proper operation and maintenance (O&M) is already specified generically in Attachment D of this permit. However, to properly operate and maintain for I&I control is necessary because of recent changes in permit requirements for EBMUD's WWFs (CA0038440).

The changes in permit requirements for EBMUD's WWFs came about as a result of a 2007 State Water Board remand (Order WQ 2007-0004) that required the Regional Water Board revise the permit for EBMUD's WWFs to require compliance with secondary treatment effluent limitations and effluent limitations that would assure compliance with the Basin Plan or cease discharge. In January 2009, the Regional Water Board adopted Order No. R2-2009-0004 reissuing the EBMUD permit. This permit prohibited discharge from the WWFs because the WWFs were not designed to meet secondary treatment standards and compliance with effluent limitations needed to comply with the Basin Plan limitations could not be assured.

Shortly afterwards, USEPA and the Regional and State Water Boards filed suit against EBMUD for discharges in violation of the Clean Water Act-mandated requirements of Order No. R2-2009-0004, and entered into a Stipulated Order. The Stipulated Order requires EBMUD to conduct flow monitoring on satellite collection systems, adopt a regional private sewer lateral ordinance, implement an incentive program to encourage replacement of leaky private laterals, and develop an asset management template for managing wastewater collection systems.

The Discharger's entire wastewater collection system connects to EBMUD's interceptor system and contributes to discharges from the WWFs. During wet weather, I&I into the Discharger's wastewater collection system causes peak wastewater flows to EBMUD's system that the WWFs cannot fully store. This in turn causes EBMUD to discharge from the WWFs in violation of Order No. R2-2009-0004. In essence, a portion of the Discharger's wastewater is discharged by EBMUD in violation of the Clean Water Act.

Therefore, the prohibition is necessary to ensure that the Discharger properly operates and maintains its facilities to reduce I&I, and by doing so not cause or contribute to violations of Clean Water Act-mandated requirements.

At this time, the Discharger is in violation of this prohibition because excessive I&I into its collection system causes or contributes to discharges from EBMUD's WWFs. Prohibition III.D provides a narrative prohibition because information is not currently available to sufficiently specify an appropriate numeric flow limit or other more detailed set of standards necessary to eliminate the Discharger's contribution to discharges from EBMUD's WWFs. Implementation of the Stipulated Order and the development of a final remedy in the Federal Action are expected to provide the technical information necessary for the Discharger to achieve compliance with Prohibition III.D. The Regional Water Board intends to modify the Discharger's NPDES permit in the future so that compliance can be measured by a specific numeric criterion or other more detailed set of standards rather than the current narrative criterion.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

Because this Order prohibits discharge, receiving water limits are unnecessary because no impacts on receiving water are allowed. Therefore, a discussion of the rationale for such limits is unnecessary.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results relating to compliance with effluent limitations. Because this Order prohibits discharges from the wastewater collection system there are no effluent limitations. Consistent with Standard Provisions (see below) and Provision IV.B.2, the Discharger must still notify the Regional Water Board and submit a written report if discharges occur in violation of Prohibitions III.A-C.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions – and additional conditions under section 122.42 – that are applicable, taking into account the discharge prohibitions in this Order.

B. Special Provisions

1. Enforcement of Prohibition III.A

This provision is based on 40 CFR 122.41 (n) regarding treatment facility upset and affirmative defense.

2. Proper Sewer System Management and Reporting, and Consistency with Statewide Requirements

This provision is to explain the Order's requirements as they relate to the Discharger's collection system, and to promote consistency with the State Water Resources Control Board adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems and a related Monitoring and Reporting Program (Order No. 2006-0003-DWQ).

The General Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer system discharges, among other requirements and prohibitions. Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sewer system discharges. The Discharger must comply

with both the General Order and this Order. The Discharger and public agencies that are discharging wastewater into the facility were required to obtain enrollment for regulation under the General Order by December 1, 2006.

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Discharger's sewer collection system. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the following: (a) an electronic copy of this Order was relayed to the Discharger, and (b) the Oakland Tribune published a notice that this item would appear before the Regional Water Board on September 9, 2009. Subsequent to this notification, additional notification was provided electronically to interested parties on August 10, 2009, that this item would appear before the Regional Water Board on November 18, 2009.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments were originally requested to be received at the Regional Water Board offices by 5:00 p.m. on August 17, 2009. This written comment deadline was later extended to October 20, 2009, by the notification above. This deadline was further extended until October 23, 2009, by an email dated October 20, 2009.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date:	November 18, 2009
Time:	9:00 a.m.
Location:	Elihu Harris State Office Building 1515 Clay Street, 1st Floor Auditorium Oakland, CA 94612

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is www.waterboards.ca.gov/sanfranciscobay/ where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (510) 622-2300.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Robert Schlipf at (510) 622-2478 or RSchlipf@waterboards.ca.gov.

ATTACHMENT G – Regional Water Board May 1, 2008, letter

EXHIBIT 2

ENVIRONMENTAL ADVOCATES
ATTORNEYS AT LAW

5135 ANZA STREET
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October 18, 2009

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

Re: Comments on draft NPDES PERMITS and WASTE DISCHARGE REQUIREMENTS for the following dischargers: City of Oakland, NPDES Permit No. CA0038512, Order No. R2-2009-xxxx; City of Alameda, NPDES Permit No. CA0038474, Order No. R2-2009-xxxx; City of Albany, NPDES Permit No. CA0038471, Order No. R2-2009-xxxx; City of Berkeley, NPDES Permit No. CA0038466, Order No. R2-2009-xxxx; City of Emeryville, NPDES Permit No. CA0038792, Order No. R2-2009-xxxx; City of Piedmont, NPDES Permit No. CA0038504, Order No. R2-2009-xxxx; and Stege Sanitary District, NPDES Permit No. CA0038482, Order No. R2-2009-xxxx; and on Cease and Desist Order to City of Oakland, Order No. R2-2009-xxxx.

Dear Regional Board:

San Francisco Baykeeper ("Baykeeper") and Our Children's Earth Foundation ("OCE"), hereby submit the following comments on the above-referenced Draft NPDES permits for the Cities of Alameda, Albany, Berkeley, Emeryville, Oakland, and Piedmont and Stege Sanitary District ("the Draft Permits") and the draft Cease and Desist Order ("CDO") to the City of Oakland.

I. The Permits' Discharge Prohibition

As the Regional Board points out, the Permittees to be covered by these Draft Permits ("the Permittees") all operate satellite sewage collection systems which convey sewage to the East Bay Municipal Utility District ("EBMUD") sewage system for treatment and discharge. None of the Permittees operates its own sewage wastewater treatment plant (WWTP). Accordingly, these Permittees only discharge sewage in the form of raw sewage spills from manholes, broken sewer lines, or pump stations. Such sewage spills (often referred to as sanitary sewer overflows or SSOs) should be categorically prohibited as they pose serious public health risks and a failure of the intended method of treatment of the Permittees sewage wastewater, i.e., the conveyance of this wastewater to EBMUD's system for treatment and subsequent discharge through a deep water outfall.

The Draft Permits go part way toward prohibiting the Permittees' SSOs, as they set forth the following discharge prohibitions:

A. The discharge of untreated or partially treated wastewater to waters of the United States, is prohibited.

B. The discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.

C. The discharge of chlorine, or any other toxic substance used for disinfection and cleanup of wastewater spills, to any surface water body is prohibited.

D. The Discharger shall not cause or contribute to discharges from EBMUD's Wet Weather Facilities that occur during wet weather or that are associated with wet weather.

E.g., Oakland NPDES Permit, § III. Discharge Prohibitions.

Baykeeper and OCE support these prohibitions as far as they go; they certainly should not be omitted or further weakened. To comply with applicable law and to allow for effective enforcement, these prohibitions must be expanded upon, however, to include a categorical ban on all SSOs from the Permittees' collection systems.

A. Discharge Prohibition A. Must Be Expanded.

While Baykeeper and OCE agree that the Draft Permits should at least prohibit SSOs to waters of the United States, the Draft Permits should further expressly prohibit: (a) all SSOs to waters of the State and (b) all SSOs from the Permittees' sewage collection systems.

