CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

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ORDER NO. R2-2009-0082
NPDES NO. CA0038466

WASTE DISCHARGE REQUIREMENTS FOR THE CITY OF BERKELEY SANITARY SEWER COLLECTION SYSTEM ALAMEDA COUNTY

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	City of Berkeley
Name of Facility	Sanitary Sewer Collection System
Facility Mailing Address	2180 Milvia Street, Berkeley, CA 94704
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this Discharger as a minor discharger.	

Table 2. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	November 18, 2009
This Order shall become effective on:	November 18, 2009
This Order shall expire on:	November 17, 2014
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date

I, Bruce H. Wolfe, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on the date shown above.

Digitally signed by Bruce Wolfe
Date: 2009.11.18 17:20:38 -08'00'

Bruce H. Wolfe, Executive Officer

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I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 3. Facility Information

Discharger	City of Berkeley
Name of Facility	Sewer Collection System
Facility Address	Berkeley city limits
	Berkeley, CA
	Alameda County
Facility Contact, Title, and Phone	Adadu Yemane, Associate Civil Engineer (510) 981-6413
Mailing Address	2180 Milvia Street, Berkeley, CA 94704
Type of Facility	Sanitary Sewer Collection System
Facility Design Flow	Not Applicable

II. FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Regional Water Board), finds:

A. Background. The City of Berkeley (hereinafter Discharger) has been regulated by Order No. R2-2004-0010 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038466. The Discharger is also regulated by State Water Board Order No. 2006-0003-DWQ Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and State laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Facility Description. The Discharger owns and maintains approximately 388 miles of mains and seven pump stations in its sanitary sewer (or wastewater) collection system, which serves a population of about 106,000 people in the City of Berkeley.

The Discharger is one of seven "Satellite Agencies" that operates wastewater collection systems in the East Bay that route sewage to the East Bay Municipal Utility District's (EBMUD) wastewater treatment facilities. The other six Satellite Agencies include Stege Sanitary District and the Cities of Alameda, Albany, Oakland, Emeryville, and Piedmont. Wastewaters collected from these East Bay collection systems flow to interceptors owned and operated by EBMUD. EBMUD treats the wastewater at its treatment facilities and discharges the treated wastewater to San Francisco Bay, under separate NPDES permits (CA0037702 and CA0038440) and Cease and Desist Order No. R2-2009-0005.

***Cease and Desist Orders, EBMUD 2009 NPDES Permit, and Stipulated Order for Preliminary Relief*.** In 1986, the Regional Water Board issued a Cease and Desist Order ("CDO") No. 86-17 (reissued in 1993 as CDO No. 93-134) to the Discharger and each of the Satellite Agencies requiring them to cease and desist discharging from their wastewater collection systems. In response, EBMUD and the Satellite Agencies developed a comprehensive Infiltration/Inflow Correction Program ("I/ICP") that contains schedules, called Compliance Plans, for each Satellite Agency to complete various sewer rehabilitation projects specified in the I/ICP. The Compliance Plans were incorporated into CDO No. 93-134 for each Satellite Agency as a compliance schedule.

In 2009, the Regional Water Board adopted Order No. R2-2009-0004 reissuing the EBMUD permit and prohibiting any discharge from EBMUD's three Wet Weather Facilities ("WWFs"), located at 2755 Point Isabel Street, Richmond; 225 Fifth Avenue, Oakland; and 5597 Oakport Street, Oakland. Shortly afterwards, the U. S. Environmental Protection Agency (USEPA), and the Regional and State Water Boards filed a Federal Action (lawsuit) against EBMUD for discharges in violation of this prohibition and entered into a Stipulated Order ("SO") based on EBMUD's immediate inability to comply. The SO requires EBMUD, among other things, to conduct flow monitoring on the 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.

