

- ITEM: 14 a and b
- SUBJECT:
- a. NPDES Permit Reissuance: Waste Discharge Requirements for the *City of Oceanside, San Luis Rey Water Reclamation Facility, La Salina Wastewater Treatment Plant, and Mission Basin Desalting Facility Discharges to the Pacific Ocean via the Oceanside Ocean Outfall* (Tentative Order No. R9-2011-0016, NPDES No. CA0107433) (Joann Cofrancesco)
 - b. Time Schedule Order: *Time Schedule Order No. R9-2011-0017 (formerly R9-2010-0148) Requiring the City of Oceanside, Mission Basin Desalting Facility Discharge to the Pacific Ocean via the Oceanside Ocean Outfall to Comply With Requirements Prescribed in Order No. R9-2011-0016, NPDES No. CA0107433* (Tentative Time Schedule Order No. R9-2011-0017) (Joann Cofrancesco)
- PURPOSE: To adopt Tentative Order No. R9-2011-0016, NPDES No. CA0107433 and Tentative Time Schedule Order No. R9-2011-0017.
- PUBLIC NOTICE: A public notice of Tentative Order No. R9-2010-0120 (Tentative Order) was posted in the San Diego Union Tribune on November 5, 2010. Copies of the Tentative Order and Tentative Time Schedule Order No. R9-2010-0148 (Tentative TSO) were e-mailed to the City of Oceanside and to all known interested parties and agencies on November 5, 2010 and were sent via certified mail to the City of Oceanside on November 8, 2010. On November 5, 2010, copies of the Tentative Order and Tentative TSO were posted on the San Diego Water Board's website.

DISCUSSION:

The City of Oceanside (City) is currently discharging secondary treated wastewater from the San Luis Rey Water Reclamation Facility (SLRWRP) and the La Salina Wastewater Treatment Plant (LSWTP), and waste brine from the Mission Basin Desalting Facility (MBDF) to the Pacific Ocean through the Oceanside Ocean Outfall (Oceanside OO) pursuant to Order No. R9-2005-0136 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0107433. The effluent limitations in this Order are based in part on secondary treatment standards, which are the required level of performance the City's SLRWRP and LSWTP must meet under Clean Water Act (CWA) Section 301 and the 2005 California Ocean Plan (Ocean Plan).

Wastewater treatment processes at the SLRWRP and LSWTP include preliminary treatment by mechanical bar screens, aerated grit removal, flow equalization, primary sedimentation, biological secondary treatment using activated sludge process, secondary sedimentation/clarification, secondary effluent equalization ponds (SLRWRP only), and solids handling. Groundwater treatment at MBDF consists of cartridge filtration, green sand filtration to remove iron and manganese, reverse osmosis, and granular activated carbon. The City's secondary treated effluent and waste brine are discharged along with three other discharges regulated under separate NPDES permits: 1) the US Marine Corps Base Camp Pendleton secondary treated effluent discharge; 2) the Fallbrook Public Utilities District treated wastewater discharge; and 3) the Genentech brine waste discharge. Thus six facilities discharge wastewater to the Oceanside OO; three of these discharges are covered in the tentative Orders.

The City's current NPDES Permit (Order No. R9-2005-0136) expired on August 10, 2010, but has been administratively extended. The City filed a timely report of waste discharge and application for reissuance of its NPDES Permit on February 9, 2010. The San Diego Water Board has deemed the application complete.

The Tentative Order continues implementation of technology-based effluent limitations (TBELs) based on secondary treatment requirements established in the

current NPDES Permit. The need for water quality-based effluent limitations (WQBELs) in the Tentative Order was evaluated using the reasonable potential analysis (RPA) procedures of the Ocean Plan, which use a statistical approach to determine if the discharge has the potential to cause an exceedance of the water quality objectives in the Pacific Ocean for the toxic pollutants listed in the Ocean Plan¹, based on historical effluent data, and the dilution factor for the Oceanside OO. The RPA results for this discharge indicate that the discharge has reasonable potential to cause exceedances of water quality objectives for tributyltin and TCDD equivalents²; therefore WQBELs are included in the Tentative Order for these pollutants.

