importance to San Francisco that the SIP exception be applied to all drinking water facilities, and not just a subset of those facilities.

Response to SFPUC Comment 2

We disagree. The SIP exception does not apply to all drinking water discharges; otherwise, there would not be a requirement for the discharge to be "short-term or seasonal" and meet other conditions set forth in SIP Section 5.3. We believe that the tentative resolution does apply the exception broadly because it covers 28 of 31 drinking water treatment facilities in the San Francisco Bay Region. We are aware that one SFPUC facility's discharge is not "short-term or seasonal" as defined in the tentative resolution. We are committed to working with the SFPUC to develop an environmentally protective permitting strategy (see also Response to SJWC Comment 1 and Response to SFPUC Comment 4).

SFPUC Specific Comments on Tentative Resolution

SFPUC Comment 3: Pollutants addressed by exception. Page 2, item 11 (and elsewhere) – "granting an exception to the copper and trihalomethanes water quality objectives…"

As allowed by the SIP, the exception should pertain to all objectives in the California Toxics Rule/NTR/Basin Plan. For example, effluent limitations could be required for priority pollutants which are at times exceeded in the receiving water present and are present in the discharges due to natural sources at levels below water quality objectives. (The SIP requires effluent limits in these situations.) For example, the Board apparently intends to place limitations and extensive monitoring on nickel even though nickel is present at background concentrations and at concentrations much lower than levels of concern. The categorical exception therefore should pertain to all priority pollutant criteria/objectives. At a minimum, nickel should be included.

Response to SFPUC Comment 3

Under SIP Section 5.3, SIP exceptions may be granted at the discretion of the Regional Water Board. We do not see a need to grant exceptions for pollutants other than copper and THMs at this time because there is no indication that providing exceptions for other priority pollutants is necessary. Regional Water Board staff is currently working on the following permits for drinking water facilities:

(1) The recently released tentative order for discharges from the SFPUC's transmission system;

(2) The reissuance of the general permit for drinking water treatment facilities;

(3) A potential permit for discharges from the Santa Clara Valley Water District's transmission and distribution system; and

(4) A potential permit for discharges from the East Bay Municipal Utility District's transmission and distribution system.

To our knowledge, none of these permits require an exception for other pollutants because these discharges can meet all effluent limits expected to be included in these permits.

The tentative order for SFPUC's transmission system discharges includes nickel limitations that the SFPUC can meet without additional treatment. Monitoring requirements include measuring nickel in effluent and receiving water samples four times per year. Each nickel analysis will cost about $35. The tentative order also calls for concurrent hardness monitoring in receiving waters. Hardness can be measured for less than $10 each time. Residual chlorine and pH monitoring and reporting are also proposed regardless of the nickel limit. As a result, mobilization and reporting costs for nickel will be minimal. We conservatively estimate the annual costs for nickel monitoring would be less than $500. We do not consider this monitoring to be extensive or costly considering that each year the SFPUC discharges millions of gallons of potable water to creeks in the San Francisco Bay Region. However, as explained in Response to SJWC Comment 1, we revised the tentative resolution to include the following statement:

> This resolution shall not preclude allowing other exceptions, including exceptions for different pollutants, under other circumstances in the future. These additional exceptions may define the term "seasonal or short-term discharge" differently. Any additional exceptions must meet SIP requirements, including compliance with CEQA.

SFPUC Comment 4: Application of "short term or seasonal". Page 2, item 12 (and elsewhere) – "As considered in the IS/MND, the exception relates specifically to drinking-water related discharges that are short-term or seasonal in nature, meaning that they occur no more than 2,200 hours per year (e.g., a continuous discharges lasting up to 3 months of the year or intermittent discharges lasting up to 6 hours per day all year long)."

This definition of what discharges can and cannot be covered by the exception is not present in the SIP and presents an artificial constraint on the applicability of the IS/MND and the resulting permits. More specifically, the definition established in Resolution and IS/MND potentially has a major adverse impact by requiring the construction of control facilities to meet the trihalomethane objectives that will still pertain to at least one San Francisco facility and, apparently, to facilities at water purveyors. These control facilities will not provide any additional protection to the environment or public health but will be costly and disruptive.

The categorical exception was intended to apply to all water supply facilities, not just some of them. This interpretation is supported by the 2000 SIP Functional Equivalent Document which states that categorical exemptions for legally-mandated activities to protect drinking water and other resources "are not expected to impose additional costs on dischargers." (See Attachment A.) However, if the Board adopts the IS/MND and subsequent permits with the proposed definition, then very substantial costs would be imposed on drinking water dischargers for existing discharges and water transfers.

