State of California Regional Water Quality Control Board San Diego Region

REVISED

EXECUTIVE OFFICER SUMMARY REPORT August 13, 2008

| ITEM: | 9 |
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| SUBJECT: | NPDES Permit Revision: City of San Diego E. W. Blom Point Loma Metropolitan Wastewater Treatment Plant discharge to the Pacific Ocean through the Point Loma Ocean Outfall: amendment would add a toxicity re-screening requirement upon initiation of chlorination and would also add total residual chlorine monitoring to the Monitoring and Reporting Program (Tentative Addendum No. 2 to NPDES No. CA0107409) (Melissa Valdovinos) |
| PURPOSE: | To amend the PLMWTP NPDES permit to include a chlorination prototype system. The discharger, the City of San Diego, has proposed the system in response to updated water contact standards for bacteria, which will most likely be incorporated in NPDES Permit No. CA0107409 upon renewal. The results from the chlorination prototype system will confirm if the disinfection is adequate to meet bacterial standards, without compromising compliance with toxicity or residual chlorine requirements. |
| PUBLIC NOTICE: | A public notice of the tentative addendum was published in the San Diego Union Tribune on July 3, 2008. Copies of the tentative addendum were mailed on July 14, 2008 to the City of San Diego Metropolitan Wastewater Department and to all known interested parties and agencies. Copies were made available for public review at the Regional Board office on July 14, 2008. The tentative addendum was also posted on the Regional Board's web site on July 16, 2008. |
| DISCUSSION: | On April 10, 2002, the Regional Board adopted Order No. R9- 2002-0025, Waste Discharge Requirements and NPDES Permit for the PLMWTP, NPDES Permit No. CA0107409. The United States Environmental Protection Agency (USEPA) issued its final approval of the joint permit on September 13, 2002. Order No. R9-2002-0025 establishes waste discharge requirements for the discharge of up to 240 million gallons per day (MGD) of treated wastewater to the Pacific Ocean via the PLOO. |

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By letter dated November 13, 2007, the City of San Diego requested Regional Board approval to initiate operation of a prototype effluent disinfection system at the PLMWTP. Sodium hypochlorite solution, used for disinfection, will be applied as determined by the City of San Diego at a feed point immediately downstream of the sedimentation tanks. The request was made because of a recent interpretation by USEPA that bacterial water quality objectives in the San Diego Region apply in ocean waters from surface to bottom, out to three nautical miles from shore. Based on USEPA's interpretation, the bacterial standards will be incorporated into the requirements of the subsequent NPDES permit (renewal) for the PLOO discharge. The City of San Diego proposes to demonstrate compliance with anticipated bacterial objectives to support the renewal of Order No. R9-2002-0025, which may be considered at a future Regional Board public hearing.

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). 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 shore.

Toxicity re-screening and monitoring total chlorine residual in effluent will be required for the protection of marine aquatic life. Total chlorine residual compliance must be achieved at the plant, before the effluent reaches the outfall. Concentrations will be monitored before traveling through the outfall to the ocean. Establishing compliance at the plant is more reliable, and therefore more protective of water quality, than the alternative of sampling at the plant and calculating final concentrations after traveling through the outfall to the ocean.

To date <u>As of July 30, 2008,</u> comments have<u>had</u> been submitted by the Sierra Club San Diego Chapter. <u>Any other</u> comments submitted prior to the written comment deadline, and responses to all comments, will be included in the supplementalagenda package. <u>Responses to these comments are</u>

| | included as Supporting Document 7. On August 4, 2008, the Regional Board received an email from the City of San Diego stating it has no major comments on the tentative addendum but noted that the sampling frequency is inconsistent with the staffing of its on-site Environmental Laboratory Accreditation Program (ELAP)-accredited laboratory. Based on this comment, the Regional Board revised the tentative addendum as indicated in the attached Errata Sheet. Additional modifications were made to correct and clarify language in the tentative addendum. These modifications are also indicated in the attached Errata Sheet. |
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| SIGNIFICANT CHANGES: | Toxicity re-screening will be required upon initiation of chlorination to identify any toxic effects of the chlorinated effluent. Monitoring and reporting requirements will include effluent sampling and analysis for total chlorine residual, an Ocean Plan requirement for the protection of marine aquatic life. |
| COMPLIANCE: | PLMWTP discharge to the Pacific Ocean through the PLOO has demonstrated compliance with current bacterial objectives as required under Order No. R9-2002-0025. |
| KEY ISSUES: | Disinfection requirements to meet bacterial objectives that apply throughout State of California territorial marine waters in the San Diego Region, which extend surface to bottom, out to three nautical miles from shore, may set a precedent for other ocean dischargers in the San Diego Region. |
| LEGAL ISSUES: | None |
| SUPPORTING DOCS: | Site Map Transmittal Letter for Tentative Addendum No. 2 to Order No. R9-2002-0025 Tentative Addendum No. 2 to Order No. R9-2002-0025 Comment Letter from Sierra Club San Diego Chapter <u>Transmittal Letter for Errata Sheet and Responses to Comments</u> <u>Errata Sheet</u> <u>Responses to Comments</u> |
| RECOMMENDATION: | Adoption of Tentative Addendum No. 2 to Order No. R9-2002- 0025 is recommended. |