EBMUD had a number of studies conducted to provide the basis for developing many of the technical provisions of the SO. One conclusion of these studies was that, while the Satellite Agencies had made significant progress in reducing inflow and infiltration ("I/I") through the I/ICP and subsequent sewer pipe rehabilitation, it is unlikely that these projects will be sufficient to reduce flows from the Satellite Agencies to the extent that discharges from the WWFs are eliminated or significantly reduced. The cooperation of each Satellite Agency in the development and implementation of the programs specified above, along with making improvements to their own wastewater collection systems, is critical to achieving the flow reductions within each system that is necessary to eliminate or significantly reduce the discharge from the WWFs.

C. Legal Authorities. This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

D. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, and reports required by Order No. R2-2004-0010. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order.

E. **California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

F. **Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations[1], require that permits allowing discharges include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. Because this Order does not allow any discharges, no such conditions are required.

G. **Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and section 122.44(d) require that permits allowing discharges include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. Because this Order does not allow any discharges, no such limitations are required.

H. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the San Francisco Bay Region (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Because this Order does not allow any discharges, effluent limitations based on the Basin Plan are not required.

   The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. Because this Order does not allow any discharges, effluent limitations based on the Thermal Plan are not required.

I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants. Because this Order does not allow any discharges, effluent limitations based on the NTR and CTR are not required.

J. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by

[1] All further regulatory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Because this Order does not allow any discharges, effluent limitations based on the SIP are not required.

K. Compliance Schedules and Interim Requirements. Section 2.1 of the SIP provides that, based on a discharger's request and demonstration that it is infeasible for an existing discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does not include compliance schedules, interim effluent limitations or discharge specifications.

L. Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 C.F.R. § 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

M. Stringency of Requirements for Individual Pollutants. Because this Order does not allow any discharges, it is the most stringent possible order for all individual pollutants.

N. Antidegradation Policy. Section 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Because this Order does not allow any discharges, it is consistent with the antidegradation provisions of section 131.12 and State Water Board Resolution No. 68-16.

O. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and section 122.44(l), title 40 of the Code of Federal Regulations, prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions

where limitations may be relaxed. Because this Order prohibits all discharges from the wastewater collection system, there are no effluent limitations in this Order, and this Order is as stringent as the previous permit. The Regional Water Board intends to refine the narrative Prohibition III.D with a numeric flow limit or other more detailed set of standards that achieves the same result as the Prohibition when information necessary to develop the limit becomes available. Accordingly, such future refinement of the effluent limitation is an equivalent effluent limitation and will not be considered to be less stringent than the existing Prohibition III.D.

P. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). By prohibiting all discharges from the wastewater collection system, this Order protects the beneficial uses of waters of the State. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

Q. Monitoring and Reporting. 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), the Discharger must still notify the Regional Water Board and submit a written report if discharges occur.

R. Standard and Special 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 that discharges from its wastewater collection system are prohibited.

S. 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 it with an opportunity to submit its written comments and recommendations. Details of the notification are provided in the Fact Sheet of this Order.

T. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

THEREFORE, IT IS HEREBY ORDERED, that Order No. R2-2004-0010 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. 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.

IV. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order that are applicable.

B. Special Provisions

1. **Enforcement of Prohibition III.A.** 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.

2. **Proper Sewer System Management and Reporting, and Consistency with Statewide Requirements.** The Discharger shall properly operate and maintain its collection system, which includes but is not limited to controlling inflow and infiltration, (Attachment D, Standard Provisions – Permit Compliance, subsection I.D), report any noncompliance with the exception noted below, and mitigate any discharge from the collection system in violation of this Order (Attachment D, Standard Provisions – Permit Compliance, subsection I.C).

