

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF December 1, 2006
Revised on October 24, 2006

ITEM NUMBER: 10

SUBJECT: Reissuance of Waste Discharge Requirements, National Pollutant Discharge Elimination System Permit No. CA0047899 for Montecito Sanitary District Wastewater Treatment Facility, Santa Barbara County, Order No. R3-2006-0084

KEY INFORMATION

Discharger:	Montecito Sanitary District
Facility Name:	Montecito Sanitary District Wastewater Treatment Facility
Facility Address:	1042 Monte Cristo Lane Santa Barbara, CA 93108 Santa Barbara County
Type of Waste:	Domestic wastewater
Treatment:	Facility effluent is treated to federal secondary treatment standards.
Disposal:	To Santa Barbara Channel, Pacific Ocean
Facility Design Flow:	Average dry weather flow of 1.5 million gallons per day (MGD)
Facility Permitted Flow:	Average monthly dry weather flow of 1.5 MGD
Existing Order:	Waste Discharge Requirements Order No. 01-116, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0047899
Recycling Requirements:	None
This Action:	Reissue NPDES Permit

SUMMARY

The proposed Order is presented in the new statewide format for National Pollutant Discharge Elimination System (NPDES) permits. This standardized format presents the proposed Order with all supporting information appended as associated attachments. This format was developed through a statewide effort between the State Board, Regional Boards, and U.S. Environmental Protection Agency (EPA) to standardize NPDES permitting and compliance evaluation. The facility information and permit evaluation discussion normally contained within the staff report are presented in the Fact Sheet, which is Attachment F to the proposed Order.

This staff report provides some general information regarding proposed changes in the permit, with reference to the Fact Sheet for additional detail. The Order, Monitoring and Reporting Program, and Fact Sheet each include a table of contents.

Discharger. The Montecito Sanitary District (District) owns and operates a sanitary sewer system and wastewater treatment and disposal facility.

Facility. The District's facility is designed to treat an average dry weather flow of 1.5 million gallons per day (MGD) to federal secondary

treatment standards. Wastewater treatment and handling includes grinding, aerated activated sludge tanks, secondary clarification, chlorination, and dechlorination. Biosolids are managed via aerobic digestion, dewatered by belt press, and composted off-site.

Discharge and Receiving Water. Treated wastewater is discharged through a 1,550-foot outfall/diffuser system to the Santa Barbara Channel, Pacific Ocean. The minimum initial dilution ration of seawater to effluent is 89:1.

PURPOSE OF THE ORDER

The purpose of the proposed Order No. R3-2006-0084, is to update and reissue NPDES permit Order No. 01-116, NPDES Permit No. CA0047899.

The existing permit expires on December 7, 2006.

CHANGES WITHIN THE PROPOSED ORDER

Changes in proposed Order No. R3-2006-0084 from the existing Order No. 01-116 are summarized below. For a complete discussion of the rationale for these changes, refer to the Fact Sheet portion of the permit (Attachment F).

Addition of Carcinogen Effluent Limitations:

Staff added chlorodibromomethane, dichlorobromomethane, heptachlor-epoxide, and N-nitrosodi-N-propylamine effluent limitations in Table IV-4 in accordance with the 2005 Ocean Plan Table B parameters. Effluent limitations were derived using the 2005 Ocean Plan Section III.C.4.a. Equation No. 1.

Substitution of BOD with CBOD: As provided by 40 CFR 133.102 (Secondary Treatment Standards), staff substituted biochemical oxygen demand (BOD) with carbonaceous biochemical oxygen demand (CBOD). The Discharger requested this substitution on the basis that CBOD is more representative of the treatment process of the facility.

Collection System Requirements: Staff removed the *Collection System Maintenance*

and *Renovation Program* requirements language (Section D of Order No. 01-116). The language was removed because the Discharger had submitted an application to the State Water Board in order to obtain coverage under the General Permit. The Discharger's application was submitted July 10, 2006. The State Water Board, via e-mail, provided official notification of General Permit enrollment on August 18, 2006.

Effluent Fecal Coliform Monitoring: Staff added effluent fecal coliform monitoring to the preexisting effluent total coliform monitoring contained in the previous monitoring and reporting program (MRP). The 2005 Ocean Plan's bacterial water quality objectives are expressed in terms of total and fecal coliforms. Effluent coliform monitoring substitutes for regular receiving water monitoring, so effluent monitoring should provide representative data for both total and fecal coliforms. Receiving water sampling is triggered by the exceedance of the maximum effluent total coliform limit, and includes the analysis of total coliform, fecal coliform, and enterococcus in the receiving water.