Alternative approaches are available including the following:

- *Modify the current definition as follows:*

  For the purposes of this analysis, "short-term or seasonal discharges" are defined as any discharge or combination of discharges occurring continuously or intermittently for no more than 2,200 hours per year. An exception from the trihalomethane criteria will also apply to non-continuous discharges to reservoirs for longer intervals. Examples of short-term or seasonal discharges include, but are not limited to, a single continuous discharge of up to three months or daily discharges of up to 6 hours for an entire year. [additions are underlined]

- *Apply the short-term/seasonal definition to the category or sector of water supply and distribution system discharges. For example:*

  "The potable water discharges under this permit are mostly intermittent, short duration, high flow discharges that comply with California Department of Health and Safety Maximum Contaminant Levels, for protection of human health."[emphasis added]. From Order No. R5-2008-0081.1 See also Lahontan low-threat permit: "Many of the discharges contemplated under this Order are of short duration or intermittent…"

- *Include all potable water discharges within the scope which are non-continuous, i.e., not meeting the definition of "continuous discharge" at 40 CFR 122.2.*

- *Do not define the terms in the IS/MND but leave them to the discretion of the permit writer.*

As noted in the cover letter, this is a key issue for the SFPUC. Changing this definition for future permits will be difficult, if not impossible; it should be adjusted now in the Resolution and IS/MND.

Response to SFPUC Comment 4

We do not think that the SFPUC's proposed changes are appropriate.

The first two paragraphs of this comment state that (a) the proposed definition of "short-term or seasonal" does not come from the SIP, (b) the State Water Board intended for SIP exceptions to apply to all water supply facilities, and (c) if the exception is not granted to all water supply facilities, the SFPUC will incur a major financial burden. Our responses follow (see also Response to SJWC Comment 1 and Response to SFPUC Comment 2).

a) We recognize that the SIP does not define "short-term or seasonal." We defined the term in the tentative resolution and supporting IS/MND to clarify which specific facilities the proposed SIP exception is to cover, and to facilitate a meaningful CEQA impact analysis. Without clearly establishing what is to be considered a "short-term or seasonal" discharge, the IS/MND impact analysis would either be vague and inadequate, or it would assume unrealistic worst-case scenarios and possibly identify burdensome and excessive mitigation. We have revised the tentative resolution to clarify that the Regional Water Board could also grant other SIP exceptions using other definitions in the future.

b) SIP Section 5.3 cannot be construed to apply to all water supply agencies because its express language places specific conditions on its applicability:

> The [Regional Water Board] *may*, after compliance with the California Environmental Quality Act (CEQA), allow *short-term or seasonal* exceptions from meeting the priority pollutant criteria/objectives…. [emphasis added]

Had the State Water Board intended SIP exceptions to apply to all water supply discharges, it would not have left such exceptions to the discretion of the Regional Water Boards and limited them to "short-term or seasonal" discharges.

c) Granting the proposed SIP exception would save many dischargers money, particularly compared to the cost of complying with existing applicable SIP requirements. Water supply agencies not covered by SIP exceptions could need to build costly treatment facilities. The State Water Board considered the economic costs of implementing the SIP in its 2000 SIP Functional Equivalent Document, and the tentative resolution does not contradict the State Water Board's analysis. With respect to the possible categorical SIP exceptions, the State Water Board concluded that granting exceptions would not pose additional costs on dischargers. We agree. We also recognize that the tentative resolution does not cover three specific drinking water dischargers, so it does not provide them with any cost savings. Nevertheless, we remain committed to working with these agencies to develop a permitting strategy that reflects their particular circumstances and is both environmentally protective and cost-effective.

In the subsequent paragraphs of this comment, the SFPUC suggests alternative approaches to granting the exception: (1) add an exception for non-continuous discharges to reservoirs, (2) apply the exception to all drinking water facilities, (3) define "short-term or seasonal" to mean "non-continuous," or (4) defer defining "short-term or seasonal" at this time. As explained below, we decline all these suggestions.

1) The first alternative would revise the definition of "short-term or seasonal" by carving out an exception to this condition for non-continuous discharges to reservoirs. However, this approach is inconsistent with the SIP, which does not allow categorical exceptions for non-continuous discharges unless they are also "short-term or seasonal." Moreover, we see no reason to carve out a special exception exclusively for reservoir discharges. As written, this tentative resolution applies broadly to all but 3 of at least 31 facilities. The Regional Water Board can consider other SIP exceptions that apply to specific circumstances through a separate process.

2) The second alternative would grant the exception to *all* water supply and distribution system discharges because *most* or *many* of these discharges are intermittent or short in duration. However, the Regional Water Board cannot grant SIP exceptions beyond those the SIP authorizes; therefore, it cannot grant an exception to all drinking water discharges just because most of them meet the requirements for a SIP exception. The SIP clearly limits the Regional Water Board's authority to "short-term or seasonal" exceptions.

3) The third alternative would grant the exception to all potable water discharges that are not "continuous" as defined in 40 CFR 122.2, which states, "Continuous discharge means a 'discharge' which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities." However, discharges that are not continuous are not necessarily "short-term or seasonal." For example, if a discharge were to occur daily for 23 hours per day, it would certainly not be short-term or seasonal; therefore, whether a discharge is continuous as defined in 40 CFR 122.2 is immaterial.

