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# California Regional Water Quality Control Board Central Valley Region

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Arnold  
Schwarzenegger  
Governor

8 June 2010

Mr. Daniel E. Blackwell  
Chief of Maintenance and Construction  
United States Department of the Interior  
Sequoia-Kings Canyon National Park  
47050 Generals Highway  
Three Rivers, CA 93271

## NOTICE OF APPLICABILITY

### ***WATER QUALITY ORDER NO. 97-10-DWQ, GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES TO LAND BY SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS, U.S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE, SEQUOIA-KINGS CANYON NATIONAL PARK, ASH MOUNTAIN WWTF, TULARE COUNTY***

The United States Department of the Interior, National Park Service, Sequoia-Kings Canyon National Park currently discharges disinfected secondary treated effluent from Ash Mountain Wastewater Treatment Facility (WWTF) to land. Waste Discharge Requirements (WDRs) Order No. 81-098 currently regulates the discharge. The WDRs are obsolete, inconsistent with current plans and policies of the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board), and need to be updated.

On 12 April 2010, Central Valley Water Board staff received your letter requesting coverage for the Ash Mountain WWTF under Water Quality Order No. 97-10-DWQ, *General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems* (hereafter General Order).

Based on the findings of the original WDRs, recent information from self-monitoring reports and communication with National Park staff, the discharge meets the conditions of the General Order. All the requirements contained within the General Order described as applicable to "All Small Domestic Systems," "Activated Sludge Systems," and "Surface Disposal Systems" apply to the Ash Mountain WWTF. The enclosed Monitoring and Reporting Program (MRP) No. R5-2010-0806 is hereby incorporated into this Notice of Applicability by reference. MRP No. R5-2010-0806 replaces the MRP associated with the General Order. You are hereby assigned General Order No. 97-10-DWQ-R5062.

***California Environmental Protection Agency***



## LOCATION

The Discharger operates the Ash Mountain WWTF and spray field disposal facility just within southwestern Sequoia National Park boundaries, in Tulare County, about six miles northeast of the community of Three Rivers. The facilities are adjacent to Generals Highway (Highway 198) and the Middle Fork of the Kaweah River in Section 34, T16S, R29E, MDB&M. The WWTF is on the south side of the highway and the spray field disposal area is on the north side, approximately 200 feet above and 1,000 feet northwest of the WWTF.

The WWTF and disposal area are in the Tulare Lake Basin. The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition* (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin.

## DESCRIPTION

The Ash Mountain WWTF treats domestic wastewater from the Ash Mountain Headquarters of Sequoia National Park and 19 government-owned homes. The headquarters consists of offices, a warehouse, an auto shop, and seasonal housing for park employees. The headquarters do not include overnight stay facilities (camping or other lodging) for visitors to the Park. The average daily flow during the dry season (May through October) is 9,500 gpd and during the wet season (November through April) is 6,400 gpd. The design flow for the WWTF is 17,500 gpd.

The WWTF, built in 1974, is an extended aeration activated sludge package treatment plant, consisting of headworks (communitor and bar screen), an aeration basin, a secondary clarifier, and two lined ponds designed for effluent storage. Some additional solids settle out in the effluent storage ponds, which each hold approximately 980,000 gallons with two feet of freeboard. Park staff use one pond at a time for effluent storage and the other for sludge thickening before disposal at a permitted facility. The WWTF does not treat or dispose of sludge. Prior to discharge to the spray field, effluent is chlorinated and pumped into a 10,000-gallon chlorine contact tank at the WWTF.

The Park currently uses about 2.3 acres of a 4.5-acre spray field about 700 feet west of the Generals Highway and 200 feet above the highway in elevation. The 10,000 gpd design flow for the 2.3-acre field results in a hydraulic loading rate of about one inch per week (or five feet per year). Once additional spray field plumbing has been installed to utilize the rest of the spray field, the Park may discharge up to 30,000 gpd, as described in the technical report the Park submitted on 31 October 2001.

Based on a 1987 National Park Service soils report, soils in the spray field area are Ultic Haploxeralfs-Typic Xerochrepts, formed in colluvium and residuum weathered from granitic rock. Site-specific studies show percolation rates from seven minutes per inch to 28 minutes per inch, and soil depths of 1.5 to 3.5 feet. Surface slopes in the area range from about 10 percent in the spray field to as much as 70 percent. The soils support a cover of

shrubs with some clusters of oak trees. In open areas there are growths of annual grasses and forbs. The spray field is fenced to preclude public contact and prevent animals from damaging spray nozzles. The Park uses the area around the spray field to graze pack mules.

The majority of groundwater resides in fractured bedrock. The WWTF and spray field are in the Three Rivers Area of the Tulare Lake Basin. The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition* (Basin Plan) designates beneficial uses for groundwater of municipal and domestic supply.

Average annual precipitation at Ash Mountain Headquarters is about 25.4 inches, all of which is rain. Surface water drainage from the WWTF and the spray field is to the Middle Fork of the Kaweah River. There is no record of surfacing groundwater or springs in the spray field area.

Water quality of the Middle Fork of the Kaweah River is excellent, with electrical conductivity around 100  $\mu\text{mhos/cm}$ . The Basin Plan specifies the following beneficial uses of the Kaweah River above Lake Kaweah: municipal and domestic water supply (MUN); hydropower generation (POW); water contact and non-contact recreation (REC-1 and REC-2); warm and cold freshwater habitat (WARM and COLD); wildlife habitat (WILD); rare, threatened, and endangered species (RARE); spawning, reproduction, and/or early development (SPWN); and freshwater replenishment (FRSH).

This Notice of Applicability (NOA) regulates the Ash Mountain WWTF and its discharge of domestic wastewater to land. The Central Valley Water Board will consider an order rescinding WDRs Order No. 81-098 at an upcoming meeting.

## **FACILITY-SPECIFIC REQUIREMENTS**

1. Discharge of wastewater at a location or in a manner different from that described above is prohibited.
2. The WWTF shall be operated in accordance with the requirements contained in the General Order.
3. There shall be no discharge to the spray field during periods of precipitation or runoff, or under saturated soil conditions.
4. The Discharger shall operate the WWTF to ensure that on or around 15 October of each year, one of the effluent storage ponds is empty and the other has at least five (5) feet of freeboard.
5. The Discharger shall submit the required annual fee (as specified in the annual billing issued by the State Water Resources Control Board) until the NOA is officially terminated.

6. Failure to abide by the conditions of the General Order and this letter authorizing applicability, including its supplemental monitoring and reporting requirements (MRP No. R5-2010-0806), could result in enforcement actions as authorized by provisions of the California Water Code.

If you have any questions regarding this NOA, please contact Mr. Steve Popenoe at (559) 444-2418.

*Original signed by: Clay L. Rodgers for*

Pamela C. Creedon  
Executive Officer

Enclosures: Water Quality Order No. 97-10-DWQ  
Monitoring and Reporting Program No. R5-2010-0806  
Standard Provisions and Reporting Requirements