The Permittees' sewage collection systems all constitute Publicly Owned Treatment Works ("POTWs") as that term is defined by the Clean Water Act ("CWA") and accompanying U.S. EPA regulations. CWA § 212(2)(A), 33 U.S.C. § 1292(2)(A); 40 C.F.R. § 403.3. Specifically, a POTW includes all sewers, pipes and other conveyances that convey wastewater to a POTW's WWTP. EPA regulations require that POTWs subject to CWA regulation be properly operated and maintained. 40 C.F.R. § 122.41(e). As sewage collection systems are part of the system/appurtenances used to collect and treat sewage to meet CWA requirements and as proper operation and maintenance of such systems would preclude SSOs, NPDES permits must prohibit SSOs. Furthermore, SSOs that do not directly reach waters, but overflow into public streets and other public places and back up into people's homes and businesses, pose nuisance public health threats that the State Board properly must regulate and seek to curtail. Notably, past NPDES permits issued by various California Regional Boards and permits issued by EPA have included such blanket prohibitions on SSOs.[1] To protect the public health and welfare from

[1] An example is NPDES Permit No. CA010991 issued by the Los Angeles Regional Board to the City of Los Angeles' Hyperion wastewater treatment plant and appurtenant

the grave health risks and frequent potential property damage caused by SSOs to public streets, parks, residences and businesses, the Draft Permits must follow the example of past NPDES permits and include a blanket prohibition on all SSOs. The Regional Board *may not condone* the spilling of raw sewage into people's homes, places of business, public streets, and other areas accessible to the public.

In addition, the Draft Permits must include a separate and express prohibition on SSOs to waters of the State to comply with the Porter Cologne Act/California Water Code. The Draft Permits are not only NPDES permits, they are WDRs issued pursuant to the California Water Code. The California Water Code precludes the discharge of raw sewage to waters of the State, and the Draft Permits must reflect this. California Water Code § 13264.

Prohibition A. in the NPDES Permits further represents impermissible backsliding from prior NPDES permits to the Permittees. *See* CWA §§ 402(o)(2) and 303(d)(4); 40 C.F.R. § 122.44(l). These prior NPDES permits to the Permittees contained the following, broader SSO prohibition:

> The discharge of untreated or partially treated wastewater to any surface water stream, natural or man-made, or to any drainage system intended to convey storm water runoff to surface waters, is prohibited.

City of Oakland, Sanitary Sewer Collection System, NPDES Permit No. CA0038512, Order No. R2-2004-0012, § A. Prohibitions, ¶ 1; City of Albany, Sanitary Sewer Collection System, NPDES Permit No. CA0038471, Order No. R2-2004-0009, § A. Prohibitions, ¶ 1; City of Alameda, Sanitary Sewer Collection System, NPDES Permit No. CA0038474, Order No.

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collection system. Regional Board Order No. 94-021 ("the Hyperion Permit"). Condition IV.2 of the Hyperion Permit provides "Any discharge of wastes at any point other than specifically described in this order and permit is prohibited, and constitutes a violation thereof." The Hyperion NPDES permit describes the discharge of treated sewage from the ocean outfall downstream of the Hyperion treatment plant. Standard Provision B.7. further provides:

> Any "overflow" or "bypass" of facilities, including the "waste" collection system, is prohibited. . . .

The Hyperion Permit further defines an "overflow" to mean "the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities." Hyperion Permit Standard Provision A.31. Together, these provisions made it clear that *all* SSOs from the Hyperion system are prohibited.

Another example is the EPA-issued NPDES Permit (NPDES Permit No. HI0020877) to the City and County of Honolulu for the Honouliuli WWTP and related collection system. The Honouliuli NPDES permit contains express provisions prohibiting all unauthorized overflows of sewage, regardless of whether the spills reach waters of the United States. *See* Honoululi Permit, Standard Provisions and Reporting Requirements ¶¶ B.7, C.2, and C.4.

R2-2004-0008, § A. Prohibitions, ¶ 1; City of Berkeley, Sanitary Sewer Collection System, NPDES Permit No. CA0038466, Order No. R2-2004-0010, § A. Prohibitions, ¶ 1; City of Emeryville, Sanitary Sewer Collection System, NPDES Permit No. CA0038792, Order No. R2-2004-0011, § A. Prohibitions, ¶ 1; City of Piedmont, Sanitary Sewer Collection System, NPDES Permit No. CA0038504, Order No. R2-2004-0013, § A. Prohibitions, ¶ 1; Stege Sanitary District, NPDES Permit No. CA0038482, Order No. R2-2004-0014, § A. Prohibitions, ¶ 1. To comply with anti-backsliding requirements of the CWA and EPA regulations, the NPDES Permits must include SSO prohibitions at least as stringent as these prior permits.

In addition to not complying with applicable law, the SSO prohibition in the draft NPDES permits would preclude effective SSO enforcement. The SSO reporting information in the State Board's California Integrated Water Quality System Project (CIWQS) database posted on the State Board's website makes obvious that there is an endemic problem with accurate reporting of SSOs.[2] Many spill reports from sewage system operators indicate large volume SSOs, with little to no of the spilled sewage recovered and yet the reports still indicate that none of the spills reached waters. It is extremely unlikely that large volume SSOs that are not recovered have not flowed into waters. The SSO prohibition as drafted gives sewage systems incentive to slant their reporting as not showing that spills reached waters of the United States, given the potential escape from liability if spills are not reported as reaching waters of the United States.

An additional problem with the prohibition is the lack of clear definition in current case law of the term "waters of the United States." The U.S. Supreme Court's recent fractured decision in *Rapanos v. United States*, 547 U.S. 715 (2006) leaves highly uncertain what is a water of the United States.[3] The State Board's current Water Quality Enforcement Policy aptly observes that "fair, firm and consistent enforcement depends on a foundation of solid requirements in law, regulations, policies, and the adequacy of enforceable orders. . . . The extent to which enforceable orders include *well-defined requirements* . . . affects the consistency of compliance and enforcement" (emphasis added).[4] Given the current uncertainty as to what constitutes a water of the United States under the governing case law, the Draft Permits are inconsistent with the State Board's Enforcement Policy's directive that enforceable orders

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[2] The CIWQS database is published on the State Board's website at: http://www.swrcb.ca.gov/water_issues/programs/ciwqs/publicreports.shtml

[3] Justice Kennedy's concurring opinion provided the fifth justice needed for a majority in *Rapanos*. With respect to wetlands, Justice Kennedy opined that only wetlands with a "significant nexus" to a navigable-in-fact water body constitute waters of the United States. As the case dealt only with wetlands, whether Justice Kennedy's test extends to other surface waters, such as streams, arroyos, and artificial channels is not clear. Moreover, Justice Kennedy's test itself is highly ambiguous and subject to varying interpretation.

[4] The State Board's current enforcement policy (adopted in February 2002) is published at a link set forth on the State Board's website at: http://www.swrcb.ca.gov/water_issues/programs/enforcement/

should specify well-defined requirements. To be consistent with the Enforcement Policy, the Draft Permits must include a clear, unambiguous and thus enforceable prohibition on all sewage spills, not just those that reach "waters of the United States."

Notably, California Water Code sections 13260(a)(1) and 13263 provide the Regional Board with authority to regulate all SSOs, not just those that reach waters of the United States or waters of the State. Section 13260(a)(1) mandates that "Any person discharging waste, or proposing to discharge waste, within any region that *could affect the quality of the waters of the state*" must file a report of waste discharge with the appropriate Regional Board (emphasis added). Any SSO has the potential to adversely affect quality of waters of the State. As the SSO reports in the CIWQS database show, many SSOs flow directly into State waters. Even when SSOs do not flow directly into waters, SSOs tend to leave sewage residue on streets or in storm drains that are eventually flushed into waters when it rains. Accordingly, sewage system operators must report all SSOs to the Regional Board to comply with California Water Code section 13260(a)(1). Section 13263, in turn, provides the Regional Board with broad authority to impose conditions regulating reported waste discharges, including conditions necessary to avoid public nuisance or indirect harm to waters.

B. Baykeeper and OCE Support Discharge Prohibitions B, C, and D.

Baykeeper and OCE support Discharge Prohibition B. California Water Code Section 13050(m) prohibits wastewater discharges which creates nuisances. Thus, the Draft Permits properly must prohibit such discharges to comply with the California Water Code.

Baykeeper and OCE further support Discharge Prohibition C. In the past, many sewage collection system operators have used chlorine or similar toxic substances to disinfect areas affected by SSOs. Unfortunately, this has at times led to the discharge of such toxic substances into waterways–compounding the environmental harm from the SSO. This prohibition is important to curtail such practices.