4) The last alternative would leave the term "short-term or seasonal" undefined, to be resolved with each permit. As stated above, we defined the term to clarify the specific discharges this proposed SIP exception would cover and to facilitate a meaningful CEQA impact analysis. In the future, the Regional Water Board may grant other SIP exceptions using other definitions.

In the last paragraph of this comment, the SFPUC suggests that changing the definition of "short-term or seasonal" will be nearly impossible in the future. We disagree. The Regional Water Board will have the option of applying the SIP exception as presented in the tentative resolution, granting a different exception based on comparable documentation (including CEQA documentation), or not granting an exception at all (see also Response to SJWC Comment 1, Response to SFPUC Comment 2, and Response to SFPUC Comment 5).

SFPUC Comment 5: Case-by-case exceptions. Page 3, item 4 (and elsewhere) –. "4. The Regional Water Board will apply these exceptions on a case-by-case basis."

This is a categorical exception; why would it be applied case-by-case? The SIP has separate provisions for case-by-case exceptions (Section 5.3, item 2).

Response to SFPUC Comment 5

The Regional Water Board may grant categorical exceptions to the SIP on a case-by-case basis as it considers each permit. To avoid confusion with the SIP's case-by-case exceptions (as opposed to categorical exceptions), we revised the tentative resolution as follows:

4. The Regional Water Board will apply these exceptions <u>as appropriate</u> on a ~~case-by-case~~ <u>permit-by-permit</u> basis."

SFPUC Comment 6: Copper criteria. Page 4, item 6 (and elsewhere) – "6. Unless a discharge (a) contains copper concentrations above water quality criteria no more frequently than once every three years on average or (b) flows back into the same reservoir where the water originated, the Regional Water Board will require the following mitigation measures from the IS/MND as conditions for granting an exception: [etc]"

The water quality criteria being applied in the requirement above are those from the California Toxics Rule and the Basin Plan. It is inappropriate to grant an exception to copper, one of the key objectives, and then to reintroduce these criteria as applicable to copper. We understand that this "re-application" of copper criteria is done in the context of CEQA but it undermines the intent of the exception provision in SIP. It is recognized that the EPA recommended copper criteria on which the objectives are based are not valid. As noted in the IS, EPA has issued new

recommended copper criteria which take into account dissolved carbon and other constituents which control copper toxicity.

Response to SFPUC Comment 6

SIP exceptions must comply with CEQA, and we believe this CEQA analysis is appropriate. To determine whether a potential environmental impact is significant, a CEQA analysis must identify a significance threshold. A typical significance threshold for water quality impacts is whether a proposed project would meet water quality standards. Although the tentative resolution (i.e., proposed project) would essentially set aside some water quality standards, the CEQA analysis must establish a significance threshold to determine whether its environmental effects could be significant. To do this, we used the technical document that is the basis of the copper water quality standards. This document sets forth water quality criteria for copper and indicates that aquatic organisms and their uses are not expected to be unacceptably affected by discharges exceeding the criteria less than once every three years on average. This finding is not part of the promulgated copper water quality standards, but it helps us determine whether environmental effects could be significant.

Although the U.S. EPA revised the copper water quality criteria in 2007, the revised criteria supplement, but do not invalidate, the previous criteria (U.S. EPA 2007). The Foreword of the revised criteria document states, "Criteria contained in this document supplement any previously published EPA aquatic life criteria for the same pollutant(s)." Later the Foreword states, "This document is guidance only…. It does not establish a binding norm and cannot be finally determinative of the issues addressed." Lastly, Section 7.0 of the revised criteria document indicates that U.S. EPA continues to view a return interval of at least three years between exceedances as acceptable.

The main difference between the previous and revised copper criteria is the models used to derive the criteria. The previous copper criteria uses a model based on water hardness, and the revised copper criteria uses a model based on site-specific data for temperature, pH, dissolved organic carbon, calcium, magnesium, sodium, potassium, dissolved inorganic carbon, chloride, and sulfate. In recognition that both criteria documents exist, we revised the IS/MND as follows:

> The CTR and Basin Plan WQOs are based on the 1984 copper criteria (USEPA 1985b) and, for estuarine water in the San Francisco Bay, more recent site-specific data (Regional Water Board 2007 a,b). Freshwater criteria depend on the hardness of the receiving water. Copper toxicity is also known to vary with other properties, including temperature, dissolved organic compounds, suspended particles, pH, and various inorganic cations and anions, including those composing alkalinity. As a result, the USEPA updated its copper criteria in 2007 to incorporate these factors ~~in~~ using a model ~~used~~ to determine copper criteria based on site-specific conditions (USEPA 2007). The WQOs do not reflect this updated approach.
>
> Many of the Treatment Facility Discharges and most of the Transmission and Distribution System Discharges occur less than once every 3 years. In addition, only 21 percent of samples from drinking water facilities exceeded freshwater chronic WQOs (assuming a hardness of 100 mg/L) (CIWQS 2008; EBMUD and others 2008; SFPUC

2008). Therefore, WQOs are not exceeded every time there is a discharge; WQOs are exceeded less often than the frequency of discharges. According to the 1984 and 2007 copper water quality criteria documents for acute and chronic exposures (USEPA 1985b, 2007), aquatic organisms and their uses are not expected to be unacceptably affected from discharges exceeding criteria less than once every 3 years on average. Therefore, the environmental impact would be less-than-significant for discharges that do not exceed copper criteria more than once every 3 years on average.

