



**Central Valley Regional Water Quality Control Board** 

16 October 2017

Hazem Gabr, Water Quality Manager Southern California Edison 2244 Walnut Grove Avenue Rosemead, CA 91770 CERTIFIED MAIL 7017 1450 0000 8121 0036

## NOTICE OF APPLICABILITY

## WATER QUALITY ORDER 2003-0003-DWQ, STATEWIDE WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES TO LAND WITH A LOW THREAT TO WATER QUALITY, SOUTHERN CALIFORNIA EDISON, SHAVER DAM DRAIN CLEANING DISCHARGE, FRESNO COUNTY

On 20 July 2017, Southern California Edison (SCE) submitted a Notice of Intent (NOI) to obtain coverage under Water Quality Order No. 2003-0003-DWQ, *Statewide General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality* (hereafter General Order) for clear water discharges to land from cleaning the drains at the Shaver Dam on Shaver Lake in Fresno County. Drain cleaning operations will take place over a four week period in the fall when necessary. An estimated 75,000 gallons of water will be generated during the cleaning process. The discharge will be to unpaved roads for dust control or to a spray field on private land owned by SCE in the vicinity of Shaver Lake. Analytical data and a technical report describing the cleaning process and discharge were submitted on 19 June 2017.

The submittals contain all the information required to evaluate applicability of the General Order. Based on the information provided in the NOI and supplemental information, the discharge meets the conditions of the General Order. The discharge is hereby covered under General Order No. 2003-0003-DWQ-0180. Please include this number on all correspondence related to this discharge.

## **PROJECT LOCATION**

Shaver Dam is part of the Big Creek hydroelectric system on Shaver Lake, approximately 14 miles east of Prather and 6 miles southwest of Big Creek in Fresno County. This portion of Fresno County is within the Tulare Lake Basin.

The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition,* revised July 2016 (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.

KARL E. LONGLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

The California Department of Water Resources, Division of Dam Safety requires SCE to conduct routine maintenance on certain dams within the Big Creek hydroelectric system to maintain dam safety. Shaver Dam on Shaver Lake is a large concrete dam equipped with a complex series of weep holes and drainage channels designed to collect seepage water in the dam and relieve pressure within the dam structure. Over time the weep holes and drainage channels become obstructed with calcite and hard water deposits. SCE needs to clean and flush out the drainage structures periodically to remove these deposits, as part of the required maintenance on the dam.

Cleaning and maintenance of Shaver Dam will take place every few years when needed to maintain dam safety. Cleaning will involve mechanically removing the calcite build up from the weep holes and flushing the drainage structures with a high pressure wash. Water, sediment, and algae flushed out of the drains will be collected in a temporary storage/settling tank. The cleaning process will continue until the collected water is clear of debris and algae.

Water generated during the cleaning process will be settled and then filtered using filter bags to remove excess sediment and suspended solids before being transferred to a water truck where it will be applied to approximately 17 miles of unpaved roads for use as dust control on land owned by SCE in the vicinity of Shaver Lake. The water will be applied by SCE, and spread evenly over the road surface at low rates to prevent runoff or nuisance conditions (such as erosion or ponding). The NOI estimates that the discharge will be applied at a rate of approximately 0.12 gallons per square foot of road. Prior to spraying the roads all water truck operators will be trained in the correct application rate to ensure no runoff is created, and 50 foot setbacks from streams and water courses will be maintained to prevent runoff into surface waters.

Alternatively, or in addition to, the water may be discharged to a temporary spray field on private land owned by SCE near the base of the dam. The discharge will be spread evenly over the area to prevent oversaturation of the soils, ponding, or runoff. Once the discharge is complete, the spray field will be dismantled and removed

Samples of the drain water from Shaver Dam contain high concentrations of iron and iron bacteria. The sample also contained arsenic and aluminum, above their respective Maximum Contaminant Levels (MCLs). However, these metals are expected to be removed by the filtering process. Sampling of the treated water will confirm this prior to discharge. According to the operations plan in the technical report, the filter bags will be tested and disposed of at an appropriate facility after use.

The General Order and this Notice of Applicability (NOA) regulate the discharge of water from drain cleaning operations at Shaver Dam and discharge to land or to unpaved fire roads for dust control on lands owned by Southern California Edison in Fresno County.

## FACILITY-SPECIFIC REQUIREMENTS

- 1. Discharge to surface waters or surface water drainage courses is prohibited.
- 2. Discharge of water at a location or in a manner different from that described in the NOI and supplemental information is prohibited.

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- 3. Prior to initiating the discharge, samples of the treated water shall be collected and analyzed for constituents of concern including pH, electrical conductivity (EC), and metals including iron, aluminum, and arsenic.
- 4. In accordance with the General Order's Monitoring and Reporting Program, all monitoring results including volume and location of discharges shall be recorded and submitted on a semi-annual basis.
- 5. All technical reports required herein that involve evaluation, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, section 6735, 7835, and 7835.1. As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.
- The Discharger shall submit the required annual fee (as specified in the annual billing statement issued by the State Water Resources Control Board) until this Notice of Applicability is terminated.
- 7. Failure to abide by the conditions of the General Order, including its monitoring and reporting requirements, and this letter authorizing applicability could result in enforcement actions, as authorized by provisions of the California Water Code.

The Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) has gone to a Paperless Office System. All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the Central Valley Water Board office at 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program: Non-15, Place ID: 836296, Facility Name: Southern California Edison Shaver Dam, Enrollee Number: 2003-0003-DWQ-0180.

If you have any questions regarding this NOA, please contact Katie Carpenter at (559) 445-5551 or by email at kcarpenter@waterboards.ca.gov.

Pamela C. Creedon Executive Officer

Enclosures: Water Quality Order No. 2003-0003-DWQ

cc: Tanya Bilezikjian, Michael Baker International (via email)