Finally, Baykeeper and OCE support Discharge Prohibition D. This Discharge Prohibition appropriately prohibits the Permittees from causing or contributing to discharges from EBMUD's Wet Weather Facilities ("the WWFs"). This Prohibition is necessary to give effect to the State Water Resources Control Board's recent decision setting aside the Regional Board's previous NPDES permit to the WWFs. This State Board decision made plain that the Regional Board may not issue a permit that authorizes discharges from the WWFs without also imposing secondary treatment-based effluent limits set pursuant to CWA section 301(b)(1)(B)[5] and appropriate water quality standard-based effluent limitations ("WQBELs") set pursuant to CWA section 301(b)(1)(C).[6] *In the Matter of Own Motion Review of EBMUD Wet Weather Permit* (Order No. WQ 2007-0004) (May 1, 2007). Since it is clear that the WWFs cannot meet such effluent limitations given that they do not provide the necessary level of treatment, to

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[5] 33 U.S.C. § 1311(b)(1)(B).

[6] 33 U.S.C. § 1311(b)(1)(C).

comply with the *EBMUD* decision, the Regional Board must both ban the WWF discharges (as its recent permit to the WWFs does) and to prohibit the Permittees, whose excess wastewater discharges to EBMUD's system cause the WWFs' discharges, from continuing past practice of discharging excessive wastewater to the EBMUD system.

II. The Draft Permits Improper Upset Defense Provision Should Be Deleted.

The Draft Permits include the following objectionable "upset defense" provision:

> Enforcement of Prohibition III.A [prohibiting SSOs to waters of the United States]. The Regional Water Board may take enforcement action against the Discharger for any sanitary sewer system discharge, unless the Discharger documents that an upset, defined in Attachment D, Standard Provisions I.H, occurred.

E.g., Oakland Permit § IV. Provisions, ¶ B.1. This confusing provision, literally read, makes no sense. It bars the Regional Board from taking an enforcement action against an SSO if a Permittee can prove that an "upset" has occurred, as the term is defined in Attachment D, Standard Provisions I.H. This latter provision, tracking EPA regulations, defines an "upset" as "an exceptional incident in which there is unintentional and temporary noncompliance *with technology based permit effluent limitations*" (emphasis added). The Permits *expressly omit* any technology based effluent limitations, however. Thus, it is impossible for a Permittee to prove an SSO caused "unintentional and temporary noncompliance with technology based permit effluent limitations," making it simply nonsensical to include an upset defense predicated on proving such noncompliance.

The upset provision in the Draft Permits appears to have been drafted due to inappropriate conflation of EPA's regulation governing bypass (40 C.F.R. § 122.41(m)) and upset (40 C.F.R. § 122.41(n)). The upset provision in the Draft Permits, though ambiguous (or even nonsensical), could be read as prohibiting Regional Board enforcement against any SSO if the Permittee proves an "upset." Only EPA's bypass regulation prohibits all EPA enforcement against discharges that constitute a bypass. Comparatively, EPA's upset regulation only precludes EPA enforcement against the technology-based effluent limitation violations involved in a given discharge; the regulation *authorizes* enforcement against any discharge for causing an exceedance of water-quality based effluent limitations or other restrictions on discharge. Accordingly, the upset provision in the NPDES Permits should be deleted for its potential conflict with EPA regulations.

Finally, including any sort of affirmative defense to Regional Board enforcement for SSOs conflicts with the State Board's Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ) ("the State Board SSO Permit"). The State Board SSO Permit omits any affirmative defense for SSOs, an outcome the State Board found mandatory under federal and state law and to provide adequate protection against the serious health, environmental, and property damage risks posed by SSOs. Both the State Board SSO Permit and the NPDES Permits will be in effect as WDRs for the discharges in question, thus leading to significant legal confusion given that the former precludes any affirmative defense while the NPDES Permits provide for one.

III. The Regional Board Should Improve the Draft Permits' Reporting Provisions.

Compliance with the CWA and accompanying EPA regulations requires that NPDES permits, even no discharge permits, include appropriate monitoring and reporting requirements. *See* CWA § 402(b)(1)(A)[7] (NPDES permits must include the applicable requirements of CWA sections 301, which in turn mandates appropriate technology-based and water quality standard-based effluent limitations on point source discharges); 40 C.F.R. § 122.44 (NPDES permits must include effluent limitations); 40 C.F.R. §122.41(j) (NPDES permits must include monitoring requirements); 40 C.F.R. §§ 122.41(l)(4), 122.48 (NPDES permits must specify reporting requirements); *see* California Water Code § 13377 (authorizing Regional Boards to prescribe NPDES permit conditions to ensure CWA compliance).

As noted above, there are significant problems with accurate SSO reporting. SSOs are typically brought to the attention of sewage system operators by calls from the public. Crews typically do not arrive at the site of a sewage spill until well after the sewage spill has commenced. Many sewage system operators report the volume of spills based on their observations after their response crews have arrived at the site of a spill, meaning that reports do not accurately account for the volume of sewage spilled before the crews arrived.

To ensure accurate and complete SSO reporting, the Draft Permits should mandate that SSO reports include any information available as to the time the SSO commenced and the total volume of sewage spilled from the time that the SSO commenced. The Draft Permits should further make clear that the reports should clearly identify whether any sewage flowed into any water body or water conduit, including the ocean, tidal waters, natural streams, wetlands or marshes, artificial channels, drainage ditches or canals, or storm drains. The reports should name the water bodies whenever this information is available or give other information providing the location of the water bodies or conduits (such as address or geographic coordinates). The reports should include this information and report the volume of sewage that initially flowed into the water body or conduit even if the operator claims to have recovered some or all of the sewage spilled and returned the sewage to its collection system. The report should separately indicate the volume of sewage recovered from the total volume initially spilled.

IV. The Oakland CDO

The Oakland CDO amends a prior CDO to Oakland and other EBMUD satellite systems, Order No. 93-014. Order No. 93-014, *inter alia*, required Oakland to complete relief sewer projects to reduce wet weather-related SSOs from Oakland's collection system–by allowing infiltration and inflow ("I/I")-driven peak sewage flows to be conveyed more rapidly to EBMUD's system. These relief sewers would have tended to reduce Oakland's SSOs at the expense of increasing discharges from the WWFs. The new CDO revises Order No. 93-014 to delete any further requirement for Oakland to construct additional relief sewers. The new CDO provides instead that Oakland is to spend an amount on sewer line rehabilitation work that is

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[7] 33 U.S.C. § 1341(b)(1)(A).

equivalent to the amount Oakland would otherwise have spent on relief sewers to meet the requirements of Order No. 93-014. Baykeeper and OCE conceptually support Oakland shifting its efforts and expenditures away from relief sewers and onto sewer line rehabilitation work instead. Sewer line rehabilitation work, designed carefully and executed well, should reduce I/I into Oakland's sewer lines–reducing *both* wet-weather SSOs from the Oakland collection system and the volume of sewage conveyed from Oakland's collection system to EBMUD's system during storm events. This should help reduce discharges from the WWFs.

The CDO's arbitrary limit on Oakland's expenditures on sewer line rehabilitation to the amount Oakland would have otherwise spent on relief sewers is insufficient to bring Oakland into compliance with the CWA or California Water Code. To ensure compliance, the CDO must require Oakland to devise a comprehensive, multi-year I/I reduction plan that reduces I/I to a level needed, in conjunction with reductions in peak flows from the other satellites, to avoid WWF discharges. The CDO must require Oakland to develop this I/I reduction plan based on the analysis of properly performed flow monitoring, flow modeling, CCTV inspection and smoke testing that identifies the sources of excessive I/I. The I/I reduction plan, to be effective, *must* further specify that Oakland adopt a systematic program for remedying problems with private laterals at the same time it repairs, replaces, or rehabilitates any of its sewer main lines. The detailed information presented at EBMUD's Blue Ribbon Panel meetings (many of which Regional Board staff attended) amply demonstrated that repair, replacement, or rehabilitation of sewer main lines is often not very effective at reducing I/I unless the private laterals that connect to these main lines are also repaired, replaced, or rehabilitated. The cost-effective time to fix private laterals is at the same time that sewer main lines are addressed.

Baykeeper and OCE hereby request to be placed on any list of interested persons to be notified of any further proceedings before the Regional Board or the State Board concerning the Draft Permits or CDO. Please send any notices to:

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Thank you for your consideration of our comments.

Sincerely,

Christopher a. Sproul

Christopher Sproul
Environmental Advocates
Counsel for Baykeeper and OCE

EXHIBIT 3

FACT SHEET

STATE WATER RESOURCES CONTROL BOARD

ORDER NO. 2006-0003

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

The State Water Resources Control Board (State Water Board) adopted Resolution 2004-80 in November 2004, requiring staff to work with a diverse group of stakeholders (known as the SSO Guidance Committee) to develop a regulatory mechanism to provide a consistent statewide approach for reducing Sanitary Sewer Overflows (SSOs). Over the past 14 months, State Water Board staff in collaboration with the SSO Guidance Committee, developed draft statewide general waste discharge requirements (WDRs) and a reporting program. The WDRs and reporting program reflect numerous ideas, opinions, and comments provided by the SSO Guidance Committee.