Regardless of discharge frequency, at least three treatment facilities discharge back to the water bodies (e.g., reservoirs) that were the initial source of the water. Since the copper originated from these reservoirs, these discharges would not change environmental conditions in the ~~reservoirs~~ water bodies. Therefore, impacts from discharging water back to these ~~reservoirs~~ water bodies would be less-than-significant.

The discharges from at least ~~six~~ three treatment facilities would exceed ~~WQOs~~ water quality criteria more than once every three years and would not flow to reservoirs that were the initial source of copper. For these facilities, mitigation would be required to reduce potential adverse effects to a less-than-significant level.

SFPUC Specific Comments on Initial Study/Mitigated Negative Declaration

SFPUC Comment 7: Determination of impact. Page ii, item 6 (and elsewhere) – The box checked is: "I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared."

We disagree that the initial study has established that the discharge could have a significant effect. These discharges are ongoing. The Board action will not have any physical effect (except potentially for treatment controls needed if the definition is not expanded). Therefore, the proposed action – approving the categorical exception - cannot possibly have a significant effect on the environment.

The lack of effect has been the reason that these discharges, for the most part, have not been permitted since the Clean Water Act came into effect in 1972.

Response to SFPUC Comment 7

We disagree on both points. First, the reason we have not previously imposed limits on copper and THMs is that, heretofore, we have not had data to assess whether there was reasonable potential for these discharges to exceed water quality objectives. However, we now have data that clearly shows there is reasonable potential (see page 8 of the IS/MND). The Regional Water Board has not previously granted any exceptions to the SIP; therefore, the CEQA analysis must assume that SIP-required copper and THM limits will be imposed.

Second, imposing the SIP-mandated limits would reduce copper and THM concentrations or result in cessation of the discharges; therefore, granting exceptions to these requirements would allow these discharges to continue and allow copper and THM concentrations to be greater than

they would be if no exception were granted. These are physical effects that must be evaluated pursuant to CEQA. The existence of discharges that pose potential water quality impacts does not eliminate the responsibility to avoid such impacts in the future. There is no precedent under CEQA for allowing significant environmental impacts to persist simply because they existed prior to a project being proposed, particularly if the project would contribute to ongoing significant impacts.

SFPUC Comment 8: Copper sources. Page 1 – "Copper occurs naturally in water; however, the primary source in water supply is the application of copper-based herbicides to control algal blooms in reservoirs and transmission canals."

Virtually all waters have some copper in them due to natural sources, which is the primary source. The highest concentrations are due to treatment. It should be noted that natural sources can cause exceedances of the standards, particularly in wet weather.

Response to SFPUC Comment 8

We acknowledge the uncertainty associated with naturally occurring copper concentrations. There are many sources of copper, including naturally occurring copper, copper in brake pads, and copper added as an herbicide to drinking water. However, as described on page 8 of the IS/MND, studies of naturally occurring copper concentrations in the San Francisco Bay Region's creeks are limited, and available data were primarily collected during dry weather. The limited data collected do not include copper concentrations above water quality objectives; however, the data are insufficient to determine whether copper from naturally occurring sources ever exceeds water quality objectives in the San Francisco Bay Region, especially during wet weather. We revised the text on page 1 of the IS/MND to be consistent with the text on page 8 of the IS/MND, which states "Although copper occurs naturally, the primary *anthropogenic* source of copper in drinking water is application of copper-based herbicides to control algal blooms that cause taste and odor problems." [emphasis added].

SFPUC Comment 9: "4. Discharges from pipeline breaks/leaks, valve malfunctions, and other unplanned discharges." Page 7 – "In general, unplanned discharges at individual locations occur less than every 3 years; however, discharges at a few locations occur about 2 to 3 times per year. The more frequent discharges are typically associated with noncompliance with drinking water standards in transmission system pipelines and generally last less than one day. Volumes of discharges range from several thousand gallons to millions of gallons, depending on the nature of the unplanned discharge. Unplanned discharges are typically not treated until human health and safety are secured at the site."

It would be appropriate to classify the larger unplanned discharges as "Emergency Discharges." These are generally flows with elevated turbidity that could overwhelm the treatment facilities and potentially threaten public health.

Response to SFPUC Comment 9

We did not change the text. The analysis in the IS/MND would not be affected by the suggested revisions, and further clarification between emergency and other unplanned discharges may be provided in NPDES permits as needed.