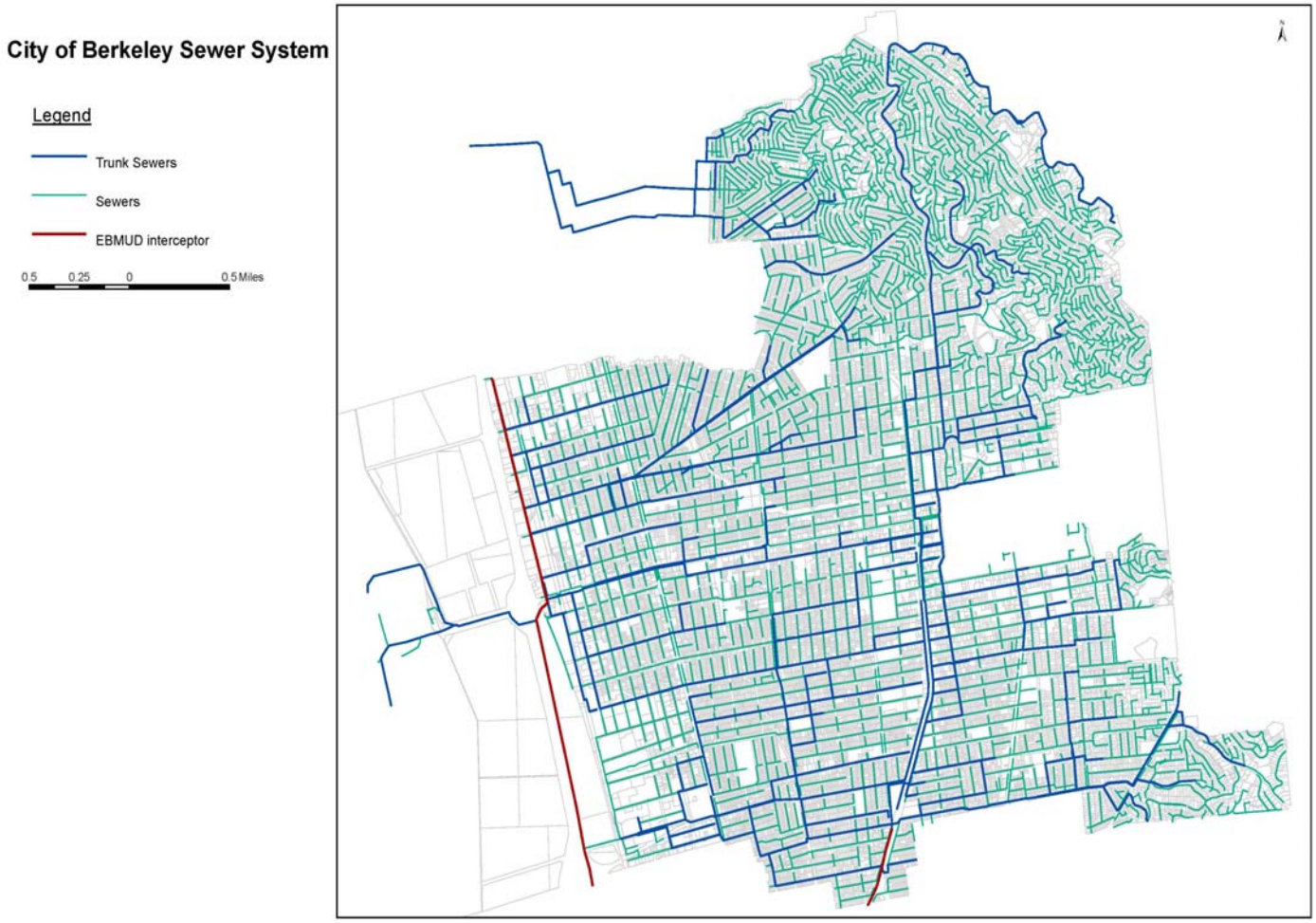
   The General Waste Discharge Requirements for Collection System Agencies (General Collection System WDR) Order No. 2006-0003-DWQ has requirements for operation and maintenance of wastewater collection systems and for reporting and mitigating sanitary sewer overflows. While the Discharger must comply with both the General Collection System WDR and this Order, the General Collection System WDR specifically stipulates requirements for operation and maintenance and for reporting and mitigating sanitary sewer overflows. Implementation of the General Collection System WDR requirements for proper operation and maintenance and mitigation of spills will satisfy the corresponding federal NPDES requirements specified in this Order provided the Discharger reduces peak wet weather flows so that it does not cause or contribute to discharges at EBMUD's Wet Weather Facilities.