The SSO Guidance Committee consists of representatives from the State Water Board's Office of Chief Counsel, several Regional Water Quality Control Boards (Regional Water Boards), United States Environmental Protection Agency (USEPA), Region IX, non-governmental environmental organizations, as well as publicly-owned sanitary sewer collection system agencies. The draft WDRs, reporting program, and associated documents result from a collaborative attempt to create a robust and rigorous program, which will serve as the basis for consistent and appropriate management and operation of sanitary sewer systems.

During the collaborative process, several key issues regarding the draft WDRs were identified. These include:

- Is there a need for statewide collection system requirements?
- Should these systems be regulated under a National Pollutant Discharge Elimination System (NPDES) permit issued pursuant to the Federal Clean Water Act or under WDRs issued pursuant to the California Water Code (the Porter-Cologne Water Quality Control Act or Porter-Cologne)?
- Should the regulatory mechanism include a prohibition of discharge and, if so, should the prohibition encompass only SSOs that reach surface waters, ground water, or should all SSOs be prohibited?
- Should a regulatory mechanism include a permitted discharge, an affirmative defense, or explicit enforcement discretion?
- Should the regulated facilities include publicly-owned facilities, privately owned facilities, satellite systems (public and private), and/or private laterals?

- Should all SSOs be reported, and if not, what should the reporting thresholds be; and what should the reporting timeframes be?
- How will existing permits and reporting requirements incorporate these new WDRs?
- How much will compliance with these new WDRs cost?

The WDRs and Reporting Program considered the comments of all stakeholders and others who commented on the two drafts circulated to the public. These documents also incorporate legal requirements and other revisions to improve the effectiveness and management of the regulatory program. Following is a discussion of the above issues, comments received on the drafts and an explanation of how issues were resolved.

The Need

As California's wastewater collection system infrastructure begins to age, the need to proactively manage this valuable asset becomes increasingly important. The first step in this process is to have a reliable reporting system for SSOs. Although there are some data systems to record spills and various spill-reporting requirements have been developed, inconsistent requirements and enforcement have led to poor data quality. A few Regional Water Boards have comprehensively tracked SSOs over the last three to five years, and from this information we have been able to determine that the majority of collection systems surveyed have had SSOs within this time period.

Both the San Diego and Santa Ana Regional Water Boards have issued WDRs over the last several years to begin regulating wastewater collection systems in an attempt to quantify and reduce SSOs. In fact, 44 out of 46 collection system agencies regulated by the San Diego Regional Water Board have reported spills over the last four and a half years, resulting in 1467 reported SSOs. Twenty-five out of 27 collection system agencies subject to the Santa Ana Regional Water Board's general WDRs reported SSOs between the years of 1999-2004. During this time period, 1012 SSOs were reported.

The 2004 Annual Ocean and Bay Water Quality Report issued by the Orange County Environmental Health Care Agency shows the number of SSOs increasing from 245 in 1999 to 399 in 2003. While this number indicates a concerning trend, the total annual spill volume from these SSOs has actually decreased dramatically, as has the number of beach closures due to SSOs. It is likely, therefore, that the rise in number of SSOs reflects better reporting, and not an actual increase in the number of SSOs.

This information also suggests that the Santa Ana Regional Water Board's WDRs, which contain sanitary sewer management plan (SSMP) requirements similar to those in the proposed statewide general WDRs, have been effective in

not only increasing the number of spills that are reported but also in mitigating the impacts of SSOs that do occur.

Data supports the conclusion that virtually all collection systems have SSOs and that implementation of a regulatory measure requiring SSO reporting and collection system management, along with required measures to limit SSOs, will greatly benefit California water quality. Implementation of these requirements will also greatly benefit and prolong the useful life of the sanitary sewer system, one of California's most valuable infrastructure items.

NPDES vs. WDRs

Porter-Cologne subjects a broader range of waste discharges to regulation than the Federal Clean Water Act. In general, the Clean Water Act prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 U.S.C. §§1311, 1342). Since not all SSOs result in a discharge to surface water, however, not all SSOs violate the Clean Water Act's NPDES permitting requirements. Porter-Cologne, on the other hand, covers all existing and proposed waste discharges that could affect the quality of state waters, including both surface waters and groundwater. (Wat. Code §§13050(e), 13260). Hence, under Porter-Cologne, a greater SSO universe is potentially subject to regulation under WDRs. In addition, WDRs under Porter-Cologne can address both protection of water quality as well as the prevention of public nuisance associated with waste disposal. (*Id.* §13263).

Some commenters contend that because all collection systems have the potential to overflow to surface waters the systems should be regulated under an NPDES permit. A recent decision by the United States Court of Appeals for the 2nd Circuit, however, has called into question the states' and USEPA's ability to regulate discharges that are only "potential" under an NPDES permit. In *Waterkeeper Alliance v. United States Environmental Protection Agency* (2005) 399 F.3d 486, 504-506, the appellate court held that USEPA can only require permits for animal feedlots with "an actual addition" of pollutants to surface waters. While this decision may not be widely followed, especially in the area of SSOs, these are clearly within the jurisdiction of the California Water Code.

USEPA defines a publicly owned treatment works (POTW) as both the wastewater treatment facility and its associated sanitary sewer system (40 C.F.R. §403.3(o)[1]). Historically, only the portion of the sanitary sewer system that is owned by the same agency that owns the permitted wastewater treatment facility has been subject to NPDES permit requirements. Satellite sewer collection systems (i.e. systems not owned or operated by the POTW) have not been

[1] The regulation provides that a POTW include sewers, pipes, and other conveyances only if they convey wastewater to a POTW.

typically regulated as part of the POTW and, therefore, have not generally been subject to NPDES permit requirements.

Comments were received that argued every collection system leading to a POTW that is subject to an NPDES permit should also be permitted based upon the USEPA definition of POTW. Under this theory, all current POTW NPDES permits could be expanded to include all satellite sewer collection systems, or alternatively, the satellite system owners or operators could be permitted separately. However, this interpretation is not widely accepted and USEPA has no official guidance to this fact.

There are also many wastewater treatment facilities within California that do not have discharges to surface water, but instead use percolation ponds, spray irrigation, wastewater reclamation, or other means to dispose of the treated effluent. These facilities, and their satellite systems, are not subject to the NPDES permitting process and could not be subject to a statewide general NPDES permit. POTWs that fall into this category, though, can be regulated under Porter-Cologne and do have WDRs.

In light of these factors, the State Water Board has determined that the best approach is to propose statewide general WDRs at this time.

Prohibition of Discharge

The Clean Water Act prohibits the discharge of wastewater to surface waters except as authorized under an NPDES permit. POTWs must achieve secondary treatment, at a minimum, and any more stringent limitations that are necessary to achieve water quality standards. (33 U.S.C. §1311(b)(1)(B) and (C)). Thus, an SSO that results in the discharge of raw sewage to surface waters is prohibited under the Clean Water Act.

Additionally, California Water Code section 13263 requires the State Water Board to, after any necessary hearing, prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. The requirements shall, among other things, take into consideration the need to prevent nuisance.

California Water Code section 13050 (m), defines nuisance as anything which meets all of the following requirements:

a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

c. Occurs during, or as a result of, the treatment or disposal of wastes.

Some SSOs do create a nuisance as defined in state law. Therefore, based upon these statutory requirements, the WDRs include prohibitions in Section C. of the WDRs. Section C. states:

C. PROHIBITIONS

1. Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.

2. Any SSO that results in a discharge of untreated or partially treated wastewater, which creates a nuisance as defined in California Water Code section 13050(m) is prohibited.

Furthermore, the State Water Board acknowledges the potential for more stringent water quality standards that may exist pursuant to a Regional Water Board requirement. Language included in Section D.2 of the WDRs allows for these more stringent instances.

D. PROVISIONS

2. It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with the general WDRs. Nothing in the general WDRs shall be:

(i) Interpreted or applied in a manner inconsistent with the Federal Clean Water Act, or supersede a more specific or more stringent state or federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;
(ii) Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;
(iii) Interpreted or applied to prohibit a Regional Water Board from issuing an individual NPDES permit or WDRs, superseding the general WDRs, for a sanitary sewer system, authorized under the Clean Water Act or California Water Code; or
(iv) Interpreted or applied to supersede any more specific or more stringent WDRs or enforcement order issued by a Regional Water Board.