As described in the IS/MND, emergency discharges are unplanned discharges that result from catastrophic events (i.e., natural disasters, such as earthquakes, fires, landslides, etc.) or sabotage (e.g., terrorist actions, illegally tapping into lines, etc.). In some cases, elevated turbidity or noncompliance with other drinking water standards can be caused by a catastrophic event, such as a large forest fire depositing ash into a water system, in which case any discharges associated with this event would be an emergency discharge. However, in most cases, elevated turbidity or noncompliance with other standards are associated with operational practices, such as bringing pipelines back on-line after a seasonal shut down, and can be anticipated and prevented to some extent. In any case, the discharge would be unplanned and human health and safety would be paramount.

SFPUC Comment 10: THM risk. Page 12 (and elsewhere) – "Therefore, granting an exception to the SIP and setting aside CTR WQOs would be unlikely to pose a human health concern. Further assurance could be provided by requiring dischargers to comply with Mitigation Measure 2, below."

By identifying a potential risk and the need for mitigation, this statement unnecessarily alarms the public. The risk from THMs in the discharges is not just unlikely, it is non-existent. The THMs in the discharge are likely to be non-detectable soon after discharge due to volatilization and dilution. There is no potential for these THMs to persist in the waterway until the water is extracted and pumped through a treatment facility – and to affect water consumers. Consequently no mitigation is necessary.

Response to SFPUC Comment 10

We agree that risk from THMs in drinking water discharges is insignificant (i.e., although some risk will always exist, it is below a threshold of concern). We also agree that Mitigation Measure 2 is unnecessary because it is an intrinsic part of the project. The Resolution would only grant the exception for CTR criteria for individual THMs and not the Basin Plan objective for total THMs (Basin Plan Table 3-5). To indicate this, we revised the IS/MND as follows:

> The CTR contains WQOs for four THMs (Table 1): bromoform, chloroform, chlorodibromomethane, and dichlorobromomethane. These WQOs are more stringent than applicable drinking water standards (Maximum Contaminant Level = 80 µg/L for total THMs [California Code of Regulations, Title 22, Section 64533]), although both the WQOs and drinking water standards are intended to protect human health from the same THMs. This difference occurs because the drinking water standards used risk levels based on factors, such as the health benefits from disinfection of public drinking water, that were not used when developing the CTR WQOs. While the CTR WQOs are intended to ensure that drinking water sources contain water fit for consumption, the drinking water delivered to consumers is allowed to contain higher THM concentrations. The CTR WQOs are particularly over-stringent for short-term and seasonal discharges because these waters mix with other waters and THMs evaporate from surface waters prior to use as drinking water supplies. ~~Although discharges that could qualify for the exception have been occurring for decades, water suppliers have not had trouble meeting drinking water standards at the tap.~~ Additionally, the primary source of exposure to THMs is from drinking water delivered to the home. For decades, drinking water agencies have had no problems meeting protective human health standards for THMs in home-delivered water,

and they will likely continue to meet these standards. NPDES permits would continue to protect municipal water supplies by including limits for total THMs based on Basin Plan Table 3-5 WQOs as necessary because the exception would not apply to these WQOs. Therefore, granting an exception to the SIP and setting aside CTR WQOs would be unlikely to pose a human health concern. ~~Further assurance could be provided by requiring dischargers to comply with Mitigation Measure 2, below.~~

~~**Mitigation Measure 2:** To mitigate for potential impacts to water quality from granting the categorical exception, permits would include limits based on the WQOs for protection of municipal water supply in Basin Plan Table 3-5.~~

~~This mitigation measure would ensure that any potential water quality impacts from granting the categorical exception would be less-than-significant. Facilities unable to implement this mitigation measure would not be granted the categorical exception.~~

SFPUC Comment 11: Checklist – Mandatory Findings of Significance: human health. Page 25 – "b) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?"

This should also be checked no impact because not even a speculative impact has been demonstrated.

Response to SFPUC Comment 11

We revised the checklist to indicate that these impacts will be less-than-significant (see Response to SFPUC Comment 10). Our conclusion regarding this checklist item is the same as our conclusion regarding checklist item VIII.a (hydrology and water quality).

III. Alameda County Flood Control and Water Conservation District, Zone 7 (Zone 7) - October 10, 2008

Zone 7 provided three comments on the main text of the Tentative Resolution and six comments on Attachment 2, Initial Study/ Mitigated Negative Declaration, of the Tentative Resolution. Responses to both sets of comments are provided below.

Comments on Tentative Resolution

Zone 7 Comment 1

Item 8 on the Tentative Resolution states that "[i]n many cases, discharges from drinking water systems ... cannot readily achieve copper and trihalomethanes effluent limits derived in accordance with the SIP." This must be qualified by the fact that discharges from drinking water systems are not continuous but are intermittent (i.e. short-term) and seasonal. Moreover, drinking water systems are regulated under the federal Safe Drinking Water Act and the California Health and Safety Code. Because discharges are intermittent and water treatment processes are required to meet other federal and state regulations, exceedences in copper and trihalomethanes limits set forth in the State Implementation Plan (SIP) would not significantly

impact beneficial uses. Therefore, discharges from drinking water systems for these constituents would be eligible for categorical exception provided in the SIP.

