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## Central Valley Regional Water Quality Control Board

13 September 2018

Hazem Gabr, Water Quality Manager  
Southern California Edison Company  
PO Box 100  
Big Creek, CA 93605

**CERTIFIED MAIL**  
**7018 0360 0000 1932 6112**

**NOTICE OF APPLICABILITY (NOA); LIMITED THREAT GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2016-0076-01 (NPDES NO. CAG995002) FOR LIMITED THREAT DISCHARGES TO SURFACE WATER; SOUTHERN CALIFORNIA EDISON COMPANY; BALSAM MEADOWS HYDROELECTRIC PROJECT, EASTWOOD POWERHOUSE FACILITY; FRESNO COUNTY**

On 4 June 2018, Southern California Edison Company (Discharger) provided an application for coverage under General Order R5-2016-0076-01 for Limited Threat Discharges to Surface Water (Limited Threat General Order) for discharge of treated wastewater, non-contact cooling water, and groundwater at the Balsam Meadows Hydroelectric Project, Eastwood Powerhouse Facility (Facility) in Fresno County. The Facility is currently covered under individual Waste Discharge Requirements Order R5-2013-0158, which is set to expire 1 December 2018. Central Valley Water Board staff has determined that the Facility discharge as described below, meets the required conditions for coverage under the Limited Threat General Order, as a Tier 1B discharger. Upon rescission of Order R5-2013-0158 (currently scheduled for consideration at the 4/5 October 2018 Central Valley Water Board meeting), this NOA will become effective and the Facility will be assigned Limited Threat General Order R5-2016-0076-047. Please reference your Limited Threat General Order number, **R5-2016-0076-047**, in your correspondences and submitted documents.

The enclosed Limited Threat General Order may also be viewed at the following web address:

[https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2016-0076-01.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf)

A copy of this NOA can be viewed at the following web address:

[https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2016-0076-01/](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01/)

You are urged to familiarize yourself with the contents of the entire Limited Threat General Order and this NOA. The Limited Threat General Order prescribes mandatory discharge monitoring and reporting requirements. The Facility activities shall be operated in accordance with the requirements contained in this NOA and the Limited Threat General Order.

## **PROJECT DESCRIPTION**

The Facility is located at 45795 Tollhouse Road in Shaver Lake on land owned by the United States Forest Service. The Discharger owns and operates the powerhouse as part of its Balsam Meadows Hydroelectric Project (Balsam Project), which generates hydroelectric power through a single pump-turbine connected to a motor/generator. The Balsam Project includes a 5,900-foot diversion tunnel connecting the existing Huntington-Pitman-Shaver Conduit, a 4,320-foot power tunnel, an access tunnel, a construction tunnel used to store equipment and access different levels of the Facility, and a 7,500-foot tailrace tunnel with a 16-foot horseshoe section leading to Shaver Lake. The Balsam Project also includes the Balsam Meadows Forebay, a 2,100 acre-foot storage reservoir from which water flows to the Facility. Occasionally, on off-peak electrical consumption hours, water from Shaver Lake may be pumped into the forebay for power generation the following day.

Discharges from the tailrace tunnel to Shaver Lake (Discharge Point 001) consist of comingled flow from the following waste streams (WSs):

WS 001A – Main Sump, which consists of: (1) treated wastewater from the oil and grease separator, which treats wastewater from equipment and floor cleaning operations, leaking pipe joints, and leaking bearings, (2) untreated groundwater that seeps into the Main Sump, (3) untreated groundwater from the access tunnel that collects in the Access Tunnel Sump, and (4) occasional untreated groundwater from the Construction Tunnel (CT-4) Sump when equipment and structures of the construction tunnel require maintenance.

WS 001B – CT-4 Sump, which consists solely of untreated groundwater that seeps into the construction tunnel.

WS 003 – Non-contact cooling water for the turbine and generator pumping equipment and water used for bearing/seal operation.

Discharges to North Fork Stevenson Creek (Discharge Point 002) consists of untreated groundwater from the construction tunnel and from the access tunnel. Discharge Point 002 is only used when the Powerhouse is not operating, usually when there is maintenance on the Tailrace Tunnel. Discharge Point 002 has not been used in approximately the last 15 years.