Permitted Discharge, Affirmative Defense, and Enforcement Discretion

Commenters from the discharger community have requested inclusion of an affirmative defense to an SSO on the grounds that certain SSO events are unforeseen and unavoidable, such as SSOs due to extreme wet weather events. An affirmative defense is a mechanism whereby conduct that otherwise violates WDRs or a permit will be excused, and not subject to an enforcement action, under certain circumstances. Since many collection system industry experts believe that not all SSOs may be prevented, given certain circumstances (such as unforeseen vandalism, extreme wet weather, or other acts of God), many

collection system owner representatives believe this should formally be recognized by including an affirmative defense for these unavoidable SSOs.

Previous informal drafts of the general WDRs included affirmative defense language, which was contingent upon appropriate development and implementation of sanitary sewer management plan (SSMP) requirements, as well as a demonstration that the SSO was exceptional and unavoidable. Other stakeholders, including USEPA and the environmental groups opposed the concept of an affirmative defense for SSOs. They argued that its inclusion in the WDRs would undermine the Clean Water Act and inappropriately limit both Regional Water Board and third party enforcement.

After considering input from all stakeholders, and consulting with USEPA, staff is not recommending inclusion of an affirmative defense. Rather, the draft WDRs incorporate the concept of enforcement discretion, and explicitly identify what factors must be considered during any civil enforcement proceeding. The enforcement discretion portion of the WDRs is contained within Sections D. 6 and 7, and is consistent with enforcement discretion provisions within the California Water Code.

Facilities Subject to WDRs

Collection systems consist of pipelines and their appurtenances, which are intended to transport untreated wastewater to both publicly-owned and private wastewater treatment facilities. While wastewater treatment facilities are owned by a wide variety of public and private entities, public agencies (state and federal agencies, cities, counties, and special districts) own the vast majority of this infrastructure.

Collection systems that transport wastewater to POTWs could be grouped into four different categories:

1. Publicly-owned treatment works – pipelines and appurtenances that are owned by a public agency that also owns a wastewater treatment facility;
2. Publicly-owned satellites – pipelines and appurtenances that are owned by a public agency that does not own a wastewater treatment facility; and
3. Private laterals - pipelines and appurtenances that are not owned by a public agency, but rather discharge into one of the above types of facilities.
4. Privately owned treatment works – pipelines and appurtenances that are owned by a private entity, which also owns a wastewater treatment facility (often a septic tank and leach field).

The WDRs require all public agencies, which own wastewater collection systems (category 1 and 2 above) to enroll in the WDRs. Privately owned systems (categories 3 and 4) are not subject to the WDRs; however, a Regional Water

Board may at its discretion issue WDRs to these facilities on a case-by-case or region wide basis.

Collection systems discharging into POTWs (categories 1, 2, and 3) represent, by far, the greatest amount of collection system infrastructure within California. Since regulating private entities (categories 3 and4) on a statewide basis would be unmanageable and impractical (because of the extremely large number and lack of contact information and other associated records), staff believes focusing on the public sector is the best option for meaningful and consistent outcomes. The legal authority and reporting provisions contained in the WDR do require limited oversight of private laterals (category 3) by public entities. Given this limited responsibility of oversight, public entities are not responsible or liable for private laterals.

State Water Board staff will notify all known public agencies that own wastewater collection systems, regarding their obligation to enroll under these WDRs. However, because of data inaccuracies, State Water Board staff may inadvertently not contact an agency that should enroll in the WDRs or erroneously contact a public agency that does not own a collection system. Staff will make every effort to accurately identify public agencies. In the event that a public agency is overlooked or omitted, however, it is the agency's responsibility to contact the State Water Board for information on the application process. An agency can find the appropriate contact by visiting the State Water Board's SSO homepage at www.waterboards.ca.gov/sso.

SSO Reporting

SSOs can be distinguished between those that impact water quality and/or create a nuisance, and those that are indicators of collection system performance. Additionally, SSO liability is attributed to either private entities (homeowners, businesses, private communities, etc...) or public entities. Although all types of SSOs are important to track, the reporting time frames and the type of information that need to be conveyed differ.

The Reporting Program and Online SSO Database clearly distinguish the type of spill (major or minor) and the type of entity that owns the portion of the collection system that experienced the SSO (public or private entity). The reason to require SSO reporting for SSOs that do not necessarily impact public health or the environment is because these types of SSOs are indicators of collection system performance and management program effectiveness, and may serve as a sign of larger and more serious problems that should be addressed. Although these types of spills are important and must be regulated by collection system owners, the information that should be tracked and the time required to get them into the online reporting system are not as stringent.

Obviously, SSOs that are large in nature, affect public health, or affect the environment must be reported as soon as practicable and information associated with both the spill and efforts to mitigate the spill must be detailed. Since the Online SSO Database is a web based application requiring computer connection to the internet and is typically not as available as telephone communication would be, the Online Database will not replace emergency notification, which may be required by a Regional Water Board, Office of Emergency Services, or a County Health or Environmental Health Agency.

Incorporating Existing Permits

It is the State Water Board's intent to have one statewide regulatory mechanism that lays out the foundation for consistent collection system management requirements and SSO reporting. While there are a significant number of collection systems that are not actively regulated by the State or Regional Water Boards, some efforts have been made to regulate these agencies on a facility-by-facility or region-by-region basis. General WDRs, individual WDRs, NPDES permits, and enforcement orders that specifically include collections systems are mechanisms that have been used to regulate collection system overflows.

However, because of these varying levels of regulatory oversight, confusion exists among collection system owners as to regulatory expectations on a consistent and uniform basis (especially with reporting spills). Currently, there are a myriad of different SSO reporting thresholds and a number of different spill report repositories. Because of the varying levels of reporting thresholds and the lack of a common database to capture this information, an accurate picture of SSOs throughout California is unobtainable.

In order to provide a consistent and effective SSO prevention program, as well as to develop reasonable expectations for collection system management, these General WDRs should be the primary regulatory mechanism to regulate public collection systems. The draft WDRs detail requirements associated with SSMP development and implementation and SSO reporting.

All NPDES permits for POTWs currently include federally required standard conditions, three of which apply to collection systems. NPDES permits must clarify that the following three conditions apply to that part of the collection system that is owned or operated by the POTW owner or operator. These conditions are:

- Duty to mitigate discharges (40 CFR 122.41(d))
- Requirement to properly operate and maintain facilities (40 CFR 122.41(e))
- Requirement to report non-compliance (40 CFR 122.41(l)(6) and (7))

Understandably, revising existing regulatory measures will not occur immediately. However, as time allows and, at a minimum, upon readopting existing WDRs or WDRs that serve as NPDES permits, the Regional Water Boards should rescind redundant or inconsistent collection system requirements. In addition, the Regional Water Boards must ensure that existing NPDES permits clarify that the three standard permit provisions discussed above apply to the permittee's collection system.

Although it is the State Water Board's intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, there will be some instances when Regional Water Boards will need to impose more stringent or prescriptive requirements. In those cases, more specific or more stringent WDRs or an NPDES permit issued by a Regional Water Board will supersede this Order. Finding number 11, in the WDRs states:

> 11. Some Regional Water Boards have issued WDRs or WDRs that serve as National Pollution Discharge Elimination System (NPDES) permits to sanitary sewer system owners/operators within their jurisdictions. This Order establishes minimum requirements to prevent SSOs. Although it is the State Water Board's intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, Regional Water Boards may issue more stringent or more prescriptive WDRs for sanitary sewer systems. Upon issuance or reissuance of a Regional Water Board's WDRs for a system subject to this Order, the Regional Water Board shall coordinate its requirements with stated requirements within this Order, to identify requirements that are more stringent, to remove requirements that are less stringent than this Order, and to provide consistency in reporting.

Cost of Compliance

While the proposed WDRs contain requirements for systems and programs that should be in place to effectively manage collection systems, many communities have not implemented various elements of a good management plan. Some agencies are doing an excellent job managing their collection systems and will incur very little additional costs. Other agencies will need to develop and implement additional programs and will incur greater costs. However, any additional costs that a public agency may incur in order to comply with these General WDRs are costs that an agency would necessarily incur to effectively manage and preserve its infrastructure assets, protect public health and prevent nuisance conditions. These General WDRs prescribe minimum management requirements that should be present in all well managed collection system agencies.