Response to Zone 7 Comment 1

We disagree with the assertion that drinking water discharges pose no risks to beneficial uses simply because many are intermittent and must comply with drinking water regulations. Although drinking water systems are regulated by the federal Safe Drinking Water Act and the California Health and Safety Code, these regulations were not intended to protect aquatic organisms. For copper in particular, "safe" levels established by the federal Safe Drinking Water Act and the California Health and Safety Code for the protection of human health are greater than water quality criteria intended to protect aquatic organisms.

Although discharges from drinking water facilities are not continuous, almost all of the discharges from these facilities last longer than 1 hour and many persist for more than 4 days. As described on page 9 of the IS/MND, water quality objectives for aquatic organisms account for effects of acute (i.e., short-term) and chronic (i.e., long-term) exposure. Acute objectives are based on 1-hour exposure, and chronic objectives are based on a 4-day exposure. Therefore, under certain circumstances, even intermittent discharges of potable water could affect beneficial uses.

Zone 7 Comment 2

Unlike with the copper effluent limitations, there are no specific discussions on trihalomethanes (THM) in this resolution. There should be a brief discussion in the CEQA documentation and resolution sections reflecting the fact that the effluent limitations in the California Toxics Rule (CTR) for THMs are significantly lower than the drinking water limitations for the same constituents. The proposed THM effluent limitations, which were promulgated to protect human health, are at least two orders of magnitude lower than the actual limits in finished drinking water served to the public. In effect, the water utilities will be required to meet a higher health standard for receiving waters [that might also be used as a municipal source water] than for people. This will create two different public health standards for THMs. Further, this limitation will not meaningfully protect human health since raw receiving waters would not be consumed by the public. This type of discussion will lend support as to why drinking water system short-term and seasonal discharges should be exempt from the THMs effluent limitations set forth in the CTR.

Response to Zone 7 Comment 2

We disagree. Finding 13 applies to both copper and THMs.

Zone 7 Comment 3

Item 5, under the "Now, Therefore Be It Resolved" section, provides that exemptions will be applied so long as the listed conditions are met. The conditions essentially require a water agency to notify potentially affected public and governmental agencies provide a detailed report for the proposed action including: schedule, monitoring plan, contingency plans, disposal plans, and subsequent certification of a qualified biologist that beneficial uses have been restored.

These conditions appear to apply to planned discharges; however this is not clear in the existing language.

Response to Zone 7 Comment 3

As indicated in Response to SFPUC Comment 5, the SIP requires that specific conditions be met before a Regional Water Board grants an exception from the SIP requirements. However, the SIP acknowledges the difficulty in providing this information in advance of unplanned discharges when it states, "To prevent unnecessary delays in taking emergency actions… the discharger is advised to file with the appropriate [Regional Water Board], in advance … to the extent possible." The SIP does not indicate that the information does not need to be provided if an emergency discharge occurs. NPDES permits with SIP exceptions will address these requirements more specifically.

Zone 7 Comments on Initial Study/Mitigated Negative Declaration

Zone 7 Comment 4

On page 3, under Section II. Treatment Facility Discharges,

a. *As a point of clarification, in the second to the last sentence in the first paragraph that starts with "Chloramination also produces ...", add "just free" before "chlorination."*

b. *The first sentence of the second paragraphs implies that operation of treatment facilities always result in discharges. However, this is not the case as most water treatment facilities do not discharge as part of their treatment process. Instead, most water treatment facilities discharges are unplanned or done in emergency situations. The first sentence should read as follows:*

> *"Discharges, planned or unplanned, may occur from operation of water treatment facilities. Discharges may include: filter backwash water..."*

c. *This section should include a summary of where the data cited in this section comes from, particularly the total number of facilities that were surveyed. This will provide context in the subsequent summaries of the discharge types.*

Response to Zone 7 Comment 4

We revised the IS/MND to incorporate these suggestions.

Zone 7 Comment 5

On page 4, item 1. Filter backwash water discharge and storage/settling basin discharges, the fourth sentence "[m]ost facilities discharge backwash water intermittently;" is confusing with the preceding sentence that states that many facilities recycle their backwash water to their headworks to be treated with the influent raw water. In addition, there is no definition on what Regional Water Board considers as "intermittent". The plain meaning, as defined in Merriam-Webster, of "intermittent" is coming and going at intervals or not continuous. This adds more confusion with the subsequent sentence that states that a few facilities discharge on a daily basis. Although discharges can happen on a daily basis, such discharges can also fall within the

"intermittent" definition if discharges occur once or sporadically throughout the day. Therefore, we recommend deleting the fourth sentence entirely so as to avoid confusion.

Response to Zone 7 Comment 5

For clarity, we revised the text as follows:

> ~~Most facilities discharge backwash water intermittently;~~ ~~however~~ However, a few facilities do not recycle their backwash water and instead discharge it ~~daily~~ intermittently throughout each day.

