

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF JULY 7, 2006
Revised on June 16, 2006

ITEM NUMBER: 8

SUBJECT: Reissuance of Waste Discharge Requirements, National Pollutant Discharge Elimination System Permit No. CA0047856 for California Department of Corrections and Rehabilitation, California Men's Colony, and Secondary Dischargers, San Luis Obispo County, Order No. R3-2006-0032

KEY INFORMATION

Location: Hwy 1, North of San Luis Obispo, behind Cuesta College
San Luis Obispo, California 93409
San Luis Obispo County

Discharge Type: Municipal wastewater

Capacity: Average dry weather flow of 1.2 million gallons per day (MGD), peak dry weather flow of 2.4 MGD, and peak wet weather flow of 5.2 MGD

Treatment: Facility effluent is tertiary-treated wastewater. Wastewater treatment includes biological treatment by oxidation ditch, clarification, filtration, and chlorination/dechlorination prior to discharge.

Disposal: To Chorro Creek and Dairy Creek Golf Course

Recycling: Yes, Department of Health Services regulations at Title 22 of the California Code of Regulations, Chapter 3.

Existing Orders: Waste Discharge Requirements Order No. 01-001, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0047856

This Action: Reissue NPDES Permit, Waste Discharge Requirements

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 USEPA 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.

Dischargers. The California Department of Corrections and Rehabilitation own and operate a trunk sewer line and wastewater treatment facility. In addition to conveying and treating domestic wastewater from the East and West Facilities of the California Men's Colony, a correctional institution, the trunk sewer and treatment plant provide wastewater conveyance and treatment for the California National Guard's Camp San Luis Obispo, Cuesta College, San Luis Obispo County Education

Center, San Luis Obispo County El Chorro Regional Park and Dairy Creek Golf Course, and San Luis Obispo County Operational Facility. The discharger and the sewerage entities are required to enroll under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ), which were adopted on May 2, 2006.

Facility. The newly upgraded facility is designed to tertiary-treat a monthly average of 1.2 million gallons per day (MGD) of wastewater in the dry season. Wastewater treatment includes biological treatment by oxidation ditch, clarification, filtration, and chlorination/dechlorination prior to discharge.

Discharge and Receiving Water. Treated wastewater is discharged to Chorro Creek at a minimum continuous flow rate of 0.75 cubic feet per second (cfs). Chorro Creek is identified as impaired on the Clean Water Act 303(d) list due to low dissolved oxygen and nutrients; both of these impairments are addressed within the proposed Order. Treated wastewater is also used by the County of San Luis Obispo to irrigate the Dairy Creek Golf Course.

PURPOSE OF THE ORDER

The purpose of the proposed Order No. R3-2006-0026, is to update and reissue NPDES permit Order No. 01-001, NPDES Permit No. CA0047856. This Order is intended to protect the beneficial uses of Chorro Creek.

The existing permit expired on February 2, 2006, but continues in force until the effective date of reissuance, in accordance with 40 CFR Part 122.6.

CHANGES WITHIN THE PROPOSED ORDER

Changes in proposed Order No. R3-2006-0032 from the existing Order No. 01-001 are summarized below. For complete discussion of the rationale for these changes, refer to the Fact Sheet portion of the permit (Attachment F).

Effluent Total Nitrogen Limit: Staff added a daily total nitrogen limit of 10 mg/L, monitored weekly. The newly upgraded plant should consistently comply with this limitation.

Effluent Sampling: Staff added annual effluent monitoring for methylene blue activated substances, phthalate esters, cobalt, iron, lithium, manganese, molybdenum, and vanadium to characterize the origin of these constituents in the receiving water.

Interim Effluent Limits: Staff performed a reasonable potential analysis (RPA), which showed three constituents in the discharge at concentrations greater than water quality objectives. Staff added interim effluent limitations, with quarterly monitoring, for chlorodibromomethane, dichlorobromomethane, and copper. Interim limits are effective until final effluent limits become effective May 19, 2010.

Trihalomethane Study: Staff added the requirement of a Trihalomethane Study to allow the Discharger to demonstrate any beneficial effect of recent plant upgrades on trihalomethane formation before final effluent limitations become effective.

Salt Management Study: Staff added a Salt Management Study, where the Discharger must characterize source water supplies and wastewater quality, evaluate alternative control strategies, and also develop a Salt Management Plan. The Plan allows no more than 5 years for full implementation.

Receiving Water Monitoring: Staff decreased receiving water monitoring for California Toxic Rule (CTR) and Title 22 pollutants to not include monitoring at the discharge point, only 100' upstream and downstream of the discharge. Monitoring frequency was also decreased to annual from semiannual due to the State Implementation Policy (SIP) objective of establishing water quality-based effluent limitations for priority pollutants. Annual monitoring is adequate for RPA analysis.

Receiving Water Monitoring Locations: Staff added receiving water monitoring location R-005, Twin-Bridges, at the bridge crossing with Chorro Creek and South Bay Boulevard. R-005 was added to aid in compliance determination for potential impacts of BOD and nutrient concentrations to Chorro Creek.

Water Supply Monitoring: Staff removed the water supply monitoring requirements since water supply water will be fully characterized, in terms of salt concentrations, when the Discharger conducts the required Salt Management Study.

CHANGES IN RESPONSE TO WRITTEN COMMENTS

Written and verbal comments were submitted by California Department of Corrections and Rehabilitation (attached).

The key comments received by California Department of Corrections and Rehabilitation, in summary, were to (1) change the effective date of the order to be the date of the facility upgrade completion, and (2) change the total nitrogen as (N) concentration from 7 mg/L to 10 mg/L monthly average. Staff determined that the effective date of the Order can be no later than August 6, 2006, and that a daily maximum 10 mg/L for total nitrogen was the maximum acceptable concentration to protect the beneficial uses of Chorro Creek.

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-25.

RECOMMENDATION

Adopt Order R3-2006-0032 as proposed.

ATTACHMENTS

1. Proposed Order No. R3-2006-0032 and the following associated attachments:

- Attachment A – Definitions
- Attachment B – Facility Location
- Attachment B-1 – Site Map
- Attachment C – Wastewater Flow Schematic
- Attachment D – Federal Standard Provisions
- Attachment D-1 – Central Coast Water Board Standard Provisions
- Attachment E – Monitoring and Reporting Program (MRP) No. R3-2006-0032
- Attachment F – Fact Sheet
- Attachment G – Self-Monitoring Report Cover/ Transmittal Form
- Attachment H – Sewage Spill Report Form

2. Letter dated May 8, 2006, from California Department of Corrections and Rehabilitation to the Central Coast RWQCB.