In order to estimate the compliance costs associated with the proposed WDRs, staff analyzed costs associated with implementing the Santa Ana Regional Water Board's general WDRs. Twenty-one agencies, which discharge to Orange County Sanitation District, submitted financial summaries for the last five years, representing both pre- and post-WDRs adoption. Operation and maintenance costs, program development costs, as well as capital improvement costs were

considered and fairly accurately represent what can be expected statewide with the adoption of the General WDRs.

After extrapolating the sample to yield a statewide cost perspective, the projected annual cost of implementing the statewide WDRs is approximately $870 million. This total represents $345.6 million in O&M costs and $524.5 for capital improvement projects.

While this sum is substantial, presenting the costs on a per capita or per household basis puts the figure in perspective. Department of Finance estimated the total population for Californians that may be subject to the WDRs to be 30.3 million persons (1/1/05). Dividing the population by the approximate average household size of 2.5 yields 12 million households. The average household in California is assumed to be 2.5 persons. The increased average annual cost (in order to comply with these WDRs) per person is estimated to be $28.74 and $71.86 per household (or $5.99 per month per household)

Given these average costs there will be some communities that realize higher costs on a per household basis and some that realize less cost. Furthermore, larger communities will probably also realize an economy of scale, which is dependent upon a community's size. While larger communities may see lower costs associated with compliance, smaller communities will probably see a higher cost associated with compliance. Costs for compliance in small communities may be as high as $40 per month per household.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. R2-2004-0011
NPDES PERMIT NO. CA0038792

CITY OF EMERYVILLE
SANITARY SEWER COLLECTION SYSTEM
EMERYVILLE, ALAMEDA COUNTY

CONTENTS

FINDINGS **3**

PURPOSE OF ORDER 3
FACILITY DESCRIPTION 3
DISCHARGE DESCRIPTION 3
BACKGROUND AND HISTORY 3
DESIGN GOAL OF EAST BAY I/ICP 6
PROGRESS MADE SINCE IMPLEMENTATION OF I/ICP 6
THE BOARD SSO RESOLUTION NO. 2003-R2-0095 6
APPLICABLE PLANS, POLICIES AND REGULATIONS 7
Federal Water Pollution Control Act (Clean Water Act) *7*
California Water Code Sections that Apply to SSOs *7*
Basin Plan *8*
Anti-degradation Policy *8*
CEQA EXEMPTION AND PUBLIC HEARING 8

A. PROHIBITIONS **9**

B. IMPLEMENTATION AND ENFORCEMENT OF PROHIBITION A.1 ..... **9**

C. RECEIVING WATER LIMITATION **11**

D. PROVISIONS **11**

1. CONTROLLING AND CONTAINING SSO 11
2. SSO REPORTING 12
3. SEWER SYSTEM MANAGEMENT PLAN (SSMP) 12
4. CHANGE IN OWNERSHIP 12
5. PERMIT COMPLIANCE AND RESCISSION OF PREVIOUS WASTE DISCHARGE REQUIREMENTS 12
6. NPDES PERMIT 12
7. ORDER EXPIRATION AND REAPPLICATION 12

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. R2-2004-0011
NPDES PERMIT NO. CA0038792

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

CITY OF EMERYVILLE
SANITARY SEWER COLLECTION SYSTEM
EMERYVILLE, ALAMEDA COUNTY

FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

1. *Discharger and Permit Application.* The City of Emeryville (hereinafter called the Discharger) has applied to the Board for reissuance of waste discharge requirements and a permit under the National Pollutant Discharge Elimination System (NPDES).

Purpose of Order

2. This NPDES permit regulates Sanitary Sewer Overflows (SSOs) caused by Inflow and Infiltration (I/I) from the Discharger's wastewater collection system.

3. The U.S. EPA and the Board have classified this Discharger as a minor discharger.

Facility Description

4. *General.* The Discharger owns and maintains approximately 14.9 miles of sanitary sewer mains, which are connected to the interceptor owned and operated by East Bay Municipal Utility District, Special District 1, or EBMUD. The Discharger's sanitary sewer main collection system serves a population of 7,000 people in the City of Emeryville.

5. *East Bay Communities.* The Discharger is a member of East Bay Communities, which include the Stege Sanitary District and the Cities of Alameda, Albany, Berkeley, Emeryville, Oakland and Piedmont. Wastewaters collected from East Bay Communities' service areas flow to EBMUD's interceptors, and are treated by EBMUD's wastewater treatment facilities.

Discharge Description

6. Wastewater overflows from the Discharger's collection system are discharged to various storm drain systems, and/or creeks, which are tributary to Central San Francisco Bay.

Background and History

7 *History.* The collection systems in the East Bay Communities were originally constructed in the early twentieth century. These systems originally included cross-connections to storm drain systems and, while not uncommon at the time of construction, some of the sewers were later characterized as having inferior materials, poor joints, and inadequate beddings for sewer pipes. The construction of improvements and the growth of landscaping, particularly trees have

damaged sewers and caused leaks. Poor construction techniques and aging sewer pipes resulted in significant infiltration/inflow (I/I) during the wet weather season. In the early 1980s, it was noted that during storms, the sewers might receive up to 20 times more flow than in dry weather. As a result, the East Bay Communities' sewers might overflow to streets, local watercourses, and the Bay, creating a risk to public health and impairing water quality.

8. *I/I Effect on EBMUD's Interceptor System.* The East Bay Communities' sewers are connected to EBMUD's interceptors. In the early 1980s, excessive I/I from the East Bay Communities' collection systems could force EBMUD's interceptors to overflow untreated wastewater at seven (7) designed overflow structures in EBMUD's interceptor along the shoreline of central San Francisco Bay.

9. *EBMUD wet weather permits.* The Board first issued an NPDES permit to EBMUD in 1976 for the wet weather discharges from EBMUD's interceptor. This permit required EBMUD to eliminate discharge of untreated overflows from its interceptors and to protect water quality in San Francisco Bay. This permit was reissued in 1984, 1987, 1992 and 1998. Additional requirements were incorporated into the renewed permits following construction of wet weather treatment facilities.

10. *Collection system permits to East Bay Communities.* Following issuance of the wet weather permit in 1976 to EBMUD, the Board issued similar permits in 1976 to all members of the East Bay Communities except the Discharger. The Board reissued these permits in 1984, 1989 and 1994. The Discharger was not originally issued a permit because it was believed that no wet weather overflows occurred in Emeryville's service area. However, wet weather overflows were identified in the Discharger's service area after completion of the East Bay I/I Study and issuance of the Cease and Desist Orders (CDO) in 1986.

11. *East Bay I/I Study and I/ICP.* In response to the requirements in the Board permits and CDOs regarding the control of untreated overflows from EBMUD's interceptors and the East Bay Communities' collection systems, EBMUD and the East Bay Communities coordinated their efforts to develop a comprehensive program to comply with these permit requirements. In 1980, the East Bay Communities, including the Discharger, and EBMUD initiated a 6-year East Bay I/I Study. The I/I Study outlined recommendations for a long-range sewer improvement program called the East Bay Infiltration/Inflow Correction Program (I/ICP). The I/I Study also specified schedules, which are called Compliance Plans, for each member of the East Bay Communities to complete various sewer rehabilitation projects specified in the I/ICP. These Compliance Plans were later incorporated into the CDO for East Bay Communities as compliance schedules.

    The $16.5 million I/I Study was funded under the Clean Water Grant Program with state and federal support paying about 87.5% of the costs. The original Compliance Plans dated October 8, 1985, proposed a 20-year plan to implement the I/ICP to eliminate wet weather overflows from the East Bay Communities' sewer system up to the 5-year storm event. The total program cost was estimated at $304 million in 1985 dollars.

12. *Joint Powers Agreement (JPA).* In order to address I/I problems in the East Bay Communities' wastewater collection systems, on February 13, 1979, the East Bay Communities and EBMUD entered into a JPA under which EBMUD serves as administrative lead agency to conduct the East Bay I/I Study. The JPA was amended on January 17, 1986 to designate EBMUD as the lead

agency during the initial five-year implementation phase of the East Bay I/I Study recommendations. The amended JPA also delegated authority to EBMUD to apply for and administer grant funds, to award contracts for mutually agreed upon wet weather programs, and to perform other related tasks. Programs developed under the JPA are directed by a Technical Advisory Board (TAB) composed of one voting representative from each of the East Bay Communities and EBMUD. In addition, one non-voting staff member of the Board, State Water Resources Control Board (State Board), and U.S. EPA may participate in the TAB.