Monitoring Requirements of Priority

Pollutants: Staff added selenium, endosulfan, endrin, HCH (the sum of alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane), and radioactivity effluent monitoring requirements in MRP Table IV-2. The existing Order No. 01-116 is based on the 1997 version of the Ocean Plan, and included water quality objectives for each of these added parameters.

Staff also added monitoring requirements for chlorodibromomethane, dichlorobromomethane, heptachlor epoxide, and N-nitrosodi-N-propylamine. These constituents were introduced in the 2001 Ocean Plan and are maintained in the 2005 Ocean Plan. Monitoring is required annually in accordance with Section IV.A.1. of the MRP.

2005 Ocean Plan Table B Sampling

Frequency: Staff changed the minimum sampling frequency for constituents in MRP Tables IV-2, IV-3, and IV-4 (representing 2005 Ocean Plan Table B parameters) from once

during the five year permit term, to once per year. Appendix III of the 2005 Ocean Plan requires at least one complete scan of the 2005 Ocean Plan Table B parameters annually for discharges in the range of one to ten MGD, which includes the Discharger. The Discharger's compliance history does not indicate a need to monitor more frequently than the 2005 Ocean Plan's minimum requirements.

Effluent sampling in MRP Order No. 01-116 was required once in August 2004. If the Discharger did not find the constituents in significant quantities exceeding effluent limitations in the August 2004 sampling, in lieu of sampling they were allowed to provide annually certification that the constituents were not added to the waste stream. However, the 2005 Ocean Plan removed this language and changes to MRP No. R3-2006-0084 eliminates the certification clause.

The monitoring frequencies listed in the 2005 Ocean Plan Appendix III represent the State Water Board's direction for what constitutes an adequate monitoring program for compliance with Table B water quality objectives or, equivalently, with effluent limitations derived from Table B objectives.

Based on the above, MRP No. R3-2006-0084, Tables IV-2, IV-3, and IV-4 require annual effluent sampling for all the 2005 Ocean Plan Table B parameters, without the option of providing certification in lieu of monitoring. The timing of sampling is varied each year to represent different months of the year during typically dry-weather conditions.

Sampling Type: Regarding sample type (i.e., grab vs. 24-hour composite), staff added the following language to MRP Section IV, "Where specified in Table IV-2, IV-3, and IV-4, 24-hour composite samples shall be collected when appropriate for the constituent and the applicable approved laboratory analytical methods. The Discharger may otherwise employ grab samples." 24-hour composite samples provide data that are more representative because they are collected over a longer period and can better account for the variability of domestic and municipal wastewater. It is, therefore, desirable for a given parameter to utilize this sample type

wherever feasible. Staff recognizes that it is not practical to use 24-hour composite samples for some constituents due to characteristics such as volatility or degradation. The tables list the 24-hour composite sample as the preferred sample type. This language allows the Discharger to work with its certified laboratory to determine the most appropriate sample type.

Remaining Priority Pollutant Monitoring: MRP Table IV-5 lists the priority pollutants which are not included in the 2005 Ocean Plan Table B, but for which monitoring data is required pursuant to 40 CFR 131.36, and EPA Application Form 3510-2A (Rev. 1-99).

U.S. EPA Application Form 3510-2A (Rev. 1-99), which is a required part of the Discharger's Report of Waste Discharge every five years, requires a minimum of three pollutant scans within four and one-half years of the date of the application. The toxic pollutants listed in the application include the 2005 Ocean Plan Table B parameters as well as other toxic pollutants not listed in the 2005 Ocean Plan. 40 CFR 131.36 contains a similar priority toxic pollutant listing. MRP Table IV-5 lists these remaining priority toxic pollutants and requires annual sampling.

Of the toxic pollutants listed in MRP Table IV-5, all are common to U.S. EPA's application and 40 CFR 131.36, with the following exceptions: 1) Endrin Aldehyde is listed only in 40 CFR, and; 2) P-Chloro-M-Cresol and 4,6-Dinitro-O-Cresol are listed only in U.S. EPA's application.

Annual sampling of these remaining toxic pollutants will ensure that a complete pollutant scan is available to meet U.S. EPA's minimum application requirements upon the expiration of Order No. R3-2006-0084.