Following reporting requirements in the General Collection System WDR will satisfy NPDES reporting requirements for discharges of untreated or partially treated wastewater from the Discharger's wastewater collection system. Furthermore, Regional Water Board staff issued notification and certification requirements in its letter on May 1, 2008. While not a part of this NPDES permit, the requirements in the May 1, 2008, letter continue to be in effect, and the letter is included in Attachment G for reference.

Exception to noncompliance reporting. This Order does not require that the Discharger report noncompliance with Prohibition III.D. EBMUD's NPDES Permit CA0038440 requires EBMUD to report such discharges from its Wet Weather Facilities so reporting by the Discharger is not necessary.

Attachment A – Not Used

ATTACHMENT B – COLLECTION SYSTEM SERVICE AREA



Attachment C – Not used

ATTACHMENT D – STANDARD PROVISIONS (FEDERAL)

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

G. Bypass

1. Definitions

   a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)

   b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and

c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)

b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was

caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):

a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));

c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));

5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and

6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)

2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. § 122.22(a)(3).).

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (470 C.F.R. § 122.22(b)(1));

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard

Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.22(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time

the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):

a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii).)

The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 C.F.R. § 122.41(l)(1)(ii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 C.F.R. § 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and

2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 C.F.R. § 122.42(b)(2).)

3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

ATTACHMENT F – FACT SHEET

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ATTACHMENT F– FACT SHEET

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	2 019069001
Discharger	City of Berkeley
Name of Facility	Sewer Collection System
Facility Address	Berkeley city limits
	Berkeley, CA
	Alameda County
Facility Contact, Title, and Phone	Adadu Yemane, Associate Civil Engineer (510) 981-6413
Authorized Person to Sign and Submit Reports	Same
Mailing Address	2180 Milvia Street, Berkeley, CA 94704
Billing Address	Same
Type of Facility	Sewer Collection System
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Pretreatment Program	N
Reclamation Requirements	Not Applicable
Facility Permitted Flow	0 gallons per day
Facility Design Flow	Not Applicable
Watershed	San Francisco Bay
Receiving Water	Various
Receiving Water Type	enclosed bay

A. The City of Berkeley (hereinafter Discharger) owns and maintains approximately 258 miles of mainline sewers and 130 miles of lateral sewers for a total of 388 miles of wastewater collection system. The Discharger also owns and maintains seven pump

stations. This wastewater collection system serves a population of about 106,000 people in the City of Berkeley.

The Discharger is one of seven East Bay Communities or "Satellite Agencies" that operates wastewater collection systems in the East Bay that route sewage to East Bay Municipal Utility District's (EBMUD) wastewater treatment facilities. The other six Satellite Agencies include Stege Sanitary District and the Cities of Albany, Alameda, Emeryville, Oakland and Piedmont. Wastewaters collected from the East Bay Communities' collection systems flow to interceptors owned and operated by EBMUD. EBMUD treats the wastewater at its treatment facilities and discharges the treated wastewater to San Francisco Bay, under a separate NPDES permit (CA0037702).