Zone 7 Comment 6

On the same page, at the end of the first sentence in item 2, replace "sewer" with "drain."

Response to Zone 7 Comment 6

We did not replace "sewer" with "drain" because the term "storm sewer" is consistent with terminology used in NPDES stormwater regulations (see 40 CFR 122.26(d)).

Zone 7 Comment 7

On the same page, the third sentence under item 3. Leakage water, should be rewritten as follows: "Alternatively, a sub-drain may discharge leakage water directly to a storm drain that drains into surface waters."

Response to Zone 7 Comment 7

We revised the text as follows:

> Alternatively, a sub-drain may discharge leakage water directly to a storm ~~drain~~ sewer that drains into surface waters~~, and through the storm drain to surface water~~.

Zone 7 Comment 8

On page 5, in the first sentence on item 6. On-site water storage facility drainage, change "clean" water to "treated potable" water.

Response to Zone 7 Comment 8

We incorporated the recommended terminology.

Zone 7 Comment 9

On page 12, under Mitigation Measure 2, there is a reference to Table 3-5 of the Basin Plan. We recommend attaching this table as an appendix to this IS/MND.

Response to Zone 7 Comment 9

We did not attach Basin Plan Table 3-5 because (1) we eliminated Mitigation Measure 2 (see Response to SFPUC Comment 10) and (2) revisions to the Basin Plan could make the attachment invalid in the future.

IV. East Bay Municipal Utility District (EBMUD) - October 10, 2008

EBMUD provided one general comment and two specific comments. Responses to the general and specific comments are provided below.

EBMUD General Comment

EBMUD Comment 1

Our understanding of the SIP is that the categorical exception was intended to be applied broadly. As currently written, permits issued to the District that incorporate the categorical exception could have a major impact upon our operations and future compliance status and leave no option except to construct extremely costly facility modifications. Therefore, we request that the SIP exception be applied to the category or sector of water supply, treatment, and distribution system discharges as a whole.

Response to EBMUD Comment 1

As discussed in the Response to SFPUC Comment 2, the SIP exception does not apply to all drinking water discharges; otherwise, there would not be a requirement for the discharge to be short-term or seasonal and no further Regional Water Board action would be necessary. We revised the resolution to clarify that the Regional Water Board could grant other SIP exceptions in the future (see also Response to SJWC Comment 1 and Response to SFPUC Comment 4). In addition, as discussed with respect to SJWC and SFPUC discharges, we are aware of three drinking water facilities for which the tentative resolution will not apply and are committed to working with the agencies operating these facilities to develop environmentally protective and cost-effective permitting strategies for these facilities.

EBMUD Specific Comments

EBMUD Comment 2: The applicability of the term "short-term or seasonal" discharges.

The SIP allows the RWQCB to allow short-term or seasonal exceptions from meeting the priority pollutant criteria/objectives if determined to be necessary to implement control measures to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health & Safety Code. In the tentative resolution, the RWQCB defines "short-term or seasonal discharges" as discharges lasting no more than 2,200 hours per year.

This definition of short term and seasonal discharges is not currently in the SIP, contrary to the intent of the SIP, and inconsistent with determinations made by other Regions. It is also inconsistent with the terms "dry season" (April 16 through October 14) and "wet season" (October 15 through April 15), which are frequently used by the RWQCB. In the Los Angeles RWQCB tentative order for Discharges from Potable Water Distribution and Water Supply Systems to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (General NPDES Permit No. CAG994005), the approach taken was a sector-wide approach since potable water is considered to be a de minimus source of pollution and as a group discharges are

generally short-term in nature. We request that a similar sector-wide approach be taken in Region 2.

The District is particularly concerned about Major adverse cost impacts that could result from having to construct control facilities to meet the proposed trihalomethane (THM) objectives. In our view, there are no significant environmental risks associated with THMs, and furthermore, THMs are likely to be non-detectable soon after discharge due to volatilization, mixing, and diffusion. THMs are already closely regulated throughout our raw water and water treatment and distribution systems to protect public health. It is also important to recognize that the District may need to increase chlorine dosage rates significantly within our raw water systems in the near future in order to control invasive species (e.g., Quagga mussels). Such competing needs between public health and environmental protection must be carefully balanced. Constructing facilities to mitigate THMs in discharges would not provide any additional protection to the environment or human health and would be costly and disruptive.

In summary, and based on these considerations, the District requests that the Regional Board reconsider the applicability of the exception and revise the current definition of "short term or seasonal" to more broadly apply to water supply, treatment, and distribution as a whole.

Response to EBMUD Comment 2

We do not think these proposed changes are appropriate.

