STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

320 West 4th Street, Suite 200, Los Angeles, California 90013

FACT SHEET WASTE DISCHARGE REQUIREMENTS FOR CASTAIC LAKE WATER AGENCY (TEMPORARY TREATMENT PLANT FOR SAUGUS WELL NOS. 1 AND 2)

NPDES NO. CAG994005 CI-8798

FACILITY ADDRESS

FACILITY MAILING ADDRESS

Magic Mountain Parkway at the South Fork of the Santa Clara River Santa Clarita, California

27234 Bouquet Canyon Road Santa Clarita, CA 91350

PROJECT DESCRIPTION:

Castaic Lake Water Agency proposes to discharge treated groundwater from a temporary treatment plant located at Magic Mountain Parkway at the South Fork of the Santa Clara River, Santa Clarita. Groundwater will be extracted for treatment from production wells; SCWC Saugus Well No. 1 (Saugus 1) and SCWC Saugus Well No. 2 (Saugus 2) located on the east bank of the South Fork of the Santa Clara River. In 1997, perchlorate was detected above the DHS Action Level in both the Saugus 1 and Saugus 2 wells.

A temporary water treatment system will be constructed on a private property near Saugus 1 to treat perchlorate-contaminated groundwater from Saugus 1 and Saugus 2 wells. The treatment system will consist of a filtration and one-pass ion-exchange system. Pilot testing of the treatment system will be performed in order to assess its performance.

VOLUME AND DESCRIPTION OF DISCHARGE:

Up to 3.50 million gallons per day of treated groundwater will be discharged into the South Fork of the Santa Clara River (Latitude: 34° 42' 46", Longitude: 118° 56' 30"), thence to the Santa Clara River, between Bouquet Canyon Road Bridge and West Pier Highway 99, a water of the United States. This high rate of discharge is necessary in order to assess the performance of various one-pass ion-exchange resins which are used to treat perchlorate-contaminated groundwater, and in order to conduct a pumping test to evaluate the hydraulic response of the Saugus Formation and Alluvial Aquifer to sustained pumping from the Saugus wells. The site location map and process flow diagram are shown in Figures 1 and 2, respectively.

APPLICABLE EFFLUENT LIMITATIONS

Based on the information provided, the analytical data showed reasonable potential for toxics to exist in groundwater above the Screening Levels for Potential Pollutants of Concern in Potable Groundwater in Attachment A. Therefore, the effluent limits for toxic compounds in Section E.1. and E.2. are applicable to your discharge. The discharge of treated groundwater drains into the South Fork of the Santa Clara River that flows into the Santa Clara River, designated as MUN (Intermittent) beneficial use. The effluent limitations in Attachment B.3.c. of the Order are applicable to this discharge.

This Table lists the specific constituents and effluent limitations applicable to the discharge.

		Discharge Limitations	
Constituents	Units	Daily Maximum	Monthly Average
Total Dissolved Solids	mg/L	1000	
Sulfate	mg/L	300	
Chloride	mg/L	100	
Boron	mg/L	1.5	
Nitrogen	mg/L	10	
Total Suspended Solids	mg/L	150	50
Turbidity	NTU	150	50
BOD ₅ 20°C	mg/L	30	20
Settleable Solids	ml/L	0.3	0.1
Residual Chlorine	mg/L	0.1	
Copper (Cu)	μg/L	1000	
Lead (Pb)	μg/L	50	
Total Chromium	μg/L	50	
1,1 Dichloroethane	μg/L	5	
1,1 Dichloroethylene	μg/L	6	
1,1,1 Trichloroethane	μg/L	200	
1,1,2 Trichloroethane	μg/L	5	
1,1,2,2 Tetrachloroethane	μg/L	1	
1,2 Dichloroethane	μg/L	0.5	
1,2-Trans Dichloroethylene	μg/L	10	
Tetrachloroethylene	μg/L	5	
Trichloroethylene	μg/L	5	
Carbon Tetrachloride	μg/L	0.5	
Vinyl Chloride	μg/L	0.5	
Total Trihalomethanes	μg/L	80	
Benzene	μg/L	1	
Methyl tertiary butyl ether (MTBE)	μg/L	5	

FREQUENCY OF DISCHARGE:

The discharge of treated groundwater from the temporary treatment plant will last approximately three months.

REUSE OF WATER:

The reuse of pumped groundwater at the site was evaluated. Discharge to the sewer is not feasible because of the large volume of water involved. The disposal of water to a treatment facility is not feasible because it is not cost effective. Therefore, the groundwater will be discharged into the South Fork of the Santa Clara River.