B. The Discharger's sewer collection system has been regulated by Order No. R2-2004-0010, which was adopted on March 17, 2004, and expired on March 16, 2009. The Discharger is also regulated by State Water Board Order No. 2006-0003-DWQ Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

II. FACILITY DESCRIPTION

A. Description of Sewer Collection System

The Discharger owns and operates about 388 miles of wastewater collection systems in the City of Berkeley in Alameda County. The sewer collection system transports wastewater from industrial, commercial, and residential sources to EBMUD's wastewater interceptor system, which conveys flow from multiple agencies to the main Wastewater Treatment Plant where EBMUD treats the wastewater and discharges it to San Francisco Bay. During wet weather, because of increased flows caused by inflow and infiltration (I&I) from collection systems tributary to EBMUD facilities, the wastewater also flows to EBMUD's Wet Weather Facilities where EBMUD stores the wastewater or partially treats it prior to discharge to San Francisco Bay.

B. Discharge Points and Receiving Waters

This Order prohibits discharges from the Discharger's sewer collection system so there are no authorized discharge points.

C. Summary of Existing Requirements

The previous permit prohibited discharge with the following requirements:

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.

At B.1 (Implementation and Enforcement of Prohibition A.1), the previous permit noted that prohibition 1 is not violated (a) if the sewer system discharge does not enter a storm drain or surface water body, or (b) if the Discharger contains the sewer system discharge within the storm drain system pipes, and fully recovers and cleans up the spilled wastewater.

D. Compliance Summary

For 2007 and 2008, Table F-2 shows the estimated number and causes of sewer system discharges in the Discharger's service area. This information is not necessarily indicative of ongoing causes, in part because there are often multiple causes for any one particular sewer system discharge.

Table F-2. Sewer System Discharges and Primary Causes

	2007			2008		
	Mains	Laterals	Total	Mains	Laterals	Total
Number of Discharges	(1)	(1)	51	15	53	68
% Caused by Roots	(1)	(1)	(1)	46	42	
% Caused by Grease	(1)	(1)	(1)	23	6	
% Caused by Debris	(1)	(1)	(1)	8	15	
% Caused by Other				23	32	

(1) This information is not available due to staff turnover; however, the Discharger has updated data tracking tools and procedures to improve the quality of its data.

The increase in sewer system discharges in 2008 was largely due to increased root intrusion in the Discharger's collection system. During drought conditions trees and large shrubs extend their roots to seek water, including to cracked joints in a sewer. To minimize sanitary sewer system discharges associated with roots, the Discharger indicates that it plans to apply root control chemical to areas showing heavy root intrusion.

E. Planned Changes

As required by Cease & Desist Order (CDO) No. 93-134, the Discharger will continue to rehabilitate and replace portions of its collection system. This CDO includes a compliance plan with projects that the Discharger must implement each year. The deadline for completing all projects associated with CDO No. 93-134 is June 30, 2016. The purpose of these projects is to prevent discharges of untreated or partially treated wastewater from its wastewater collection system. The background and history for these requirements are detailed in the subsections below.

Background and Regulatory History

a. *History.* The wastewater 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 I&I during the wet weather season. In the early 1980s, it was noted that during storms, the collection systems might receive up to 20 times more flow than in dry weather. As a result, the East Bay Communities' collection systems might overflow to streets, local watercourses, and the Bay, creating a risk to public health and impairing water quality.

b. *I&I Effect on EBMUD's Interceptor System*. The East Bay Communities' collection systems 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 designed overflow structures in EBMUD's interceptor along the shoreline of central San Francisco Bay.

c. *EBMUD wet weather permits*. The Regional Water Board first issued an NPDES permit to EBMUD in 1976 for the wet weather discharges from EBMUD's interceptors. This permit required EBMUD to eliminate the 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 reissued permits following construction of wet weather treatment facilities.

d. *Collection system permits to East Bay Communities.* Following issuance of the wet weather permit to EBMUD in 1976, the Regional Water Board issued similar permits in 1976 to all members of the East Bay Communities except the City of Emeryville. The Regional Water Board reissued these permits in 1984, 1989 and 1994. Emeryville 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 City of Emeryville after completion of the East Bay I&I Study and issuance of the Cease and Desist Orders (CDO) in 1986.

