

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

**STAFF REPORT FOR REGULAR MEETING OF JULY 7, 2006**  
Revised on June 14, 2006

**ITEM NUMBER: 7**

**SUBJECT: Reissuance of Waste Discharge Requirements, National Pollutant Discharge Elimination System Permit No. CA0048127 for Lompoc Regional Wastewater Reclamation Plant and Sewering Entities of Vandenberg Village Community Services District, Services District, Santa Barbara County, Order No. R3-2006-0037**

**KEY INFORMATION**

Dischargers:	City of Lompoc
Facility Name:	Lompoc Regional Wastewater Reclamation Plant
Facility Address:	1801 West Central Avenue Lompoc, California 93436 Santa Barbara County
Type of Waste:	Domestic wastewater
Treatment:	Facility effluent is secondary-treated domestic wastewater. Wastewater treatment includes mechanical bar screens, two primary clarifiers, one aeration tank, three secondary clarifiers and a chlorine contact tank prior to discharge.
Disposal:	To San Miguelito Creek and Santa Ynez River
Facility Design Flow:	Average dry weather flow of 5.0 million gallons per day (MGD)
Facility Permitted Flow:	Average monthly dry weather flow of 5.0 MGD
Existing Order:	Waste Discharge Requirements Order No. 01-87, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0048127
Recycling Requirements:	Yes, Department of Health Services regulations at Title 22 of the California Code of Regulations, Chapter 15.
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 Lompoc Regional wastewater Reclamation Plant (LRWRP) own and operate a trunk sewer line and wastewater treatment facility. In addition to conveying and treating domestic wastewater from the City of Lompoc, Vandenberg Air Force Base and Vandenberg Village Community Service District. 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 LRWRP is designed to secondary-treat an average dry weather flow of 5.0 million gallons per day (MGD). Wastewater treatment and handling includes mechanical bar screens, two primary clarifiers, one aeration tank, three secondary clarifiers and a chlorine contact tank prior to discharge. In September 2004, LRWRP began work to upgrade its wastewater treatment plant. Plant upgrades will include the replacement of an influent pump station; grit removal and handling with aerated grit tank, grit classifiers and washers; biological treatment in two parallel oxidation ditches for nitrification and denitrification; secondary clarification in three sediment tanks; and ultraviolet disinfection. Construction is estimated to begin July 2006.

**Discharge and Receiving Water.** Treated wastewater is discharged to San Miguelito Creek and Santa Ynez River. During high flows, the Santa Ynez River periodically flows over its banks combining with San Miguelito creek so that the plant's discharge is directly to the Santa Ynez River. Santa Ynez River is identified as impaired on the 303(d) list due to nutrients, salinity, TDS, chloride, and sedimentation/siltation; these impairments are addressed within the proposed Order.

## PURPOSE OF THE ORDER

The purpose of the proposed Order No. R3-2006-0037, is to update and reissue NPDES permit Order No. 01-87, NPDES Permit No. CA0048127.

The existing permit expired on May 18, 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. R3-2006-0037 from the existing Order No. 01-87 are summarized below. For complete discussion of the rationale for these changes, refer to the Fact Sheet portion of the permit (Attachment F).

**Effluent CTR Limits:** Staff has removed 134 of the 138 California Toxics Rule (CTR) effluent limits retained in Order No. 01-87. Staff removed these effluent limits because reasonable potential was not established in accordance with the SIP. This Order retains effluent limits for copper, mercury, dichlorobromomethane, and chlorodibromomethane because they were found to have reasonable potential. Final effluent limits for the remaining CTR constituents were derived using the SIP. Furthermore, all CTR constituents will be monitored semiannually and annually as part of the MRP.

**Effluent Nitrate:** Staff has added an effluent limitation for nitrate. Because Santa Ynez River is impaired by nutrients, and nitrite will readily oxidize to nitrate during wastewater treatment steps, this Order is establishing the Title 22 MCL for nitrate. This limit is more stringent than those of Order No. 01-87 for nitrate and nitrite and takes into consideration all applicable water quality criteria for receiving streams.

