

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

STAFF REPORT FOR REGULAR MEETING OF OCTOBER 23, 2009

Updated September 8, 2009

ITEM NUMBER: 13

SUBJECT: Waste Discharge Requirements for Cate School, Santa Barbara County – Order No. R3-2009-0037

KEY INFORMATION

Location: 1960 Cate Mesa Road, Carpinteria, California 93013
Discharger: Cate School
Facility Name: Cate School Wastewater Treatment Facility
Type of Waste: Domestic wastewater
Treatment: Facility effluent is treated to tertiary treatment standards.
Disposal: Athletic fields, percolation wells, spray fields
Facility Design Flow: Average flow of 25,000 gallons per day
Facility Permitted Flow: Average flow of 20,000 gallons per day
Existing Order: Waste Discharge Requirements Order No. 00-002
Recycling Requirements: Title 22 Requirements
This Action: **Reissue Waste Discharger Requirements**

SUMMARY

Cate School (Discharger) owns and operates a wastewater treatment, and disposal system located in the foothills of the Santa Ynez Mountains approximately 2.5 miles northeast of the City of Carpinteria. The school property is bounded by Carpinteria Creek approximately 900 feet to the west and Gobernador Creek approximately 600 feet to the east and southeast.

This Order improves on the existing order by incorporating reclaimed water requirements for the application of tertiary treated wastewater to athletic fields. This Order replaces existing waste discharge requirements for Cate School for discharges to the spray irrigation fields.

DISCUSSION

Facility Description

The discharger's wastewater treatment plant is located in Santa Barbara County at 1960 Cate Mesa Road, northeast of the City of Carpinteria.

The treatment facility has a design capacity of 25,000 gallons per day (gpd). The wastewater treatment processes include a coarse bar screen, flow equalization, extended aeration, secondary clarifier, tertiary dual-cell rapid sand filters, and chlorine contact disinfection.

Effluent from the disinfection chamber is discharged either to a 427,000 gallon underground recycled water storage tank, to the existing spray irrigation fields, or to percolation wells.

The primary disposal option for Cate School will be irrigation of 10 acres of campus playfields. The annual average water demand for the playfields is approximately 27,000 gpd, well above the 15,000 gpd average effluent flow rate from the wastewater treatment plant. During summer months irrigation demand could exceed 80,000 gpd.

During the wet season, when playfield turf irrigation is not required, Cate School will discharge surplus treated wastewater to onsite percolation wells. The percolation wells will also be used if the recycled water does not meet Title 22 Tertiary standards.

A third disposal option will be the use of existing spray fields. The spray fields are currently used for disposal of secondary treated wastewater. Once the new wastewater treatment plant is completed, Cate School will maintain the spray fields as an alternate disposal option.

Existing Order

The Discharger currently operates under Waste Discharge Requirements Order No. 00-002 (Order No. 00-002). Order No. 00-002 requires the Discharger comply with standard provisions, prohibitions, effluent limitations, and groundwater limitations. The current Order covers the existing secondary treatment plan with disposal to the spray field. The current plant will be decommissioned and replaced with a pump station that will pump untreated wastewater to the new tertiary treatment plant.

Compliance History

Central Coast Water Board staff conducted a review of the Discharger's compliance history. There were no effluent limit violations from January 2004 – June 2009. Cate School did violate Order No. 00-002 by submitting late quarterly reports twice in 2005, three times in 2006, and once in early 2007. However, the reports were eventually submitted with no effluent limit violations reported.

Purpose of Proposed Order

The Discharger submitted a Report of Waste Discharge dated September 22, 2008. The Discharger requested updating its existing requirements to address the wastewater treatment and disposal facility upgrades that will produce tertiary treated wastewater for onsite reuse.

The proposed Order No. R3-2009-0037 revises the existing Order No. 00-002, which was adopted by the Central Coast Water Board on July 14, 2000.

Proposed Changes

Waste Discharge Requirements:

1. Disinfected tertiary recycled water limitations are included in Section B of the proposed Order. The Order includes reclamation specifications for the installation and operation of the reclaimed water system. California Department of Public Health staff reviewed and approved the Discharger's reclaimed water Engineering Report and reviewed the proposed

Waste Discharge Requirements.

2. Salt loading to groundwater is a regionwide concern. This Order proposes that the Discharger address salts through the development of a Salts Management Program. The Salts Management Program will require the Discharger to assess current contributions, assess current data to determine salts concentration in the wastewater system, and evaluate current practices and identify potential practices that will improve salt concentration in the Discharger's effluent.
3. Nutrient management is important to protect groundwater from elevated levels of nitrate. The Order proposes that the Discharger address nutrients through a Nutrient Management Program. The Nutrient Management Program will require the Discharger account for all nutrient loading to the application areas and ensure the total nitrogen applied does not exceed the amount required by the landscaping being irrigated.

Monitoring and Reporting Program:

1. Proposed effluent monitoring includes daily coliform and continuous turbidity and chlorine monitoring. The additional monitoring requirements will ensure that the effluent used for irrigation purposes meets all reclamation standards.
2. The Discharger will be required to report on the overall recycled water system performance including cross connection and backflow prevention testing results.

ENVIRONMENTAL SUMMARY

The County of Santa Barbara is the lead agency for purposes of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) (CEQA). In 2007, the County of Santa Barbara certified as adequate a Negative Declaration finding that the construction of the wastewater treatment plant, effluent storage and disposal system will have no negative effect on the environment in accordance with CEQA and the CEQA Guidelines in Title 14 California Code of Regulations. The Water Board is a responsible agency for purposes of CEQA. The Water Board has considered the Negative Declaration and has included requirements in the proposed Order to protect waters of the state.

PUBLIC NOTIFICATION

Central Coast Water Board staff notified the Discharger and all known interested parties of its intent to revise waste discharge requirements for Cate School on July 16, 2009. The notification provided interested agencies with a copy of the proposed order and an opportunity to submit written views and comments by August 21, 2009. The following known interested parties were notified:

California Department of Public Health
Santa Barbara County Public Health Department
Santa Barbara Channelkeeper

COMMENTS

Water Board staff incorporated several minor edits to the draft order based on comments from California Department of Public Health staff and Santa Barbara County Public Health Department staff. California Department of Public Health staff requested that Water Board staff add the Title 22 filter loading rate requirement to the Order. Water Board staff added the Title 22 filter loading rate requirement to Discharge Specification B.4. Santa Barbara County Public Health Department staff commented that annual cross connection testing should be included in the Order. Water Board staff added an annual cross connection testing requirement to Reclamation Specification C.24.

RECOMMENDATION

Adopt Waste Discharger Requirements Order No. R3-2009-0037 as proposed.

ATTACHMENTS

1. WDR Order No. R3-2009-0037
2. Monitoring and Reporting Program No. R3-2009-0037