State of California Regional Water Quality Control Board San Diego Region

## EXECUTIVE OFFICER SUMMARY REPORT November 13, 2013

ITEM: 6

SUBJECT: NPDES Permit Reissuance: Marine Corps Base, Camp

Pendleton, Discharges from Southern Regional Tertiary Treatment Plant and Advanced Water Treatment Plant to the Pacific Ocean via the Oceanside Ocean Outfall, San Diego County (Tentative Order No. R9-2013-0112, NPDES

Permit No. CA0109347). (Joann Lim)

PURPOSE: To reissue waste discharge requirements and National

Pollutant Discharge Elimination System (NPDES) Permit No. CA0109347 with the adoption of the revised Tentative

Order No. R9-2013-0112.

RECOMMENDATION: Adoption of the revised Tentative Order No. R9-2013-0112

is recommended.

KEY ISSUES: 1. Th

 The Tentative Order continues the San Diego Water Board's efforts to protect contact water recreation (REC-1) beneficial use within all jurisdictional ocean waters by updating the bacterial receiving water limitations, in conformance with the requirements of the 2012 California Ocean Plan and the Basin Plan.

- 2. The City of Oceanside's evaluation of the receiving waters concluded that the Marine Corps Base, Camp Pendleton wastewater discharge is not a major contributor to the bacterial exceedances in the Pacific Ocean receiving water. Nonetheless, if there are any changes to their facilities or processes, the permit requires the Marine Corps Base, Camp Pendleton to determine if the changes to the effluent may cause or contribute to violations of the bacterial receiving water limitations.
- 3. The permitted amount, types of discharge, and the effluent limitations have remained the same in the Tentative Order from current Order No. R9-2008-0096 (as amended by Order No. R9-2012-0041) and changes listed below are minor and common to the

other wastewater treatment plant NPDES permits in the San Diego Region.

DISCUSSION:

The Marine Corps Base, Camp Pendleton (Discharger) is the owner of the Southern Regional Tertiary Treatment Plant (SRTTP) and Advanced Water Treatment Plant at Haybarn Canyon (AWT). The SRTTP treats wastewater from the southern portion of Marine Corps Base, Camp Pendleton that is primarily domestic in nature from residences, commercial areas, and offices. The AWT is a potable water treatment facility that receives water pumped from groundwater wells within the Ysidora Hydrologic area and processes the water for potable water consumption. Discharge requirements were first established for the AWT on June 13, 2013 when the Discharger's current Order No. R9-2008-0096 was amended (Amending Order No. R9-2012-0041). The AWT started full continuous discharge on March 4, 2013. (Supporting Document No. 1, Location Map of facilities.)

SRTTP discharges of secondary- and tertiary-treated wastewater, and AWT discharges of brine are comingled and discharged jointly approximately 1.7 miles out into the Pacific Ocean, a water of the United States, through the Oceanside Ocean Outfall (Oceanside OO). The City of Oceanside (City), Fallbrook Public Utility District (FPUD), and Genentech discharge to the shared Oceanside OO under separate waste discharge requirements. (Supporting Document No. 2, Attachment F, Fact Sheet, Sections II.A. and II.B., Pages F-4 through F-7 for more details on the facilities.)

Discharges from the SRTTP and AWT are currently regulated by Order No. R9-2008-0096 and NPDES Permit No. CA0109347, which was adopted on November 1, 2008, amended on June 13, 2012 (Amending Order No. R9-2012-0041), and expired on November 1, 2013. Following the Discharger's submittal of a complete reissuance application prior to the November 1 expiration date, Order No. R9-2008-0096 was administratively extended and will remain fully effective under the administrative extension until such time as it is superseded by this Tentative Order or other Order.

The Tentative Order (Supporting Document No. 2) was developed based on information in the Discharger's reissuance application, the Discharger's self-monitoring

reports, and other available sources, such as facility inspection reports. The Tentative Order implements the permitting requirements in the federal Clean Water Act, Code of Federal Regulations, and California Water Code, applicable to a wastewater plant and to brine discharges. The Tentative Order also updates the waste discharge requirements to be consistent with other ocean discharges in the San Diego Region, the Ocean Plan, and Basin Plan. (See Significant Changes below.). If adopted, the Tentative Order will supersede Order No. R9-2008-0096 and update waste discharge requirements for the discharge of waste from the SRTTP and AWT to the Oceanside OO. If adopted, the Tentative Order will remain in effect for a five-year fixed term.

The City and the Discharger submitted comments on the Tentative Order, by email dated September 18, 2013 and by letter dated October 3, 2013, respectively. (Supporting Documents Nos. 3 and 4.) Supporting Document No. 5 is the Response to Comments document, which was developed in consultation with the City and the Discharger, and addresses all of the City's and Discharger's comments and concerns. Where appropriate, changes have been made to the Tentative Order (See Supporting Document No. 2 for changes that are shown in red underline/strikeout format to indicate added and removed language). On October 30, 2013, the Response to Comments document and revised Tentative Order were sent to the Discharger and to all known interested persons, and posted on the San Diego Water Board's website.