Discharge Point 001 to Shaver Lake is located at Gate 5 at a latitude and longitude of 37°7'44.65" north and 119°16'1.38" west. Discharge Point 002 to North Fork Stevenson Creek is located at a latitude and longitude of 37°8'7.08" north and 119°15'32.15" west. The Discharger's application states that for the combination of internal waste streams at Discharge Point 001 the maximum daily flowrate is 3.24 million gallons per day (mgd) and the average flowrate is 2.61 mgd. Power generation water is also discharged to Discharge Point 001 at a maximum daily flowrate of 672 mgd and an average flowrate of 336 mgd. Discharge Point 002 occurs approximately once every 15 years, at a maximum of 1.0 mgd.

**CALIFORNIA TOXICS RULE / STATE IMPLEMENTATION POLICY MONITORING**

The Limited Threat General Order incorporates the requirements of the California Toxics Rule (CTR) and the State Water Resources Control Board’s (State Water Board), *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, 2005, also known as the State Implementation Policy (SIP). Screening levels for CTR constituents and other constituents of concern are found in Attachment I of the Limited Threat General Order. Attachment I lists the most stringent objective/criteria (i.e., screening level) for receiving waters with and without the municipal and domestic (MUN) beneficial use.

The Central Valley Water Board’s *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition (Revised July 2016)* (hereinafter Basin Plan) does not specifically identify beneficial uses for Shaver Lake and North Fork Stevenson Creek, but does identify present and potential beneficial uses for San Joaquin River from its sources to Millerton Lake, to which Shaver Lake and North Fork Stevenson Creek are tributaries. The Basin Plan does designate MUN as an existing beneficial use for sources to Millerton Lake. Therefore, screening levels based on MUN are applicable to the Facility’s discharge. Central Valley Water Board staff compared the representative data reported for the Facility to the applicable screening levels listed in Attachment I of the Limited Threat General Order. Review of the representative water quality data for the Facility showed that there were no constituents detected in the effluent above the applicable screening levels listed in Attachment I of the Limited Threat General Order. However, Technology-Based Effluent Limitations for total suspended solids and settleable solids have also been retained in this NOA.

**EFFLUENT LIMITATIONS**

Effluent limitations are specified in Sections V.A and V.B, Effluent Limitations, of the Limited Threat General Order. The following effluent limitations are applicable to discharge to Shaver Lake (Discharge Point 001) and North Fork Stevenson Creek (Discharge Point 002) with compliance measured at Monitoring Locations EFF-001 and EFF-002, unless otherwise noted:

**Table 1. Effluent Limitations for Discharge Point 001 and Discharge Point 002**

Parameter	Units	Effluent Limitations		Section Reference
		Average Monthly	Maximum Daily	
Total Suspended Solids	mg/L	10	20	V.B.1.a
Settleable Solids	mL/L	--	0.1	V.B.1.a

- **Flow (Section V.A.1.a).** The maximum daily discharge flow of non-contact cooling water shall not exceed 3.11 million gallons per day, as measured at Monitoring Location EFF-001C.
- **pH (Section V.A.1.b.i).** The pH of all discharges within the Sacramento and San Joaquin River Basins shall at all times be within the range of 6.5 to 8.5.
- **Whole Effluent Toxicity, Chronic (Section V.A.2.a).** There shall be no chronic toxicity in the discharge.

**RECEIVING WATER LIMITATIONS**

The Limited Threat General Order includes receiving surface water limitations in Section VIII.A. Receiving Water Limitations are based on water quality objectives contained in the Basin Plan for the Sacramento River and San Joaquin River Basins and are a required part of the Limited Threat General Order. Based on the information provided in the NOI, only the following receiving surface water limitations are applicable to this discharge:

- Bacteria (VIII.A.2);
- Biostimulatory substances (VIII.A.3);
- Chemical constituents (VIII.A.4);
- Color (VIII.A.5);
- Dissolved oxygen (VIII.A.6.a.i, ii, and iv);
- Floating material (VIII.A.7);
- Oil and grease (VIII.A.8);
- pH (VIII.A.9.a);
- Pesticides (VIII.A.10);
- Radioactivity (VIII.A.11);
- Suspended sediments (VIII.A.12);
- Settleable substances (VIII.A.13);
- Suspended material (VIII.A.14);
- Taste and odors (VIII.A.15);
- Temperature (VIII.A.16.a);
- Toxicity (VIII.A.17); and
- Turbidity (VIII.A.18.a).

