STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF NOVEMBER 13-14, 2014

Prepared on October 9, 2014

ITEM NUMBER: 9

SUBJECT: Issuance of Waste Discharge Requirements, Mission

Springs Christian Camp and Conference Center Wastewater Treatment Plant, Santa Cruz County, Order No. R3-2014-0025

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KEY INFORMATION

Location: Mission Springs Christian Camp and Conference Center, 1050

Lockhart Gulch Road, Scotts Valley, Santa Cruz County, California

Type of Discharge: Residential

Design Capacity: The treatment plant is designed to treat a peak flow of 36,300 gpd. The

total disposal capacity between all five zones is estimated to be 36,355

gpd. Permitted flow is 25,400 gpd (70% of designed maximum)

averaged over each month (30-day average).

Current Capacity: Not applicable

Treatment: Enhanced, recirculating, three-stage trickling filter wastewater

treatment plant.

Disposal: Five new independent leachfield zones.

Reclamation: None at this time. Existing Orders: None at this time.

This Action: Adopt Order No. R3-2014-0025

SUMMARY

The Mission Springs Christian Camp and Conference Center (hereafter "Mission Springs") owns and operates the newly installed distribution system and advanced wastewater treatment plant (hereafter "Facility"). Mission Springs is located in the San Lorenzo River watershed, approximately two miles northeast of Felton, at 1050 Lockhart Gulch Road, Scotts Valley, Santa Cruz County. There are no pre-existing waste discharge orders for the Facility because historically all wastewater discharges were handled by several individual septic systems. This is a new Order.

DISCUSSION

Background

The primary objective of Waste Discharge Requirements Order No. R3-2014-0024 is to permit subsurface discharge of treated domestic wastewater.

<u>Facility Description</u>: Mission Springs' new collection system includes over 3,000 linear feet of gravity and pressurized sewer mains to convey sewage up to Frontier Lodge and then to the new wastewater treatment system. The treatment system is an enhanced, recirculating, multi-stage wastewater treatment plant (three-stage trickling filter) located at the bottom of the Biblar Trail. The advanced treatment system (Facility) is designed to treat a peak flow of 36,300 gallons per day (gpd) and to serve a maximum population of 660 persons. The proposed Order permits the Facility to have a daily flow of 25,400 gpd averaged over each month (30-day average). Wastewater flow measurements taken in September 2007 indicate that the daily average and peak flows at the facility are 7,840 gpd and 23,670 gpd, respectively.

This Order requires a 50% reduction of nitrogen in effluent, consistent with Resolution No. 95-04. Resolution 95-04 amended the Basin Plan to incorporate the "Wastewater Management Plan for the San Lorenzo River Watershed, County of Santa Cruz" and "San Lorenzo Nitrate Management Plan Phase II Final Report" by reference and requires individual onsite wastewater disposal systems to comply with both plans. The Facility is not located within a California Groundwater Bulletin 118 (update 2003) groundwater basin but lies immediately north of the Scotts Valley (3-27) groundwater basin.

<u>Compliance History</u>: The County of Santa Cruz regulated the individual septic systems installed at this facility prior to the installation of the new advanced treatment system. Mission Springs does not have a compliance history with the Water Board.

Proposed Order Contents

<u>Flow</u>: The treatment plant is designed to treat a peak flow of 36,300 gpd. The total disposal capacity between all five zones is estimated to be 36,355 gpd. Permitted flow is 25,400 gpd (70% of designed maximum) averaged over each month (30-day average).

<u>BOD</u>: 5-day Biological Oxygen Demand effluent limit of 30 milligrams per liter (mg/L), maximum 30-day average

pH: The pH effluent limit is set at 6.5 to 8.4, standard units.

<u>TSS and Salts</u>: The discharge shall not cause a statistically significant increase of mineral or organic pollutant concentrations in underlying groundwater, as determined by statistical analysis of samples collected from wells in the vicinity of the treatment and disposal area.

<u>Nutrients</u>: Effluent Total Nitrogen shall be reduced by at least 50 percent prior to subsurface disposal. Compliance will be determined from samples taken at points before and after extended treatment.

ENVIRONMENTAL SUMMARY

The Mission Springs Conference Center obtained a Use Permit in 1976 from the County of Santa Cruz, Application No. 75-1060-U. The Use Permit approved occupancy for 500 overnight stays and up to 1,000 people for day use. Therefore, County of Santa Cruz Environmental Health staff found the facility to have an existing occupancy and use deeming the wastewater treatment system upgrade exempt from any CEQA requirements.

The Central Coast Water Board's action to adopt waste discharge for this existing facility is exempt from CEQA pursuant to Section 15301 of the CEQA guidelines.

COMMENTS

See Attachments 2 and 3

ATTACHMENTS

- 1. Waste Discharge Requirements Order No. R3-2014-0025
- 2. Mission Springs Conference Center Comments
- 3. Response to Comments

RECOMMENDATION

Adopt Order No. R3-2014-0025 as proposed.

CRD Place Id: 805824 126-01