State of California Regional Water Quality Control Board San Diego Region

REVISED

EXECUTIVE OFFICER SUMMARY REPORT January 21, 2009

ITEM: 6

SUBJECT: PUBLIC HEARING: NPDES Permit Reissuance: City of San Diego

Point Loma Ocean Outfall Discharge to Pacific Ocean. Discussion of Tentative NPDES Permit No. CA0107409 and waste discharge requirements for the City of San Diego E. W. Blom Point Loma Metropolitan Wastewater Treatment Plant discharge to the Pacific Ocean through the Point Loma Ocean Outfall, based on a variance from federal secondary treatment standards at Title 40 of the Code of Federal Regulations Part 133 (40 CFR 30), as

provided for improved discharges under Clean Water Act section 301(h) and 40 CFR 125, Subpart G. The USEPA and the Regional Board will jointly conduct this public hearing to receive comments related to the tentative NPDES permit. The Regional Board will not adopt the NPDES permit at this hearing, but will formally act on the permit at a subsequent later Board meeting. The public comment period for this item will remain open until 5:00 p.m. on January 28, 2009 and all written comments submitted by the deadline will be considered by the Board before taking action on the tentative permit. (Tentative Order No. R9-2009-0001) (Melissa

Valdovinos)

PURPOSE: The United States Environmental Protection Agency (USEPA) and

the Regional Board will jointly conduct this public hearing to receive comments related to the tentative NPDES permit/order, including the tentative decision document (TDD) regarding the City's application for a variance from secondary treatment requirements of the Clean Water Act, pursuant to section 301(h) and (j)(5). The Regional Board will not adopt the NPDES

permit/order at this hearing, but will formally act on the permit at a

subsequent later Board meeting.

PUBLIC NOTICE: USEPA and the Regional Board published a Joint Notice of

Proposed Actions in the San Diego Union Tribune newspaper on December 5, 2008, which announced this January 21, 2009 meeting and gave instructions on submitting comments on the tentative NPDES permit/order and TDD. The public comment

period will remain open until January 28, 2009.

The tentative NPDES permit/order and TDD were sent out on December 5, 2008 to the City of San Diego Metropolitan

Wastewater Department (the City) and to all known interested parties and agencies. Copies were also made available for public review at the Regional Board web site and office on December 5, 2008.

DISCUSSION:

The City is currently discharging advanced primary treated wastewater to the Pacific Ocean via the Point Loma Ocean Outfall pursuant to Order No. R9-2002-0025, as amended, and NPDES Permit No. CA0107409, as modified. The effluent limitations are based, in part, on a variance from secondary treatment standards contained in the Clean Water Act as granted by USEPA pursuant to sections 301(h) and (j)(5). The variance results in biochemical oxygen demand (BOD) and total suspended solids (TSS) limitations that are less stringent than federal secondary requirements (based on Ocean Pollution Reduction Act [OPRA] requirements). Also in accordance with OPRA, a reduction of TSS mass emissions is required. In the draft permit/order, a limitation of 15,000 metric tons per year must be achieved on the permit effective date through December 31, 2013, and a limitation of 13,598 metric tons per year must be achieved by January 1, 2014.

The wastewater treatment system consists of mechanical bar screens, aerated grit removal, chemical addition, sedimentation, and partial chlorination. The Point Loma Ocean Outfall (PLOO) discharges the wastewater effluent approximately 4.5 miles offshore. Although this is beyond the limit of State-regulated ocean waters, potential plume migration within this limit warrants joint regulation of the effluent, from USEPA as well as the State.

Order No. R9-2002-0025 expired on June 15, 2008 but has been administratively extended. The City submitted an application for a renewed permit and 301(h) variance on December 14, 2007, and supplemental information requested by the Regional Board, on June 6, 2008. In a letter to the City of San Diego, dated November 13, 2008, the Regional Board deemed the application complete. The tentative permit/order establishes discharge requirements based on modified secondary treatment requirements in accordance with federal Clean Water Act sections 301(h) and (j)(5).

The need for water quality-based effluent limitations for toxic pollutants listed under Table B of the Ocean Plan was determined using the reasonable potential analysis (RPA) procedures of the Ocean Plan, which were added in 2005. The RPA procedures

use a statistical approach to determine if the discharge has the potential to cause an exceedance of the water quality objectives for the Pacific Ocean for the toxic pollutants listed under Table B of the Ocean Plan, based on historical effluent data and the dilution factor for the PLOO. The RPA results for this discharge indicated that the effluent only has reasonable potential to cause exceedances of water quality objectives for chronic toxicity, chlordane, and heptachlor; therefore, water quality-based effluent limitations are included in the tentative order for these parameters. Performance goals, rather than effluent limitations, are included in the tentative order for all other toxic pollutant parameters of Table B of the Ocean Plan. Performance goals are not enforceable effluent discharge specifications or standards for the regulation of the discharge; however, inclusion of performance goals supports State and federal antidegradation policies and provides all interested parties with information regarding the expected levels of pollutants in the discharge that should not be exceeded to maintain the water quality objectives established in the Ocean Plan.