Performance goals, rather than effluent limitations, are included in the Tentative Order for all other toxic pollutant parameters in the Ocean Plan. Performance goals are not enforceable effluent limitations or standards for the regulation of the discharge independently; however, inclusion of performance goals supports State and federal anti-degradation policies and provides 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.

The Tentative Order includes updated effluent limitations for the brine discharge from the MBDF to the Oceanside OO. The updated limitations include moving the point of compliance for the Ocean Plan parameters³ from the combined discharge to the MBDF plant effluent in order to 1) properly apply the TBELs to the brine discharge, and 2) achieve consistency in regulation for all brine discharges in the San Diego Region. The December 10, 2009 San Diego Water Board Memorandum entitled *Application of Technology-based Effluent Limitations for Discharges to the Pacific Ocean in the San Diego Region* (Supporting Document No. 5) describes Staff's evaluation of thirty-five (35) NPDES permitted facilities for consistency in application of the Ocean Plan TBELs. The NPDES permits for six (6) of the 35 facilities were identified as not correctly implementing the Ocean Plan TBELs. Three of

¹ Table B of the Ocean Plan contains water quality objectives for toxic pollutants parameters.

² TCDD equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors.

³ Table A of the Ocean Plan contains TBELs.

the six facilities where TBEL permitting deficiencies were identified are the three City of Oceanside discharges covered under the Tentative Orders. (i.e. SLRWRP, LSWTP, and MBDF). The Tentative Orders continue Staff's implementation of the strategy for correcting the permitting deficiencies at the time of NPDES permit reissuance as outlined in the December 10 Memorandum. (Supporting Document No. 5)

The City has evaluated the proposed change in compliance point identified in the Tentative Order and has determined that the MBDF brine waste discharge would not be able to immediately comply with the turbidity TBELs derived from the Ocean Plan. The tentative TSO would, if adopted, establish a time schedule for the City to achieve full compliance with the turbidity effluent limitations for the MBDF. Based on these considerations the issuance of a separate TSO under the authority of California Water Code section 13300 is appropriate to allow the City time to take specific actions to comply with the turbidity TBELs and thereby prevent violations of the Tentative Order requirements.

The City of Oceanside (City) submitted comments on the Tentative Order by letter dated December 2, 2010 (Supporting Document 6). The San Diego County Water Authority also submitted comments by letter dated December 3, 2010 (Supporting Document 7). A Response to Comments document (Supporting Document 9) and Errata Sheet (Supporting Document 10) have been prepared to address these comments. The Response to Comments document and Errata Sheet were transmitted to all interested parties by letter dated December 9, 2010 (Supporting Document 8). The changes made to the Tentative Order in response to comments received and as described in the Errata Sheet are considered minor and do not require additional public noticing. Changes to the Tentative Order in response to comments are included below as Significant Changes No. 5-8.

A Supplemental Errata Sheet (Supporting Document 11) has been included to update order numbers, adoption dates, permit effective dates, and other dates contained in the Tentative Order and Tentative TSO to reflect the change in proposed adoption dates from December 14, 2010 to January 12, 2011. The Supplemental Errata

Sheet was transmitted to all interested parties by email dated December 28, 2010.

**SIGNIFICANT
CHANGES:**

The following areas in the Tentative Order differ from current Order No. R9-2005-0136 and the original version of the Tentative Order circulated on November 5, 2010:

1. The Tentative Order does not incorporate WQBELs for total chlorine residual, ammonia, chronic toxicity, phenolic compounds (non-chlorinated), chlorinated phenolics, endosulfan, and HCH, which were contained in current Order No. R9-2005-0136. These WQBELs were not included because the RPA for the Tentative Order concluded that these pollutants in the discharge did not have reasonable potential to cause excursions of water quality objectives listed in the Ocean Plan. Instead, performance goals have been included for these pollutants.
2. The Tentative Order incorporates a WQBEL for TCDD equivalents, which was not contained in current Order No. R9-2005-0136. This WQBEL was included because the RPA performed for the Tentative Order concluded that TCDD equivalents in the discharge did have reasonable potential to cause exceedances of the water quality objective listed in the Ocean Plan.
3. The Ocean Plan's definition of the zone where bacterial objectives apply includes areas used for water contact sports, as determined by the San Diego Water Board (i.e., waters designated as REC-1 for contact water recreation). Current Order No. R9-2005-0136 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 San Diego Water Board's 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 from surface to bottom, out to three nautical miles from the shoreline. USEPA's interpretation applies to all discharges to ocean waters in the San Diego Region. Consistent with this interpretation the Tentative Order requires that bacterial objectives, which include enterococcus, in