13. *Cease and Desist Order (CDO).* In 1986, the Board issued a CDO to the East Bay Communities including the Discharger (Order No. 86-17, reissued with Order No. 93-134). This CDO requires East Bay Communities to cease and desist discharging wet weather overflows from their wastewater collection systems. In this enforcement order, the Board accepted the proposed approach in the I/ICP and directed the I/ICP to focus on conducting activities that reduce impacts to public health.

    The Board also issued a separate CDO to EBMUD (Order No. 87-19, reissued with Order No. 92-96) requiring EBMUD to eliminate discharge of untreated overflows from its interceptors. The CDO for EBMUD (Order No. 92-96) was rescinded following construction of storage and increased treatment capacity at EBMUD's Main Wastewater Treatment Plant, of interceptor hydraulic improvements, of increased storage at Pump Station C, and of three (3) wet weather treatment facilities, which remove floatable material and disinfect peak excess flows that are directed to them.

14. *EBMUD's Wet Weather Program.* From 1975 to 1987, EBMUD underwent its own wet weather program planning, and developed a comprehensive Wet Weather Program. The objective of the Wet Weather Program is that EBMUD's wet weather facilities have the capacity to convey peak flows to EBMUD's system by the East Bay Communities' trunk sewers at the end of the I/ICP implementing period. EBMUD started implementing its Wet Weather Program in 1987. Since then, EBMUD has spent about $310 million on the wet weather program. This includes construction of three (3) wet weather treatment facilities, and two (2) wet weather interceptors, new storage basins and pumping facilities, expansion of the main wastewater treatment plant, and elimination of two (2) out of the seven (7) designed wet weather overflow structures.

15. *Updates to original I/ICP.* After receiving a notice from the Board for issuing a new CDO in 1993, the East Bay Communities requested the opportunity to revise their Compliance Plans. The impetus of this revision stemmed from increased costs for implementing the original Compliance Plans. New technological developments and the inadequacy of other methods previously thought viable for sewer rehabilitation and relief line installation have increased the cost of the I/ICP from original cost estimates. The revised Compliance Plans incorporated the experience gained from the implementation of I/ICP for the past six (6) years from 1987 to 1993 in order to better address the remaining I/ICP projects.

16. *Extension to Original Compliance Plans.* The increase in project costs necessitated extensions of the schedules in the original Compliance Plans in order to minimize the impact on rate-payers. As a result, all members of the East Bay Communities except the Stege Sanitary District and the Discharger submitted a revised Compliance Plan and Schedule in October 1993. In light of the increased costs, the Board granted the Cities of Alameda, Berkeley, Oakland, and Piedmont a five

(5) to ten (10) year extension to the original compliance schedules in the CDO reissuance in October 1993.

Design Goal of East Bay I/ICP

17. *Cost analysis of sewer rehabilitation program.* It is cost prohibitive to eliminate all I/I into a sewer system. The East Bay Communities performed a cost analysis during the I/I Study to determine the cost-effective level of rehabilitation. The cost-effective level of rehabilitation involves balancing the cost of rehabilitation of the East Bay Communities' sewer systems and the cost for increasing the capacity of EBMUD's interceptors, wastewater treatment facilities. A sensitivity analysis was performed to study cost effects of various levels of rehabilitation on various wet weather alternatives. Cost-Effective Ratios[1](C-E-Ratio) for various drainage basins were calculated. A C-E Ratio greater than one (1) indicates that I/I rehabilitation is cost effective. The analysis was performed by using a computer program supported by the Corps of Engineers Hydrologic Engineering Center, called STORM. This analysis derived a regional least-cost solution, which involves both East Bay Communities' sewer rehabilitation cost and transportation/treatment cost by EBMUD. The study results were described in the Wet Weather Facilities Update. It was concluded that the most cost effective solution was to rehabilitate the cost effective collection systems and provide relief sewers, interceptor hydraulic capacity, and storage basins to handle wet weather flows up to a 5-year storm event.

18. *Design goal of I/ICP.* The design goal of East Bay I/ICP is to eliminate overflows from the East Bay Communities' collection systems and EBMUD's interceptor unless the rainfall exceeds a 5-year design storm event. Overflows may continue to occur for events less than the 5-year design storm until the Discharger completes its I/ICP. However, the occurrence of overflows will decrease as more of the East Bay I/ICP projects are completed.

19. *5-year Design Storm Event Definition.* The 5-year design storm event is a storm event that meets the following criteria: a 6-hour duration, and a maximum 1-hour rainfall intensity of a storm with return period of five (5) years. The storm is assumed to occur during saturated soil conditions, and to coincide with the peak 3-hour ultimate Base Wastewater Flow (BWF) condition. BWF consists of domestic wastewater flow from residential, commercial, and institutional sources plus industrial wastewater. BWF specifically excludes infiltration and inflow (I/I) from groundwater or storm water. Due to these conservative assumptions, the Wet Weather Facilities Pre-design Report concluded that the estimated peak flow produced by this event has a return period of approximately 13 years. The peak I/I flow from a 5-year storm was selected as the basis of design for the treatment level intended to protect beneficial uses as defined by the San Francisco Bay Basin Plan (Basin Plan), Maintenance Level C. Maintenance Level C requires secondary treatment to the half-year recurrence interval, primary treatment to the 5-year recurrence interval, and above the 5-year interval, overflows are allowed.

Progress Made Since Implementation of I/ICP

20. The Discharger started implementing its I/ICP in 1987. Since 1987, the Discharger has spent approximately $9 million dollars (in 2003 dollars) on sewer rehabilitation, maintenance and replacement. As part of the I/ICP, the Discharger has replaced, repaired or rehabilitated 9.5 miles of its sewer mains. On average, one and one half (1.5) miles of sewer lines are inspected by television camera every year. The Discharger has an ordinance in place that requires the

[1] C-E Ratio = (East Bay Communities Cost Savings + EBMUD Cost Savings)/(Rehabilitation Cost)

collected annual sanitary sewer user fees and sanitary sewer collection fees be used to finance sewer system improvements.

21. *Elimination of overflows points and storm drain cross connections.* The I/ICP Compliance Plan dated October 1993, identified eight (8) overflow locations as high threats to public health within the Discharger's service area. The Discharger has eliminated seven (7) high threat overflow locations. The remaining one will be removed this year through rehabilitation projects to be implemented by the Discharger and the City of Oakland concurrently. No known cross connections between the sewer system and the storm drain system were identified in the October 1993 Compliance Plan.

The Board SSO Resolution No. 2003-R2-0095

22. In October 2003, the Board adopted a Resolution in support of collaboration between the Board and the Bay Area Clean Water Agencies (BACWA) to report and manage SSOs in this Region. The Board staff and BACWA will develop a web-based region-wide SSO reporting system, and an outline for the necessary elements for a Sewer System Management Plan (SSMP). The Board will require wastewater collection system owners and operators to report all SSOs through the web-based SSO reporting system and develop site-specific SSMPs for wastewater collection systems. This Order is consistent with the SSO Resolution No. 2003-R2-0095.

Applicable Plans, Policies and Regulations

Federal Water Pollution Control Act (Clean Water Act)

23. The Clean Water Act (CWA) Section 301(a) prohibits discharge to waters of the United States except in compliance with other provisions of the CWA. For publicly owned treatment works, all discharges must meet effluent limitations based upon secondary treatment requirements. The secondary treatment standards are specified in 40CFR Part 133. The CWA Section 308 provides the basis for SSO reporting requirements. This section requires establishing, maintaining, and reporting records for determining whether there has been a violation of the CWA.

California Water Code Sections that Apply to SSOs

24. *California Water Code Section 13243.* California Water Code Section 13243 provides that a Board, in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, is not permitted.

25. Section 13193 of the California Water Code requires the State Board, after funding has been appropriated, to develop a form for reporting of SSOs. Subsequently, it requires sanitary sewer agencies to report specific information for SSOs greater than 1,000 gallons[2] to the Board. Water Code Section 13376 also requires any person discharging pollutants or proposing to discharge pollutants to waters of the State to file a report of waste discharge.

26. Section 13377 of the California Water Code authorizes the Board to prescribe effluent standards and limitations to ensure compliance with the CWA, and the Water Quality Control Plan or Basin Plan.

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[2] However, the Board SSO Resolution No. 2003-R2-0095 requires dischargers report all SSOs including those SSOs that are below 1,000 gallons. See Finding No. 22 for discussion on SSO Resolution.

Basin Plan

27. *Water Quality Control Plan.* The Board, on June 21, 1995, adopted, in accordance with Section 13240 et seq. of the CWC, a revised Water Quality Control Plan, San Francisco Bay Basin (Basin Plan). This updated and revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20, 1995, and November 13, 1995, respectively. A summary of revisions to regulatory provisions is contained in California Code of Regulations, Section 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and ground waters. This Order is in compliance with the Basin Plan.

