

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
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FACT SHEET

FOR
NPDES PERMIT and WASTE DISCHARGE REQUIREMENTS for
City of Berkeley, Alameda County

NPDES Permit No. CA0038466

PUBLIC NOTICE:

Written Comments

- Interested persons are invited to submit written comments concerning this draft permit.
- Comments must be received by the Regional Board no later than 5:00 p.m. on February 16, 2004.
- Send comments to the ATTN: Jenny Chen

Public Hearing

- The draft permit will be considered for adoption by the Board at a public hearing during the Board's regular monthly meeting at: Elihu Harris State Office Building, 1515 Clay Street, Oakland, CA; 1st floor Auditorium.
- This meeting will be held on: March 17, 2004, starting at 9:00 am.

Additional Information

- For additional information about this matter, interested persons should contact Regional Board staff member: Ms. Jenny Chen, Phone: (510) 622-2405; email: jc@rb2.swrcb.ca.gov

This Fact Sheet contains information regarding an application for waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permit for the City of Berkeley for controlling sanitary sewer overflows (SSOs) during wet weather condition. The Fact Sheet describes the factual, legal, and methodological basis for the proposed permit and provides supporting documentation to explain the rationale and assumptions used in deriving the limits.

I. INTRODUCTION

The Discharger owns and maintains approximately 270 miles of sanitary sewer mains and 130 miles of City owned sewer laterals. The Discharger's sewer systems are connected to interceptors owned by East Bay Municipal Utility District, Special District 1, or EBMUD. The Discharger's collection system serves a population of 104,600 in the City of Berkeley. The wastewater collected from the Discharger's service area is treated by EBMUD's wastewater treatment facilities. The collection system was originally constructed in the early twentieth century with cross connections to storm drain systems. In the 1970s and 1980s, overflows occurred frequently due to these storm drain cross connections as well as to infiltration into the Discharger's collection system. These overflows resulted in untreated wastewater overflows (also called SSOs) to streams, creeks or the Bay during storm events.

II. BACKGROUND INFORMATION ON EAST BAY I/ICP

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

The East Bay Communities and EBMUD initiated a 6-year East Bay Sewer System Evaluation Survey (SSES) in 1980. The SSES outlined recommendations for a sewer improvement program called the I/I Correction Program (I/ICP). Schedules to complete the I/ICP, which are called Compliance Plans, were developed for each member of the East Bay Communities. The East Bay Communities and EBMUD started implementing the I/ICP in 1987. Since then, the East Bay Communities have eliminated all known cross connections between sewer and storm drain systems, and 113 out of 115 sewer overflow points identified in the SSES as high threats to public health from the East Bay Communities' wastewater collection systems.

In conjunction with the SSES, EBMUD conducted its own wet weather program planning from 1975 to 1987, and developed a comprehensive East Bay Wet Weather Program. This East Bay Wet Weather Program combined the results of the I/I Studies and the EBMUD facility planning and developed a cohesive approach to reducing sanitary sewer overflows in the East Bay. EBMUD started implementing its component of the East Bay Wet Weather Program in 1987. Since then, EBMUD has spent about \$310 million on the East Bay Wet Weather Program. EBMUD has constructed three (3) wet weather treatment facilities, two (2) wet weather interceptors, improvements at its Main Wastewater Treatment Plant, system storage and pumping facilities and has eliminated two designed wet weather overflow structures. As a result, EBMUD's interceptor and treatment facilities will be able to treat all wet weather flows up to a 5-year design storm from the East Bay Communities after the East Bay Communities complete their I/ICP.

III. GENERAL RATIONALE

The following documents are the bases for the requirements contained in the proposed Order, and are referred to under the specific rationale section of this Fact Sheet.

- Federal Water Pollution Control Act, as amended (hereinafter the CWA).
- Federal Code of Regulations, Title 40 (40 CFR)- Protection of Environment, Chapter 1, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-129 (hereinafter referred to as 40 CFR specific part number).
- Porter-Cologne Water Quality Control Act, or California Water Code.
- 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.

IV. SPECIFIC RATIONALE

1. Basis for Prohibitions

a. Prohibition A.1 (no discharges of untreated or partially treated sewage to State water):

This prohibition is based on the Clean Water Act, which prohibits discharges of wastewater that does not meet secondary treatment standards as specified in 40CFR 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 Plan.

b. Prohibition A.2 (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.

c. Implementation and enforcement of Prohibition A.1.

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

4. Basis for Receiving Water Limitations

a. Receiving water limitations C.1 and C.2 (conditions to be avoided):

These limits are based on the previous permit and the narrative/numerical objectives contained in Chapters 2 and 3 of the Basin Plan.

b. Receiving water limitations C.3 and C.4 (Dissolved Oxygen and un-ionized ammonia limitations):

This requirement is based on the Basin Plan receiving water objectives.

5. Basis for Provisions

a. Provision D.1. (Controlling and containing SSO)

This requirement is based on available practices for addressing SSOs commonly used by some collection system operators.

b. Provision D.2. (SSO Reporting)

This requirement is based on California Water Code Section 13193, 40CFR 122.48, and the Board's Resolution No. 2003-R2-0095.

c. Provision D.3. (Sewer System Management Plan)

This requirement is based on 40 CFR 122.41(e) for proper operation and maintenance, and (d) for Duty to mitigate. These two standard NPDES requirements require dischargers to

properly operate and maintain their collection systems as well as take all reasonable steps to minimize or prevent SSO discharges to waters of the United States, and waters of the State that have a reasonable likelihood of adversely affecting human health or the environment. These requirements, along with prohibition on SSOs discharge to waters of the State are the basis for requiring dischargers to provide adequate sanitary sewer collection system capacity. It is also consistent with the Board's SSO Resolution No. 2003-R2-0095, which was developed collaboratively with the Bay Area Clean Water Agencies.

d. Provision D.4. (Change in Control or Ownership):

This provision is based on 40 CFR 122.61.

e. Provisions D.5 and D.6. (Permit compliance and rescission of previous permit):

Timeframes are consistent with the State's Memorandum of Agreement with the U.S. EPA.

f. Provision D.7 (Permit Expiration and Reapplication):

The term of the permit is five (5) years, which is consistent with 40 CFR 122.46 (a).

V. WASTE DISCHARGE REQUIREMENT APPEALS

Any person may petition the State Water Resources Control Board to review the decision of the Board regarding the Waste Discharge Requirements. A petition must be made within 30 days of the Board public hearing.