**Interim Limits:** In accordance with the SIP, interim limits are set for constituents whose effluent limitations are unattainable with the current treatment processes. Interim limits are valid for five years after which the affected constituents must achieve final effluent limitations. Order No. 01-87 contained interim limits for 10 constituents (cadmium, copper, mercury, antimony, beryllium, lead, selenium, silver, thallium, and molybdenum). Molybdenum, copper and mercury final effluent limits remain in this Order because they were found to have reasonable potential. The other constituent final effluent limitation did not show

reasonable potential and, as a consequence, were removed. This Order does not contain any interim limits.

**Receiving Water pH:** Staff has modified the pH receiving water limit range to 7.0 – 8.3 in order to protect the Municipal and Domestic Supply (MUN) and Cold Fresh Water habitat (COLD) beneficial use objectives.

**Receiving Water Temperature:** Staff has incorporated the temperature language for receiving water in order to protect the COLD beneficial use objectives.

**Biosolids Specifications:** Staff has included modified language regarding biosolids handling and disposal in accordance with USEPA guidance.

**Infiltration and Inflow Specifications:** Staff has removed the infiltration and inflow language in this Order to alleviate redundancy with the Statewide Wastewater Collection System General Permit (2006-0003-DWQ). This General Permit includes language addressing infiltration and inflow. The discharger is required to enroll under the General Permit by November 2, 2006.

**Effluent Sampling:** Staff has included quarterly sampling for boron to maintain consistency with the Basin Plan Table 3-7. Oil and grease sampling frequency has decreased to quarterly because of the ongoing compliance with the effluent limits. However, if the oil and grease monitoring results exceed effluent limits then sampling frequencies will increase to monthly. Supplemental monitoring for dioxin congeners was removed in accordance with Section 3 of the SIP. This section requires monitoring for 17 congeners for a period of three consecutive years.

**Salt Management Study:** Staff added a Salt Management Study; 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 five years for full implementation.

**Receiving Water Monitoring:** Staff included the chloride, sulfate, sodium, fecal coliform, boron, nitrate, Methylene Blue Activated Substances, ammonia, hardness, CTR pollutants, and Title 22 pollutants. CTR pollutants and Title 22 pollutants are required to be sampled annually. Hardness is required to be sampled quarterly because the toxicity of several CTR metals is hardness dependent. Fecal coliform and Methylene Blue Activated Substances will be sampled to protect Basin Plan objectives in surface waters. Chloride, sulfate, sodium, and boron will be sampled quarterly to protect Basin Plan objectives in Table 3-7.

## CHANGES IN RESPONSE TO WRITTEN COMMENTS

The City of Lompoc Regional Wastewater Reclamation Plan (LRWRP), the County of Santa Barbara County Environmental Health Services (EHS) Department, and Mr. Steve Jordan of the farm Bureau (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 included language regarding EHS spill notification (Section VIII.D.10.).

The LRWRP submitted extensive comments regarding the Tentative Order (TO) requirements. Major changes in response to written comments include the following:

- Facility Information – facility design flow was modified to reflect average dry weather flow (ADWF).
- Effluent Limitations (TDS, Sodium, Chloride) – effluent limitation for TDS, sodium, and chloride reflect compliance is based on a 12-month running mean.
- Effluent Limitation (Total Chlorine Residual) – Time-based chlorine limits were modified to reflect 0.02 instead of 0.01.
- Acute Toxicity – language was modified to reflect that other tests (besides t-tests) consistent with procedures described in the approved EPA

document are acceptable measure for determining acute toxicity.

- Total Coliform Bacteria – language was changed to reflect original language retained in Order No. 01-87. This action was done to alleviate confusion in the paragraph.
- Receiving Water Introductory – language was modified to remove the SIP reference because application of the SIP is only for “end-of-pipe” or effluent discharges.
- Dissolved Oxygen – language was modified to remove DO may not fall below 85 percent saturation.
- Editorial Comments –47 editorial comments were incorporated into the document.

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-28.

#### **RECOMMENDATION**

Adopt Order R3-2006-0037 as proposed.

#### **ATTACHMENTS**

1. Proposed Order No. R3-2006-0037 and the following associated attachments:
  - Attachment A – Definitions
  - Attachment B – Topographic 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. R3-2006-0037
  - Attachment F – Fact Sheet
  - Attachment G – Self-Monitoring Report Cover / Transmittal Form
2. Letter dated May 12, 2006, from the City of Lompoc to the Central Coast RWQCB with Attachments 1 through 11.
3. Letter dated May 12, 2006, from Mr. Steve Jordon of the Farm Bureau to the Central Coast RWQCB.