**MONITORING AND REPORTING**

Monitoring and reporting requirements are contained in Attachment C of the Limited Threat General Order. The Discharger is required to comply with the following specific monitoring and reporting requirements in accordance with Attachment C of the Limited Threat General Order.

**Monitoring Locations** – The Discharger shall monitor the influent, effluent, and the receiving water at the specified locations as follows:

**Table 2. Monitoring Station Locations**

<b>Discharge Point Name</b>	<b>Monitoring Location Name</b>	<b>Monitoring Location Description</b>
001	EFF-001	At Gate 5 where a representative sample of the comingled waste streams can be collected prior to discharging to Discharge Point 001
001	EFF-001C	A location where a representative sample of non-contact cooling water flow from the Powerhouse to the Tailrace Tunnel can be collected.
002	EFF-002	At the Access Tunnel Sump where a representative sample of the discharge can be collected prior to discharging to Discharge Point 002

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
–	RSW-001U	A location greater than 25 feet, and not to exceed 125 feet from the point of discharge from the Tailrace Tunnel to Shaver Lake
–	RSW-001D	A location within 25 feet of the point of discharge from the Tailrace Tunnel to Shaver Lake
–	RSW-002U	A location not to exceed 250 feet upstream of Discharge Point 002
–	RSW-002D	A location not to exceed 250 feet downstream of Discharge Point 002

**Effluent Monitoring** – When discharging to Shaver Lake, the Discharger shall monitor the effluent at Monitoring Locations EFF-001C and EFF-001 as follows:

**Table 3. Effluent Monitoring EFF-001C**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Discharge Flow Rate, Total	MGD	Meter	Continuous	--

**Table 4. Effluent Monitoring EFF-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	standard units	Grab	1/Quarter	1,2,3
Temperature	°F	Grab	1/Quarter	1,2
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Quarter	1,2
Total Suspended Solids	mg/L	Grab	1/Quarter	1
Settleable Solids	mL/L	Grab	1/Quarter	1
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/Year	1
Chronic Toxicity	TUc	Grab	1/Year	1,4

- <sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
- <sup>2</sup> A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained by the Discharger.
- <sup>3</sup> pH samples must be analyzed within 15 minutes of sample collection, in accordance with 40 CFR Part 136.
- <sup>4</sup> See the Limited Threat General Order MRP (Attachment C, Section V) for toxicity monitoring requirements.

When discharging to North Fork Stevenson Creek, the Discharger shall monitor the effluent at Monitoring Location EFF-002 as follows:

**Table 5. Effluent Monitoring EFF-002**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Discharge Flow Rate, Total	MGD	Meter	Continuous	--
pH	standard units	Grab	1/Month	1,2,3
Temperature	°F	Grab	1/Month	1,2
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Month	1,2
Total Suspended Solids	mg/L	Grab	1/Month	1
Settleable Solids	mL/L	Grab	1/Month	1
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/Month	1
Chronic Toxicity	TUc	Grab	1/Year	1,4

- <sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
- <sup>2</sup> A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained by the Discharger.
- <sup>3</sup> pH samples must be analyzed within 15 minutes of sample collection, in accordance with 40 CFR Part 136.
- <sup>4</sup> See the Limited Threat General Order MRP (Attachment C, Section V) for toxicity monitoring requirements.