EBMUD asserts that (a) the proposed definition of "short-term or seasonal" does not come from the SIP, (b) the State Water Board intended the SIP exception to apply to all potable water discharges, (c) the proposed SIP exception is inconsistent with those of other regions, (d) the proposed definition of "short-term or seasonal" doesn't relate to this area's "wet" and "dry" seasons, (e) potable water is a *de minimus* source of pollution, and (f) EBMUD could face a major financial burden if it must meet THM effluent limits that are based on the California Toxics Rule and SIP. Our responses follow (also see Response to SJWC Comment 1 and Response to SFPUC Comment 4).

a) We recognize that the SIP does not define "short-term or seasonal." We defined the term to clarify which specific facilities this proposed SIP exception is to cover and to facilitate a meaningful CEQA impact analysis (See Response to SFPUC Comment 4).

b) SIP Section 5.3 cannot be construed to apply to all water supply agencies because its express language places specific conditions on its applicability. Had the State Water Board intended SIP exceptions to apply to all such discharges, it would have said so (See Response to SFPUC Comment 4).

c) The proposed SIP exception is consistent with the SIP. Although other Regional Water Boards may have taken a sector-wide approach by asserting that their potable water discharges are generally short-term in nature, SIP Section 5.3 clearly limits such exceptions to short-term or seasonal discharges exclusively.

d) The Regional Water Board sometimes includes seasonal conditions within its wastewater permits based on wet and dry weather. There is no fixed definition for such seasons. As explained in the Response to SJWC Comment 1 and Response to SFPUC Comment 4, the Regional Water Board retains the right to grant SIP exceptions based on alternative definitions of "short-term or seasonal" in the future.

e) We agree that most potable water discharges are not significant sources of pollutants, but we cannot conclude that potable water discharges are never significant pollutant sources. Based on the SIP methodology, potable water discharges can sometimes exhibit reasonable potential to cause or contribute to exceedances of water quality objectives. The IS/MND evaluated the environmental impacts of copper and THMs in potable water and concluded that, with mitigation, the environmental impacts of short-term or seasonal discharges (as defined in the IS/MND) are less-than-significant.

f) We acknowledge EBMUD's concern regarding the need for costly treatment facilities to control THMs in accordance with existing SIP requirements. The State Water Board considered the economic costs of implementing the SIP when it adopted the SIP. We also recognize that the tentative resolution does not cover all of EBMUD's discharges; therefore, it does not alleviate this potential burden. Nevertheless, we remain committed to working with EBMUD to develop a permitting strategy that reflects its particular circumstances and is both environmentally protective and cost-effective.

EBMUD Comment 3: The applicability of EPA's NPDES Water Transfer Rule.

As stated in the Federal Register, Volume 73, No. 115 dated Friday, June 13, 2008, water transfers used for providing public water supply are generally excluded from NPDES permit requirements. In this rulemaking, EPA stated that "in instances where a water transfer facility does itself introduce pollutants into the water being transferred, the scope of the required NPDES permit would only be for those added pollutants. Such a permit would not require the water transfer facility to address pollutants that may have been in the donor waterbody and are being transferred." 73 Fed. Reg. 33697. 33705.

EBMUD's principal source of raw untreated drinking water is Pardee Reservoir, which is a water of the United States and which contains naturally occurring pollutants such as metals and total suspended solids. EBMUD transfers the raw water from Pardee Reservoir (located in Calaveras County) to various facilities and other waters of the United States located in the East Bay (Contra Costa County) via its Mokelumne and Lafayette Aqueducts. We are also currently constructing facilities that would provide us the capacity for future water transfers from the Sacramento River.

EBMUD does not use copper sulfate to treat its raw water, but it does add sodium hypochlorite (bleach) to meet drinking water requirements and calcium oxide (liquid lime) to protect the aqueducts from corrosion. Thus, the scope of any required NPDES permit applicable to our water transfers should address pollutants associated with the use of bleach and liquid lime (e.g., chlorine residual and pH); however, the permit should not address pollutants already in the donor waterbody, such as metals and total suspended solids from Pardee Reservoir. Similarly,

the scope of the NPDES permit for future water transfers from the Sacramento River should be limited only to added pollutants..

Response to EBMUD Comment 3

Comments regarding future permits are best made when such permits are drafted and circulated for public review. The proposed resolution does not determine whether NPDES permits are required for particular water transfers and does not determine which pollutants such permits should address. However, if any water transfers are subject to NPDES requirements, they could qualify for the SIP exception set forth in the resolution as long as they meet the conditions set forth in the resolution. For clarity, we revised Finding 4 of the tentative resolution as follows:

> To the extent that these discharges are not simple water transfers (i.e., activities that convey or connect waters of the United States without introducing pollutants or subjecting the transferred water to intervening industrial, municipal, or commercial use [40 CFR 122.3]) ~~of unaltered raw water and contain pollutants~~, they are subject to National Pollutant Discharge Elimination System (hereinafter "NPDES") permit requirements that implement priority pollutant water quality objectives contained in the National Toxics Rule, California Toxics Rule (hereinafter "CTR"), and San Francisco Bay Basin (Region 2) Water Quality Control Plan (hereinafter "Basin Plan").