Comments on Tentative Order No. R9-2009-0001 have been received from eight parties as of January 7, 2009. One party expressed opposition to the operations of the plant. Six parties support and concur with the TDD and tentative NPDES permit/order. One party provided comments on disinfection technique, minimization of pharmaceuticals, laboratory analysis/reporting, and bacterial fate and transport. Additional comments received and any will be provided in the supplemental agenda packet. Written responses to comments will be prepared after the close of the comment period on January 28, 2009. Comments on the TDD will be addresses by USEPA.

SIGNIFICANT CHANGES:

The following areas in the tentative permit/order differ from the current permit/order:

- 1. Standard language for certain Findings, Standard Provisions, and the permit format recommended by the State Board are implemented.
- 2. A RPA was conducted for water quality-based limitations using data supplied by the City. Effluent limitations were included for the constituents with reasonable potential to exceed water quality objectives; chronic toxicity, chlordane, and heptachlor. Constituents that do not have reasonable potential or had inconclusive RPA results are assigned performance goals in the

tentative order. These constituents are also assigned monitoring requirements, but the results will be used for informational purposes only, not compliance determination.

- 3. Section VII Compliance Determination has been added to explain how compliance with the requirements of the tentative order will be determined.
- 4. The 2005 California Ocean Plan's definition of the zone where bacterial objectives apply includes areas used for water contact sports, as determined by the Regional Board (i.e., waters designated as REC-1 for contact water recreation). The current permit applies these bacterial objectives to a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline. USEPA maintains that based on the Water Quality Control Plan for the San Diego Basin 9 (Basin Plan) definitions for REC-1 beneficial use and for Ocean Waters, REC-1 beneficial use must be protected throughout State of California territorial marine waters in the San Diego Region, which extend surface to bottom, out to three nautical miles from the shoreline. These bacterial objectives, which now include enterococcus, in addition to total and fecal coliforms, are applied throughout State of California territorial marine waters in the draft permit/order.

COMPLIANCE:

The City has generally complied with the requirements of the current NPDES permit/order; noncompliance consists of the following:

- 1. The City violated the daily maximum effluent limitation of 205 chronic toxicity units (TUc) for chronic toxicity on May 4, 2003 at >667 TUc.
- 2. The City violated the daily maximum effluent limitation of 3 mg/L. for settleable solids on June 8, 2004 at 7.5 mg/l and on August 21, 2004 at 3.5 mg/L.
- 3. The City violated the 7-day average effluent limitation of 1.5 mg/L for settleable solids on June 12, 2004 at 1.8 mg/L and on June 14, 2004 at 1.7 mg/L.
- 4. The City violated the 30-day average effluent limitation of 4.7 mg/L for chlordane in July and August 2004 at 34.8 mg/L.

- 5. The City violated the 30-day average effluent limitation of 10 mg/L for heptachlor in July and August 2004 at 11 mg/L.
- 6. The City violated the 30-day average effluent limitation of 10 mg/L for heptachlor in July and August 2004 at 11 mg/L.

These violations resulted in an Administrative Civil Liability of \$42,000 on September 14, 2005 (Order No. R9-2005-0229).

KEY ISSUES:

- 1. The tentative permit/order establishes discharge requirements based on modified secondary treatment requirements in accordance with federal Clean Water Act sections 301(h) and (j)(5), which results in less stringent BOD and TSS limitations. This has been the case for the past two permit terms as well.
- 2. Bacterial objectives for enterococcus, total coliform, and fecal coliform, are applied beyond the shoreline area, throughout State of California territorial marine waters.

LEGAL CONCERNS: None

SUPPORTING DOCS:

- 1. Site Map
- 2. Joint Notice of Proposed Actions
- 3. USEPA Tentative Decision Document
- 4. Transmittal Letter for Draft NPDES Permit No. CA0107409 and Tentative Order No. R9-2009-0001
- 5. Draft NPDES Permit No. CA0107409 and Tentative Order No. R9-2009-0001
- 6. Comments on Draft NPDES Permit No. CA0107409 and Tentative Order No. R9-2009-0001, as of January 7, 2009 (from James Gilhooly, Metro Joint Powers Authority, City of Chula Vista, City of Poway, City of Coronado, City of La Mesa, Otay Water District, and Sierra Club)
- 7. Additional Comments Letters from Padre Dam Municipal Water District (12/19/08), City of San Diego Metropolitan Wastewater Department (1/7/09), City of Imperial Beach (Received 1/9/09), National City (1/5/09), and City of El Cajon (1/5/09).
- 8. Section 301(j)(5) of the Clean Water Act, also know as the Ocean Pollution Reduction Act

RECOMMENDATION:

Not applicable; the Regional Board will not be acting on the NPDES permit at this meeting.