28. *Basin Plan Prohibition.* The Basin Plan prohibits discharge of raw sewage or any waste failing to meet waste discharge requirements to any waters of the Basin. The intent of this prohibition is to protect the public and the aquatic environment from the effects of raw or inadequately treated waste discharges.

29. *Basin Plan Beneficial Uses.* Beneficial uses for central San Francisco Bay and its tributaries, as identified in the Basin Plan, are:

    a. Commercial and sport fishing
    b. Estuarine habitat
    c. Industrial service supply
    d. Fish migration
    e. Navigation
    f. Preservation of rare and endangered species
    g. Water contact and non-contact recreation
    h. Shellfish harvesting
    i. Fish spawning
    j. Wildlife habitat

Anti-degradation Policy

30. *State Board Resolution.* The prohibition on discharge, and receiving water limitation in this Order is consistent with the State Board Resolution 68-16 (Anti-degradation Policy). Compliance with these requirements will result in the use of best practicable treatment or control of the discharge.

CEQA Exemption and Public Hearing

31. *NPDES Permit.* This Order serves as an NPDES permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code [California Environmental Quality Act (CEQA)] pursuant to Section 13389 of the California Water Code.

32. *Notification.* The Discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharges and have been provided an opportunity to submit their written views and recommendations. Board staff prepared a Fact Sheet and Response to Comments, which are hereby incorporated by reference as part of this Order.

33. *Public Hearing.* The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code, regulations, and plans and policies adopted thereunder, and to the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, that the Discharger shall comply with the following:

A. PROHIBITIONS

1. The discharge of untreated or partially treated wastewater to any surface water stream, natural or man-made, or to any drainage system intended to convey storm water runoff to surface waters, is prohibited.

2. The discharge of chlorine, or any other toxic substance used for disinfection and cleanup of wastewater spills, to any surface water body is prohibited.

B. IMPLEMENTATION AND ENFORCEMENT OF PROHIBITION A.1

1. *Enforcement consideration.* In any enforcement action, the Board will consider the Discharger's efforts in containing, controlling, and cleaning up SSOs. The Board will also consider the Discharger's efforts in sewer rehabilitation as well as implementation of the East Bay I/I Correction Program (I/ICP). These considerations are part of the factors required by Section 13327 of the California Water Code.

   The Discharger shall make every practicable effort to contain SSOs and to prevent the wastewater from entering storm drains and surface water bodies.

   Prohibition A.1. is not violated under either of the following:

   a. If the SSO does not enter a storm drain or surface water body, or

   b. If the Discharger contains the SSO within the storm drain system pipes, and fully recovers and cleans up the spilled wastewater.

   However these incidents of SSOs shall be reported to the Board as SSOs as stipulated in Section D.2.

2. *Discharges caused by severe natural conditions.* The Board may take enforcement action against the Discharger for any sanitary sewer system discharge caused by natural conditions, unless the Discharger demonstrates through properly signed, contemporaneous operating logs, or other relevant evidence that,

   a. The discharge was caused by severe natural conditions (such as hurricanes, tornadoes, flooding, earthquakes, landslides, tsunamis, and other similar natural conditions);

   b. There were no feasible alternatives for the discharge, such as retention of untreated wastewater, reduction of inflow and infiltration, and use of adequate backup equipment;

c. The Discharger submitted a claim to the Board's staff within 10 working days of the date of the discharge that the discharge meets the conditions of this provision. Additional information to substantiate such claim shall be submitted upon request of the Board staff; and

d. The Discharger took all reasonable steps to stop, and mitigate the impact of the discharge within 24 hours after the Discharger became aware of the SSO.

3. *Discharges caused by other factors*. For SSOs other than those covered under this section, the Discharger may establish an affirmative defense to an action brought for noncompliance if the Discharger demonstrates through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. The Discharger can identify the cause or likely cause of the discharge event;

   b. The discharge was exceptional, unintentional, temporary and caused by factors beyond the reasonable control of the Discharger;

   c. The discharge could not have been prevented by the exercise of reasonable control, such as proper management, operation and maintenance; adequate treatment facilities or collection system facilities or components (e.g., adequately enlarging treatment or collection facilities to accommodate growth or adequately controlling and preventing infiltration and inflow); preventive maintenance; installation of adequate backup equipment; or in compliance with East Bay I/ICP.

   d. The Discharger submitted a claim to the Board's Executive Officer within 10 working days of the date of the discharge that the discharge meets the conditions of this provision; and

   e. The Discharger took all reasonable steps to stop, and mitigate the impact of, the discharge as soon as possible.

4. *Burden of proof*. In any enforcement proceeding, the Discharger has the burden of proof to establish that the criteria in this section have been met. A claim to be submitted under Sections B.2.c. and B.3.d. above may also be provided in the space allocated for claims in the web-based SSO reporting system (when the system becomes available), which currently is being developed pursuant to the Board SSO Resolution No. 2003-R2-0095. The Discharger shall provide additional available information pertaining to the SSO upon request by the Board's staff. The information may include:

   a. Relevant sewer maintenance/repair logs including the associated costs of sewer rehabilitation, cleaning/flushing, inspection, and replacement for the pipe section where the SSO occurred; and

   b. Information relating to storm event, such as size of the storm, length of such storm during the SSO.

C. RECEIVING WATER LIMITATION

1. The discharges shall not cause the following conditions to exist in waters of the State at any place:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   d. Visible floating, suspended, or deposited oil or other products of petroleum origin; and

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.

2. The discharges shall not cause nuisance, or adversely affect the beneficial uses of the receiving water.

3. The discharges of waste shall not cause the following limits to be violated in waters of the State at any one place within one foot of the water surface:

   a. Dissolved Oxygen: 5.0 mg/L, minimum

   b. Un-ionized ammonia: 0.16 mg/L as N, maximum

D. PROVISIONS

1. **Controlling and containing SSO**

   In a Sanitary Sewer Overflow (SSO) event, the Discharger shall make every practicable effort to contain the SSO and prevent the SSO from entering storm drains and surface water bodies. However, if it is not feasible, the Discharger may use storm drains to contain the SSO by blocking the drain, and recovering and cleaning up the SSO in order to prevent the SSO from being discharged to an open surface water body.

   The Discharger shall, to the maximum extent possible, take remedial action to

   a. Control or limit the volume of wastewater discharged to the State water;

   b. Terminate the wastewater discharge as rapidly as possible; and

   c. Recover as much of the wastewater discharged as possible for proper disposal, including any wash down water.

2. **SSO Reporting**
The Discharger shall report SSOs in accordance with Standard Provisions and Reporting Requirements with the exception of items, B., C., D.2., D.3., E.5., E.6.c., and E.6.d(ii). In the event that there is a discrepancy between requirements of this permit, and the Standard Provision and Reporting Requirements and Part A of Self-Monitoring Program, the permit requirements prevail. After the development of an SSO Monitoring and Reporting Program by Bay Area Clean Water Agencies (BACWA) and the Board, pursuant to the Board's SSO Resolution No. 2003-R2-0095, the Discharger shall report SSOs using the SSO electronic reporting system in accordance with the SSO Monitoring and Reporting Program.

3. **Sewer System Management Plan (SSMP)**
The Discharger shall develop an SSMP and implement the SSMP in according with the requirements and schedule developed by BACWA and Board staff pursuant to SSO Resolution No. 2003-R2-0095.

4. **Change in ownership**
This Order is not transferable to any person, except after notice to the Board's Executive Officer. The Discharger shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Discharger containing a specific date for the transfer of this Order's responsibility and coverage between the existing Discharger and the new Discharger. This agreement shall include an acknowledgement that the existing Discharger is liable for violations up to the transfer date and that the new Discharger is liable from the transfer date on.

5. **Permit Compliance**
The Discharger shall comply with all sections of this Order beginning on the effective date stated in a later provision.

6. **NPDES Permit**
This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective on March 17, 2004, provided the U.S. EPA Regional Administrator has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

7. **Order Expiration and Reapplication**
   a. This Order expires on March 16, 2009

   b. In accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code, the Discharger must file a report of waste discharge no later than 180 days before the expiration date of this Order as application for reissurance of this permit and waste discharge requirements.

I, Bruce H. Wolfe, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on March 17, 2004.

BRUCE H. WOLFE
Executive Officer

Attachment:
Standard Provisions and Reporting Requirements, August 1993
(Not attached, see our website at http://www.swrcb.ca.gov/rwqcb2/Download.htm for document)