Shore Sampling: Staff added shore sampling language Section VI.A.1 of the MRP in order to demonstrate receiving water compliance with the 2005 Ocean Plan water quality objectives and in accordance with Section III.G. (Monitoring Program) of the 2005 Ocean Plan. Section VI.A.1 of the MRP includes a trigger mechanism that explains that shore sampling shall occur if three consecutive effluent samples exceed 2,300 per 100 milliliters of total coliform

bacteria. Shore sampling shall encompass total, fecal coliform, and enterococcus analysis at the monitoring locations identified in Section II of the MRP.

STAFF CHANGES

Staff changed the acute toxicity effluent limit of 2.0 toxicity units (TUa) to 3.0 TUa in Table IV-2 of the Order. Justification for the change is noted in Section IV.C.5 (Whole Effluent Toxicity) of the monitoring and reporting program. Section III.C.4.b of the 2005 Ocean Plan provides guidance on deriving an effluent limitation for acute toxicity. The Tentative Order available for public comment had provided an incorrect value of 2.0 TUa. In accordance with Section III.C.4.b, equation 2 of the 2005 Ocean Plan the true effluent limitation is calculated as 3.0 TUa. Staff made the appropriate changes to Table IV-2 of the Order.

CHANGES IN RESPONSE TO WRITTEN COMMENTS

The Montecito Sanitary District (District), the County of Santa Barbara County Environmental Health Services (EHS) Department, and Ms. Hillary Hauser, Executive Director of Heal the Ocean (attached) submitted written and verbal comments.

The County of Santa Barbara EHS requested that the Order include language regarding spill notification to the County. Staff added spill notification language in Section XII.E. of the MRP. Staff also indicated that the District obtained coverage under the Statewide General Waste Discharge Requirement for Sanitary Sewer Systems (General Permit). The General Permit retains language that requires the discharger to notify local agencies, including the County EHS in spill circumstances.

The Discharger submitted written comments on October 5, 2006. Prior to the submittal of the written comments, two conference calls between Central Coast Water Board staff and the Discharger were conducted on October 2, 2006 and October 3, 2006. The purposes of the conference calls were to provide the Discharger

with further clarification and guidance on the proposed Order. Major changes in response to verbal and written comments include the following:

- Receiving Water Introductory Language – Language was added to Section V.A. providing further clarification on compliance determination and violation assessment.
- Shore Sampling Location – A footnote was added to the shore sampling location to address the Discharger's concern with sample collection safety. Language now allows the discharger to use discretion when collecting samples.
- Receiving Water Sampling – Enterococcus was added to the receiving water shore monitoring.
- Reporting Requirements – Staff removed reporting requirements, definitions, and reporting schedules that did not apply to the Discharger's MRP.
- Priority Pollutant Effluent Monitoring Schedule - Staff changed MRP Section IV effluent monitoring for priority pollutants to September 2007, August 2008, July 2009, June 2010, and May 2011.
- Biosolids Monitoring – Staff changed the sample date to May 2011. This sample date is consistent with the Discharger's priority pollutant effluent monitoring schedule for that year.

Heal the Ocean submitted written comments on October 17, 2006. Major changes in response to Heal the Ocean's written comments include the following:

- Facility Description – Staff included additional outfall and diffuser information and details regarding diffuser length and depth of water in Section II.B. of the Order.
- Flow Statistics – Staff included a table in the facility description that included flow statistics (i.e., average dry-weather flow, maximum dry-weather flow, peak dry-weather flow, and maximum wet-weather flows) in Section II.A. of the Fact Sheet.

Details of comments, staff's responses, and minor changes made to the attached draft of the tentative Order are shown in the Fact Sheet, beginning on page F-40.

RECOMMENDATION

Adopt Order R3-2006-0084 as proposed.

ATTACHMENTS

1. Proposed Order No. R3-2006-0084 and the following associated attachments:

- Attachment A – Definitions
- Attachment B – Site Map
- Attachment C – Flow Schematic
- Attachment D – Federal Standard Provisions

- Attachment D-1 – Central Coast Water Board Standard Provisions
- Attachment E – Monitoring and Reporting Program (MRP) No. R3-2006-0084
- Attachment F – Fact Sheet
- Attachment G – Self-Monitoring Report Cover / Transmittal Form

2. Letter dated October 5, 2006, from Montecito Sanitary District to the Central Coast Water Board.
3. Letter dated October 17, 2006, from Ms. Hillary Hauser of Heal the Ocean to the Central Coast Water Board.