SIGNIFICANT CHANGES:

The Tentative Order contains the following changes from current Order No. R9-2008-0096:

1. The receiving water zone where bacterial limitations apply has been expanded to be consistent with the requirements of the Ocean Plan and the Basin Plan. The current Order only applies bacterial receiving water limitations 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. The Tentative Order expands this zone to include ocean waters used for water contact sports, as determined by the San Diego Water Board (i.e., ocean waters with the REC-1 beneficial use designation). For the San Diego Region, the REC-1 beneficial use designation applies to all jurisdictional ocean waters, surface to bottom,

extending three nautical miles into the Pacific Ocean from the shoreline. The requirement to meet bacterial receiving water limitations in this expanded zone is consistent with similar requirements in other San Diego Water Board ocean outfall NPDES Permits. This interpretation has been confirmed by the US Environmental Protection Agency (USEPA).

Based on the City's evaluation of the receiving waters. effluent from the Discharger and FPUD are believed to contribute relatively low densities of bacteria as compared to the City's effluent. Brine from Genentech is believed to carry little, if any, pathogens. Due to the high densities of bacteria appearing in the City's past effluent monitoring data, the San Diego Water Board is working with the City to achieve full compliance with the bacterial receiving water limitations under separate waste discharge requirements. If there are new or modified facilities or processes from the Discharger. FPUD, and/or Genentech that increase the bacterial density in the effluent, the San Diego Water Board will also work with all appropriate dischargers to achieve full compliance with the bacterial receiving water limitations. (Supporting Document No. 2, Section VI.C.7, Pages 21-22; Attachment F, Fact Sheet, Section V., Page F-31; and Attachment F, Fact Sheet, Section VI.B.7., Page F-35.)

- 2. The requirement for repeat effluent sampling for chronic toxicity has been updated to be consistent with other San Diego Water Board ocean outfall NPDES Permits and to conform to appropriate toxicity guidance documents and regulations. The current Order requires the Discharger to increase the sampling frequency when there is a chronic toxicity exceedance to a minimum of two times per month until the results of at least two consecutive toxicity tests do not show violations. The Tentative Order requires six additional tests over a 12-week period based on USEPA guidance documents. (Supporting Document No. 2, Section VI.C.2.d., pages 17 through 18 and Attachment F, Fact Sheet, Section VI.B.2.c., Page F-33.)
- 3. The requirement for repeat monitoring of the receiving waters for bacteria has been updated to be consistent with the provisions of the Ocean Plan and with other San Diego Water Board ocean outfall NPDES Permits.

The current Order does not require additional monitoring when a single sample exceeds any of the single sample bacterial limitations. The Tentative Order requires repeat sampling to determine the extent and persistence of the exceedance. (Supporting Document No. 2, Attachment E, Monitoring and Reporting Program, Section VIII.A.1., pages E-9 through E-10.)

- 4. The monitoring frequency for oil and grease in the influent and effluent has been reduced from weekly to monthly. Influent oil and grease concentrations measured by the Discharger during the previous order are consistent with oil and grease concentrations in untreated domestic wastewater. The SRTTP effluent has been meeting the effluent limitations for oil and grease and effluent monthly monitoring for oil and grease is consistent with monitoring requirements for other wastewater treatment plants. (Supporting Document No. 2, Attachment F, Fact Sheet, Sections VII.A. and VII.B., page F-36.)
- 5. Effluent monitoring for arsenic, cadmium, chromium (VI), lead, mercury, nickel, selenium, silver, zinc, cyanide, nonchlorinated phenolic compounds, chlorinated phenolic compounds, endosulfan, and radioactivity has been reduced from quarterly to semiannually. Consistent with the findings for Order No. R9-2008-0096, there was no reasonable potential for any of these parameters to exceed Ocean Plan objectives. (Supporting Document No. 2, Attachment F, Fact Sheet, Section VII.B., page F-36.)
- 6. Effluent monitoring for copper, Endrin, hexachlorocyclohexane (HCH), aldrin, beryllium, dieldrin, heptachlor, heptachlor epoxide, hexachlorobenzene, polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), TCDD equivalents, and toxaphene has been increased from semiannually to quarterly to assess compliance with the effluent limitations. (Supporting Document No. 2, Attachment F, Fact Sheet, Section VII.B., page F-36.)

COMPLIANCE RECORD:

During the term of Order No. R9-2008-0096, according to the Discharger's self-monitoring reports, there were eight effluent violations, 29 deficient monitoring violations, and seven unauthorized discharges, as of October 17, 2013. Details and enforcement actions taken on each violation are provided in Supporting Document No. 6.

LEGAL CONCERNS: None

SUPPORTING DOCUMENTS:

1. Location Map

2. Revised Tentative Order No. R9-2013-0112

3. City of Oceanside September 18, 2013 Comment Email

4. Discharger October 3, 2013 Comment Letter

5. San Diego Water Board Response To Comments

6. Compliance Record

PUBLIC NOTICE:

On September 6, 2013, a public notice was published in the San Diego Union Tribune and copies of the original Tentative Order emailed to the Discharger and to all known interested persons. The original Tentative Order was also posted on the San Diego Water Board's website.