

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

STAFF REPORT FOR REGULAR MEETING OF MAY 14, 2004

Prepared on February 23, 2004

ITEM: 33

SUBJECT: Revision of Waste Discharge Requirements for Monterey County Parks Department, Lake San Antonio Recreation Area, North Shore Wastewater Facilities, Monterey County, Order No. R3-2004-54

KEY INFORMATION

Location: North shore of Lake San Antonio, Monterey County
Type of Waste: Domestic Wastewater
Design Capacity: 60,000 gallons per day (30-day average)
Current Flow: To be determined by new flow meter
Treatment: Imhoff tank followed by oxidation ponds
Disposal: Percolation and Evaporation Pond
Reclamation: None
Existing Orders: Order No. 01-132

SUMMARY

The Monterey County Parks Department owns and operates the Lake San Antonio Recreation Area, including a wastewater treatment and disposal facility on the Lake's north shore. Wastewater flows peak during the summer and are relatively low during the winter. The discharger measured past flow rates up to 71,000 gpd using a V-notch weir. These measurements seemed inaccurate, so the discharger recently installed an ultrasonic flow meter, which should provide more reliable flow data. Treatment facilities consist of an Imhoff Tank, two oxidation ponds, and one biosolids pond. Disposal occurs via percolation and evaporation. In 2001 the Regional Board updated waste discharge requirements for this discharge. Since the flows appeared to exceed the design capacity during the summer, Order No. 01-132 required a capacity evaluation study. That study was submitted to the Executive Officer. It made recommendations to modify the wastewater treatment plant to increase capacity. Those modifications included adding mechanical aerators and deepening the treatment ponds. With the proposed modifications, staff believes that the wastewater plant capacity can be reliably increased from 30,000 gallons per day to 60,000 gallons per day. This Order is essentially identical to Order No. 01-132, except that it sets a flow limit at 60,000 gallons per day.

DISCUSSION

Domestic wastewater generated from campground and recreation areas is collected, treated and disposed of at a wastewater treatment plant, which includes an Imhoff Tank, two oxidation ponds, one biosolids pond, and a disposal pond.

Treatment Description - Wastewater is collected and routed into an "Imhoff Tank." The Imhoff Tank, which operates like a septic tank, provides physical separation and headworks functions. From the Imhoff Tank, wastewater flows to the first of two oxidation/clarification ponds for facultative treatment. Treated wastewater flows to the disposal pond near the treatment works.

Disposal Pond Soils - The disposal pond has performed reliably over the years. The soils have allowed percolation without excessive accumulation.

Biosolids - Biosolids are dried onsite. Once dried, biosolids are disked into soils near the wastewater treatment plant.

Nearby Surface Water - The wastewater facility is located in the San Antonio Reservoir tributary area. The nearest surface water body is the Lake San Antonio Reservoir, located about one half mile to

the southwest. Lake San Antonio Reservoir drains in a southeasterly direction to the Salinas River.

Groundwater - The wastewater facility is constructed adjacent to a seasonal tributary that enters Lake San Antonio. The tributary is dry for most of the year. Staff presumes that percolated effluent commingles with the tributary's underflow, when present, and enters Lake San Antonio.

Flooding - Flooding has not been an issue. The facility is protected from the 100-year flood levels.

Proposed Order - The proposed Order is only slightly different from the existing Order, the difference being that the flow limit has been increased from 30,000 to 60,000 gallons per day in response to treatment modifications.

Monitoring and Reporting Program

Proposed Monitoring and Reporting Program (No. R3-2004-0054) requires routine water supply, wastewater influent, pond, and effluent monitoring to ensure ground water quality protection. The monitoring program includes daily influent and effluent measurements. The wastewater in the ponds is monitored for total dissolved solids, sodium, chloride, total nitrogen, ammonia and nitrate semiannually. The effluent wastewater in the disposal pond is monitored for flow volume, total suspended solids, BOD, and infrequent heavy metals. Monitoring reports are required semiannually.

Groundwater Monitoring - Staff does not recommend groundwater monitoring because the cost of designing, installing, and maintaining a groundwater monitoring system would be excessive for any benefits that might be gained. The facility is remote, the flows are relatively low, and the receiving water is sufficiently vast. Furthermore, nearby groundwater is not being used.

COMPLIANCE HISTORY

Over the last decade, the Discharger has not had significant compliance problems, except concerns about peak flows. Those flow problems will be addressed by modifying the wastewater ponds to increase treatment capacity.

POTENTIAL PROBLEMS

As was mentioned above, the facility's compliance history does not indicate significant problems. The facility is remote and inspections suggest satisfactory operation.

ENVIRONMENTAL SUMMARY

This action is intended to ensure compliance with laws and regulations administered by the Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act pursuant to Section 15321 of the Resources Agency Guidelines. Mitigation measures to prevent nuisance and assure protection of beneficial uses of surface and ground waters will be implemented through this Order.

COMMENTS AND RESPONSES

The following parties were solicited for comments.

Monterey County Parks Department - Concur

Monterey County Department of Environmental Health - No response

Monterey Bay Unified Air Pollution Control District - No response

Monterey Co. Building & Planning Department - No response

Monterey County Department of Public Works - No response

California Department of Fish and Game - No response

RECOMMENDATION

Adopt proposed WDR Order No. R3-2004-054, including the Monitoring and Reporting Program.

ATTACHMENTS

1. Proposed Order No. R3-2004-054
2. Monitoring and Reporting Program No. R3-2004-054.

TJK -Task:121-01
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