**Effluent Characterization Monitoring** – Section II.B.2 of the Limitations and Discharge Requirements section of the Limited Threat General Order requires that dischargers submit new analytical results every 5 years for pollutants specified in Table I-1 of Attachment I. The Facility is considered a Tier 1B discharge. Therefore, the Discharger shall conduct one effluent sampling event at Monitoring Locations EFF-001 and EFF-002 by **21 May 2023** and submit the results in the corresponding quarterly report for the following constituents shown in Table 6, below:

**Table 6. Effluent Characterization Monitoring**

Parameter <sup>1</sup>	Units	Sample Type	Required Analytical Test Method
Biochemical Oxygen Demand	mg/L	Grab	2
Total Suspended Solids	mg/L	Grab	1,2
Dissolved Oxygen	mg/L	Grab	2,3
Hardness	mg/L	Grab	2
pH	standard units	Grab	2,3
Temperature	°F	Grab	2,3

Parameter <sup>1</sup>	Units	Sample Type	Required Analytical Test Method
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1,2,3
Total Dissolved Solids	mg/L	Grab	2
Settleable Solids	mL/L	Grab	1,2
Un-ionized Ammonia Nitrogen, Total (as N)	mg/L	Grab	2
Chlorine, Total Residual	mg/L	Grab	2,3
CTR Priority Pollutants <sup>4</sup>	µg/L	Grab	2
Known Wastewater Contaminants <sup>5</sup>	varies	Grab	2

- <sup>1</sup> The Discharger is not required to conduct effluent monitoring for constituents that have already been sampled in a given month, as required in Table 4 and 5, except for hardness, pH, and temperature, which shall be conducted concurrently with the effluent sampling.
- <sup>2</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
- <sup>3</sup> A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
- <sup>4</sup> See Attachment I, Table I-3 of the Limited Threat General Order.
- <sup>5</sup> Known contaminants are those contaminants known to be present in the wastewater prior to any treatment.

**Receiving Water Monitoring** – The Discharger shall monitor the receiving waters in accordance with Table C-5 of the Limited Threat General Order and this NOA.

The Discharger shall monitor the receiving water at RSW-001U and RSW-001D only when a spill occurs at the Facility with the potential to impact CT-4 Sump, Main Sump, and/or the receiving water. Monitoring in response to a spill should be conducted daily (except for hardness) for a period of not less than two weeks and shall continue until no further evidence of impact from the spill is detected, as follows:

**Table 7. Receiving Water Monitoring RSW-001U and RSW-001D**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	standard units	Grab	Daily	1,2
Temperature	°F	Grab	Daily	1,2
Dissolved Oxygen	mg/L	Grab	Daily	1,2
Turbidity	NTU	Grab	Daily	1,2
Electrical Conductivity @ 25°C	µmhos/cm	Grab	Daily	1,2
Hardness, Total (as CaCO <sub>3</sub> )	mg/L	Grab	1/Year <sup>3</sup>	2

- <sup>1</sup> A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
- <sup>2</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
- <sup>3</sup> Monitoring is only required at Monitoring Location RSW-001U.

The Discharger shall monitor North Fork Stevenson Creek at RSW-002U and RSW-002D only when the Facility is discharging at Discharge Point 002, as follows:

**Table 8. Receiving Water Monitoring RSW-002U and RSW-002D**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	standard units	Grab	1/Month	1,2
Temperature	°F	Grab	1/Month	1,2
Dissolved Oxygen	mg/L	Grab	1/Month	1,2
Turbidity	NTU	Grab	1/Month	1,2
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Month	1,2
Hardness, Total (as CaCO <sub>3</sub> )	mg/L	Grab	1/Year <sup>3</sup>	2

- <sup>1</sup> A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
- <sup>2</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
- <sup>3</sup> Monitoring is only required at Monitoring Location RSW-002U.

In conducting receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-001U and RSW-001D and the reach bounded by RSW-002U and RSW-002D. Attention shall be given to the presence or absence of:

- a. Floating or suspended matter;
- b. Discoloration;
- c. Bottom deposits;
- d. Aquatic life;
- e. Visible films, sheens, or coatings;
- f. Fungi, slimes, or objectionable growths; and
- g. Potential nuisance conditions.

Notes on receiving water conditions shall be summarized in the monitoring reports.

**Self-Monitoring Report Submittals** – Monitoring in accordance with the Limited Threat General Order shall begin on the effective date of this NOA. Self-monitoring reports (SMRs) shall be submitted to the Central Valley Water Board on a quarterly basis, beginning with the **Fourth Quarter 2018**. This report shall be submitted by **1 February 2019**. If no discharge

occurs during the quarter, the monitoring report must be submitted stating that there has been no discharge. Table 9, below, summarizes the monitoring report due dates required under the Limited Threat General Order. Quarterly monitoring reports must be submitted until your coverage is formally terminated in accordance with the Limited Threat General Order, even if there is no discharge during the reporting quarter.