addition to total and fecal coliform, be maintained throughout State of California territorial marine waters outside the initial dilution zone. The Tentative Order requires the City of Oceanside to demonstrate compliance with the receiving water bacteria objectives outside the initial dilution zone no later than 5 years following adoption of the Tentative Order. This requirement and 5-year compliance schedule are consistent with two other recently adopted POTW Ocean Outfall NPDES Permits for the City of Escondido and the San Elijo Joint Powers Authority.

4. The Tentative Order establishes TBELs for the MBDF brine waste discharge pursuant to federal regulations and the Ocean Plan. Section 301(b) of the CWA and USEPA permit regulations at 40 CFR 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The Ocean Plan establishes TBELs for publicly owned treatment works (i.e. SLRWRF and LSWTP) and industrial discharges for which effluent limitation guidelines have not been established (i.e. the MBDF brine waste discharge). By e-mail dated October 7, 2010, the City of Oceanside reported that the MBDF brine waste discharge would not immediately comply with the turbidity TBELs contained in the Tentative Order. To address this issue, the Tentative TSO establishes a schedule for the City to achieve compliance with the turbidity effluent limitations no later than five years following adoption of the Tentative Order.
5. The findings, requirements, and fact sheet of the Tentative Order have been modified to accommodate the City's request to include provisions for allowing an increase in the permitted flow rate through the Oceanside OO when the 15-inch diameter meter section of the outfall is replaced.
6. The performance measures mass limitations listed in Table 11 and Table F-15 have been removed to shorten and simplify the permit. Mass limitations for performance goals are not required to be listed in the NPDES permit and do not provide useful information for the discharger or interested persons in evaluating

compliance with water quality-based effluent limitations. Note that concentration based performance goals remain in the Tentative Order for reference and for evaluating discharger performance.

7. Language has been modified at the request of the City to specify that the San Luis Rey Water Reclamation Facility has a maximum 30-day capacity of 15.4 million gallons per day (MGD) along with 30 million gallons of onsite storage, but currently can only discharge 13.5 MGD to the Oceanside OO through the land outfall. Provisions have been included to allow for an increase in the permitted flow rate from the SLRWRF to the Oceanside OO through the land outfall when improvements are made to the land outfall.
8. The monitoring frequency has been reduced at the request of the City for certain constituents which have not been detected within the combined effluent during the past five years and do not have reasonable potential to cause or contribute to an exceedance of a water quality standard.

COMPLIANCE:

During the term of Order No. R9-2005-0136, the City of Oceanside had eight violations, including seven (7) monitoring and reporting violations and one (1) effluent limitation violation for ammonia. These violations are not significant, were not subject to mandatory minimum penalties, and have been addressed by the City.

LEGAL ISSUES:

None.

**SUPPORTING
DOCUMENTS:**

1. Location map of Facilities and Oceanside Ocean Outfall
2. Transmittal letter to City of Oceanside
3. Tentative Order No. R9-2010-0120
4. Tentative Time Schedule Order No. R9-2010-0148
5. December 10, 2009 San Diego Water Board Memorandum.
6. City of Oceanside comment letter dated December 2, 2010
7. San Diego County Water Authority comment letter dated December 3, 2010
8. Transmittal letter dated December 9, 2010 for San Diego Water Board Responses to Comments document and Errata Sheet
9. San Diego Water Board Responses to Comments document
10. San Diego Water Board Errata Sheet
11. San Diego Water Board Supplemental Errata Sheet

RECOMMENDATION:

Adoption of the following Tentative Orders are recommended:

1. Tentative Order No. R9-2010-0120 (R9-2011-0016) with Errata and Supplemental Errata, and
2. Tentative Time Schedule Order No. R9-2010-0148 (R9-2011-0017) with Supplemental Errata.