

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

STAFF REPORT FOR REGULAR MEETING OF FEBRUARY 9, 2007
Prepared on January 8, 2007

ITEM NUMBER: 16

SUBJECT: Rescission of Waste Discharge Requirements Order No. 86-04, for Vandenberg Air Force Base, STS South Base Power Plant, Santa Barbara County; and Enrollment under the Central Coast Water Board Resolution No. R3-2002-0115, General Waiver for Specific Types of Discharges (General Waiver)

KEY INFORMATION

Discharger: Vandenberg Air Force Base, STS South Base Power Plant (SVPP)
Location: Coast Road, Building 525, Vandenberg Air Force Base, Santa Barbara County
Discharge Type: Treated Process Water
Treatment: The SVPP uses a demineralization process to remove particulates from potable water used for Nitrogen Oxide (NO_x) emission reduction during SVPP operation.
Recycling: None
Existing Order No.: 86-04
This Action: Rescind Waste Discharge Requirements Order No. 86-04 and approve enrollment under the General Waiver

SUMMARY

On January 10, 1986, the Central Coast Water Board adopted Waste Discharge Requirements Order No. 86-04 to regulate process water discharges from the Vandenberg Air Force Base STS South Base Power Plant (hereafter, SVPP of Discharger). After reviewing the Discharger's case history and August 2006 Report of Waste Discharge application, Central Coast Water Board staff recommends rescinding Order No. 86-04 and regulating the discharge using the Central Coast Water Board Resolution No. R3-2002-0115, General Waiver for Specific Types of Discharges (General Waiver).

DISCUSSION

The Vandenberg Air Force Base STS South Base Power Plant (hereafter, SVPP or Discharger) is located on Coast Road, building 525, Vandenberg Air Force Base. The SVPP uses a demineralization process to remove particulates from potable water used for NO_x emission reduction during SVPP operation. Demineralization process wastewater is produced during the routine back flush of the demineralization water treatment system. The demineralization process includes four treatment mechanisms: carbon filtration, brine filtration, reverse osmosis, and deionization. This wastewater is discharged to an indoor lined sump, which drains to a percolation pond outside.

The SVPP uses potable water to cool an air compressor. The non-contact cooling water discharges to an indoor lined sump. An automatic sump pump discharges the accumulated non-contact water to the outside percolation pond.

Waste Discharge Requirements Order No. 86-04 allows the SVPP to discharge a maximum of 36,000 gallons per day of wastewater from the demineralization water treatment system. The permit requires monthly monitoring for effluent discharges and submittal of a semiannual report summarizing monthly data to the Central Coast Water Board. The monitoring and reporting program for Order No. 86-04 was revised on May 9, 2002. The revised monitoring and reporting program requires the Discharger to monitor pH in the supply water quarterly, representative samples of pH and flow from the water treatment system to the percolation ponds monthly, and total dissolved solids (TDS) collected semi-annually from the water treatment system to the percolation ponds. Pond freeboard is to be measured weekly.

SAMPLE ANALYSIS REVIEW

The Discharger's August 2006 Report of Waste Discharge application includes analytical results for the potable water system and the demineralization discharge. Potable water results indicate pH ranging from 8.5 to 9.0 standard units. The drinking water system is maintained with chloramines, which results in elevated pH levels base-wide.

The applicant's demineralization discharge sampling data provides laboratory analysis of nitrite, nitrate, chloride, sulphate, total recoverable petroleum hydrocarbons, total dissolved solids, total suspended solids, ammonia, total chlorine residual, and 17 metals. Concentrations did not exceed Basin Plan Water Quality Objectives or Drinking Water Maximum Contaminant Levels.

Central Coast Water Board staff reviewed analytical data from the 1999 through 2006 self-monitoring reports. The Discharger has

demonstrated compliance with Order No. 86-04.

GENERAL WAIVER

The Central Coast Water Board adopted the General Waiver on December 13, 2002. In accordance with Resolution Finding 5 of the General Waiver, the Executive Officer is authorized to tentatively enroll proposed discharges not listed in Attachment A1 of the General Waiver, provided the discharge meets all general conditions listed therein and any additional site-specific conditions prescribed by the Executive Officer. Tentative enrollments are to be brought before the Central Coast Water Board for final approval.

TENTATIVE GENERAL WAIVER ENROLLMENT

After reviewing historic data and Order No. 86-04, staff determined that the discharge has no appreciable effect on the environment and is more appropriately regulated by a waiver than by waste discharge requirements. The waiver enrollment has no conditions on flow, effluent quality, or monitoring requirements. Central Coast Water Board staff sent a letter to Vandenberg Air Force Base indicating tentative enrollment under the General Waiver on November 16, 2006. General Waiver enrollment will be recommended for the SVPP at the February 9, 2007 meeting and is conditional upon the central Coast Water Board's rescission of Order No. 86-04. If the Central Coast Water Board rescinds Order No. 86-04 and approves staff's recommendation for enrollment under the General Waiver, the Discharger's enrollment will be effective February 9, 2007 and will expire February 9, 2012.

ENVIRONMENTAL SUMMARY

Waste Discharge Requirements for existing facilities are exempt from provisions of the California Environmental Quality Act (Public Resource Code, Section 21100 et seq.) in accordance with Section 15301, Chapter 3, Title 14 of the California Administrative Code.

RECOMMENDATION

Rescind Order No. 86-04 and enroll the Discharger under the General Waiver.

ATTACHMENTS

1. Existing Waste Discharge Requirements Order No. 86-04
2. Resolution No. R3-2002-0115, General Waiver for Specific Types of Discharges
3. Notice to Enroll under the General Waiver dated on November 16, 2006 letter