**Table 9. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On...	Quarterly Report Due Date
Continuous Daily 1/Month 1/Quarter 1/Year 2/Year	NOA Effective Date	1 May (1 Jan – 31 Mar) 1 Aug (1 Apr – 30 Jun) 1 Nov (1 Jul – 30 Sep) 1 Feb, of the following year (1 Oct – 31 Dec)

The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website [http://www.waterboards.ca.gov/water\\_issues/programs/ciwqs/](http://www.waterboards.ca.gov/water_issues/programs/ciwqs/). The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

**GENERAL INFORMATION AND REQUIREMENTS**

The Discharger must notify Central Valley Water Board staff within 24 hours of having knowledge of noncompliance.

Discharge of material other than what is described in the application is prohibited. The required annual fee (as specified in the annual billing you will receive from the State Water Resources Control Board) shall be submitted until this NOA is officially terminated. You must notify this office in writing when the discharge regulated by the Limited Threat General Order is no longer necessary by submitting the Request for Termination of Coverage (Attachment E of the Limited Threat General Order). If a timely written request is not received, the Discharger will be required to pay additional annual fees as determined by the State Water Resources Control Board.

**ENFORCEMENT**

Failure to comply with the Limited Threat General Order may result in enforcement actions, which could include civil liability. Effluent limitation violations are subject to a Mandatory Minimum Penalty (MMP) of \$3,000 per violation. In addition, late monitoring reports may be subject to MMPs or discretionary penalties of up to \$1,000 per day late. When discharges do not occur during a quarterly report monitoring period, the Discharger must still submit a quarterly monitoring report indicating that no discharge occurred to avoid being subject to enforcement actions.

**COMMUNICATION**

The Central Valley Regional Water Quality Control Board has transitioned to a paperless office system, therefore, please convert all documents to a searchable Portable Document Format (pdf) and email them to [CentralValleyFresno@waterboards.ca.gov](mailto:CentralValleyFresno@waterboards.ca.gov). Please include the following

Hazem Gabr, Water Quality Manager  
Southern California Edison Company  
Balsam Meadows Hydroelectric Project  
Eastwood Powerhouse Facility  
R5-2016-0076-047

13 September 2018

information in the body of the email: Discharger's name, Facility name, County name, CIWQS Place ID 208630, and the Order number R5-2016-0076-047. Documents that are 50 megabytes or larger shall be transferred to a CD, DVD, or flash drive and mailed to our office at 1685 "E" Street, Fresno, California 93706.

All documents (excluding SMRs), including responses to inspections and written notifications, submitted to comply with this NOA and the Limited Threat General Order shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention Gurjot Chahal. Mr. Chahal can be reached at (559) 445-5977 or at Gurjot.Chahal@waterboards.ca.gov.

Questions regarding the permitting aspects of the Limited Threat General Order, and notification for termination of coverage under the Limited Threat General Order, shall be directed, via the paperless office system, to the NPDES Permitting Unit, attention Nicolette Dentoni. Ms. Dentoni can also be reached at (559) 444-2505 or at Nicolette.Dentoni@waterboards.ca.gov.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at:

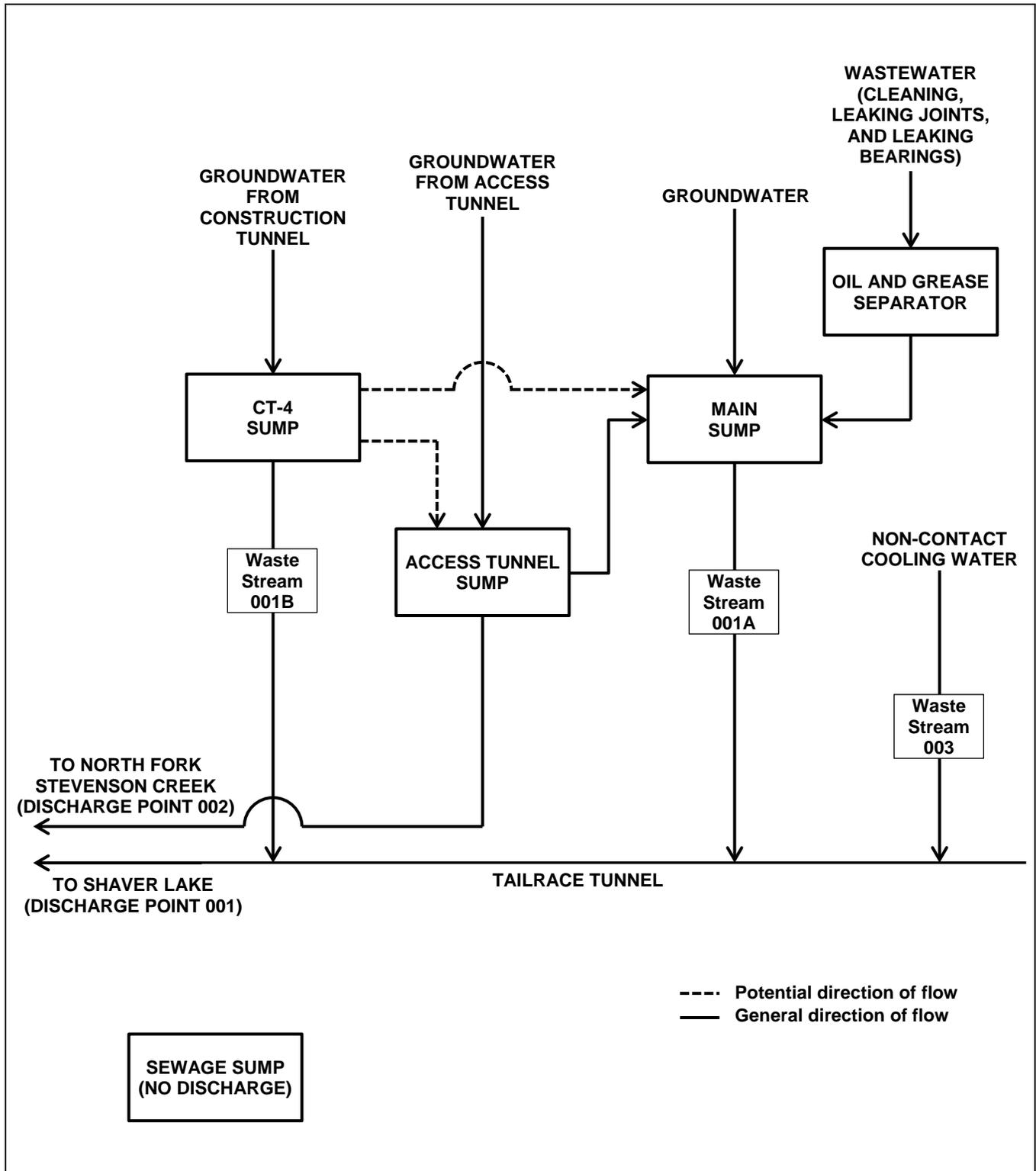
[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