e. *East Bay I&I Study and I/ICP*. In response to the requirements in the Regional Water 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' collection systems up to the 5-year storm event. The total program cost was estimated at $304 million in 1985 dollars.

f. *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 Regional Water Board, State Water Board, and USEPA may participate in the TAB.

g. *Cease and Desist Order (CDO)*. In 1986, the Regional Water Board issued a CDO to the East Bay Communities including the City of Emeryville (Order No. 86-17, reissued with Order No. 93-134). This CDO requires the East Bay Communities to cease and desist discharging from their wastewater collection systems. In CDO No. 86-17, the Regional Water 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.

h. *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 was 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 wet weather treatment facilities, and two wet weather interceptors, new storage basins and pumping facilities, expansion of the main wastewater treatment plant, and elimination of two out of the seven designed wet weather overflow structures.

i. *Updates to original I/ICP.* After receiving a notice from the Regional Water 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 six years from 1987 to 1993 in order to better address the remaining I/ICP projects.

j. *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 Emeryville submitted a revised Compliance Plan and Schedule in October 1993. In light of the increased costs, the Regional Water Board granted the Discharger and the Cities of Alameda, Albany, Oakland, and Piedmont a five (5) to ten (10) year extension to the original compliance schedules in the CDO reissuance in October 1993.

k. *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 involved balancing the cost of rehabilitation of the East Bay Communities' sewer systems and the cost for increasing the capacity of EBMUD's interceptors and 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) indicated 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 involved 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.

l. *Design goal of I/ICP.* The design goal of East Bay I/ICP was 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 could continue to occur for events less than the 5-year design storm until the Discharger completed its I/ICP. However, the occurrence of overflows decreased as more of the East Bay I/ICP projects was completed.

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

m. *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 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 had 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. It should be noted that the State Water Board in 2007 remanded this portion of the Basin Plan in its Order WQ 2007-0004 with direction that the Regional Water Board initiate a Basin Plan amendment to ensure that its regulation of wet weather overflows is consistent with the Clean Water Act.

n. In 2009, the Regional Water Board adopted Order No. R2-2009-0004 reissuing the EBMUD permit and prohibiting any discharge from EBMUD's three Wet Weather Facilities ("WWFs"), located at 2755 Point Isabel Street, Richmond; 225 Fifth Avenue, Oakland; and 5597 Oakport Street, Oakland. Shortly afterwards, the USEPA, and the Regional and State Water Boards filed a Federal Action (lawsuit) against EBMUD for discharges in violation of this prohibition and entered into a Stipulated Order ("SO") based on EBMUD's immediate inability to comply. The SO requires EBMUD, among other things, to conduct flow monitoring on the 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.

o. EBMUD had a number of studies conducted to provide the basis for developing many of the technical provisions of the SO. One conclusion of these studies was that, while the Satellite Agencies had made significant progress in reducing inflow and infiltration ("I/I") through the I/ICP and subsequent sewer pipe rehabilitation, it is unlikely that these projects will be sufficient to reduce flows from the Satellite Agencies to the extent that discharges from the WWFs are eliminated or significantly reduced. The cooperation of each Satellite Agency in the development and implementation of the programs specified above, along with making improvements to their own wastewater collection systems, is critical to achieving the flow reductions within each system that is necessary to eliminate or significantly reduce the discharge from the WWFs.

Progress in Reducing Inflow & Infiltration and Eliminating Overflows

The East Bay Communities most recent update, dated December 31, 2008, indicates that sewer rehabilitation is 81.1 percent complete. The Communities have completed all of the I&I projects that were designed to eliminate overflow locations identified as high threats to human health and removed all sanitary sewer system bypasses identified in the CDO that diverted wet weather overflows to storm drains. At this time, Stege Sanitary District and the Cities of Alameda, Emeryville, and Piedmont have completed their respective requirements under CDO No. 93-134. The Discharger still has additional rehabilitation work to complete. The City of Berkeley anticipates that it will complete the work required by CDO No. 93-134 well before its June 30, 2016 deadline. Finally, to date, the work under the CDO has also reduced peak wet weather flows from the East Bay Communities to EBMUD's interceptor from about 20 times dry weather flows to just above 10.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the San Francisco Bay (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

   Common beneficial uses for central and lower San Francisco Bay, as identified in the Basin Plan, are:

a. Commercial and sport fishing

b. Estuarine habitat

c. Industrial service and process 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

Requirements of this Order implement the Basin Plan.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants. Requirements of this Order are consistent with the NTR and CTR because discharges from the wastewater collection system are prohibited.

3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order are consistent with the SIP because discharges from the wastewater collection facility are prohibited.

4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for

CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

5. **Antidegradation Policy.** Section 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provisions of section 131.12 and Resolution No. 68-16. Because this Order prohibits discharge, it is consistent with the antidegradation provisions of section 131.12 and Resolution No. 68-16.

6. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations[2] section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Because this Order does not allow any discharges, it is consistent with the antidegradation provisions of section 131.12 and Resolution No. 68-16.

D. Impaired Water Bodies on CWA 303(d) List

On June 28, 2007, the USEPA approved a revised list of impaired water bodies prepared by the State [hereinafter referred to as the 303(d) list], pursuant to provisions of CWA section 303(d) requiring identification of specific water bodies where it is expected that water quality standards will not be met after implementation of technology-based effluent limitations on point sources. Lower and Central San Francisco Bay are listed as impaired water bodies. The pollutants impairing these water bodies include chlordane, DDT, dieldrin, dioxin compounds, exotic species, furan compounds, mercury, PCBs, dioxin-like PCBs, and selenium. The SIP requires final effluent limitations for all 303(d)-listed pollutants to be based on total maximum daily loads (TMDLs) and associated waste load allocations (WLAs). Because this Order prohibits discharge, a detailed discussion of the Regional Water Board's process of developing TMDLs, WLAs and resulting effluent limitations is, therefore, unnecessary.

E. Other Plans, Polices and Regulations

This Order is not based on any other plans, polices or regulations.

[2] All further regulatory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

IV. RATIONALE FOR DISCHARGE PROHIBITIONS

1. Discharge Prohibition III.A (no sewer system discharges to Waters of the United States): This prohibition is based on the federal Clean Water Act, which prohibits discharges of wastewater that does not meet secondary treatment standards as specified in 40 CFR Part 133. Additionally, the Basin Plan prohibits discharge of raw sewage or any waste failing to meet waste discharge requirements to any waters of the basin.

2. Discharge Prohibition III.B (no sewer system discharges shall create a nuisance as defined in California Water Code Section 13050(m)): This prohibition is based on California Water Code Section 13263, which requires the Regional Water Board to prescribe waste discharge requirements that prevent nuisance conditions from developing.

3. Discharge Prohibition III.C (**no discharge of chlorine, or any other toxic substance used for disinfection and cleanup of sewage spill to any surface water body):** The Basin Plan contains a toxicity objective stating, "All waters shall be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses to aquatic organisms." Chlorine is lethal to aquatic life.

4. Discharge Prohibition III.D (shall not cause or contribute to discharges from EBMUD's three wet weather facilities): Because excessive I&I has contributed to discharges of partially treated wastewater at EBMUD's Wet Weather Facilities, in violation of Order No. R2-2009-0004, this prohibition is necessary to ensure that the Discharger properly operates and maintains its wastewater collection system (40 CFR Part 122.41(e)) so as to not cause or contribute to violations of the Clean Water Act.

This prohibition is based on 40 CFR 122.41(e) that requires permittees to properly operate and maintain all facilities, and the need for this specific prohibition results from recent changes in permit requirements for EBMUD's wet weather facilities. The requirement for 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 the recent changes in permit requirements for EBMUD's WWFs.

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