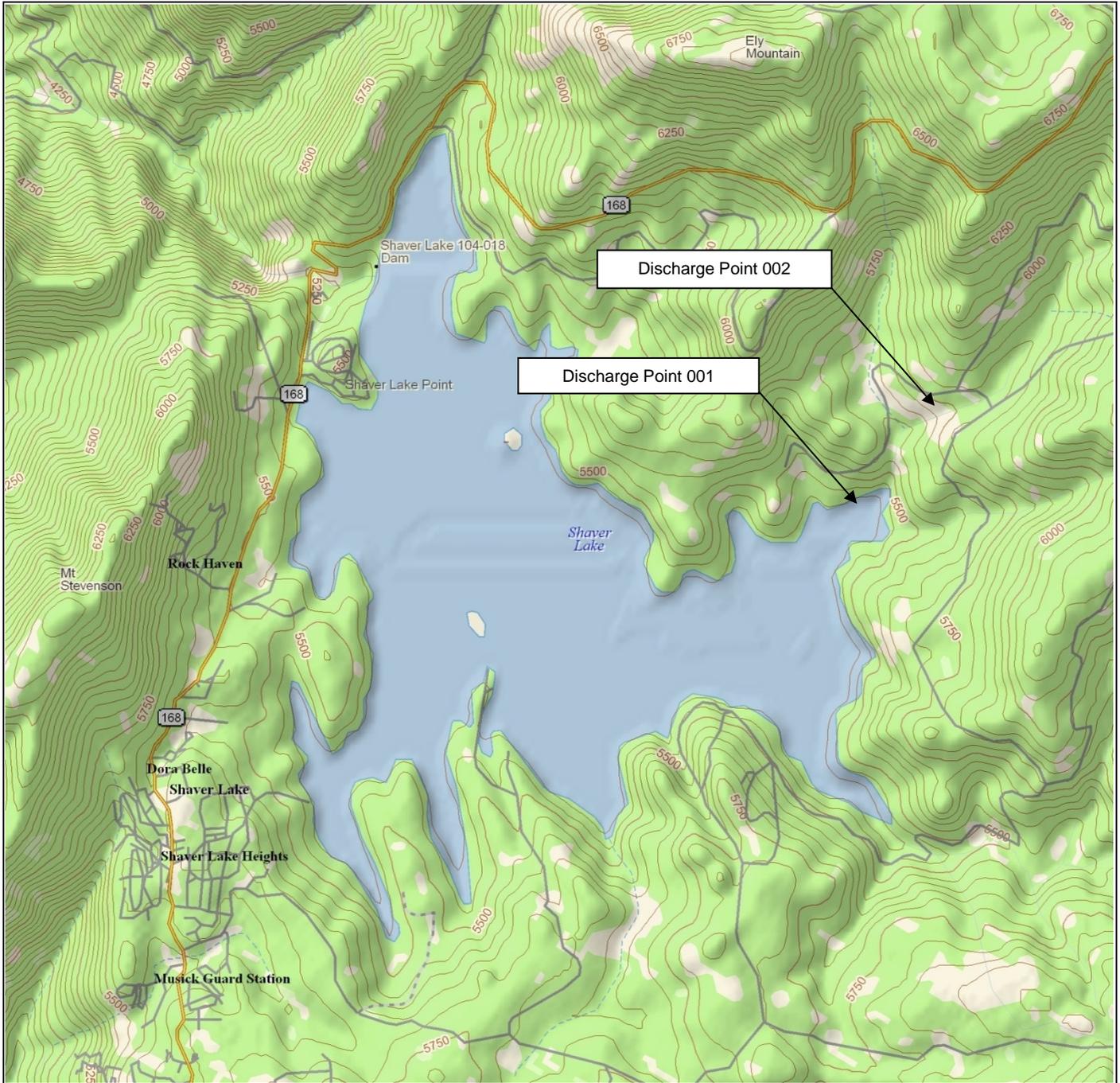
*for*   
Patrick Pulupa  
Executive Officer

Attachments: Attachment A, Project Maps  
Attachment B, Satisfaction of Anti-Backsliding Requirements

Enclosures: Limited Threat General Order R5-2016-0076-01 (Discharger only)

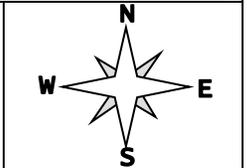
cc: David Smith, U.S. EPA, Region IX, San Francisco (via email)  
U.S. Forest Service, Prather  
Division of Water Quality, State Water Board, Sacramento (via email)  
California Department of Fish and Wildlife, Fresno  
Paul Ahn, Southern California Edison Company, Rosemead (via email)





Drawing Reference:  
 Shaver Lake, California

**SITE LOCATION MAP**  
 Southern California Edison Company  
 Balsam Meadows Hydroelectric Project  
 Eastwood Powerhouse Facility



## ATTACHMENT B – RATIONALE FOR EFFLUENT LIMITATIONS AND MONITORING

### 1. Satisfaction of Anti-Backsliding Requirements

The Clean Water Act (CWA) specifies that a revised permit may not include effluent limitations that are less stringent than the previous permit unless a less stringent limitation is justified based on exceptions to the anti-backsliding provisions contained in CWA sections 402(o) or 303(d)(4), or, where applicable, 40 CFR section 122.44(l).

The effluent limitations in this Notice of Applicability (NOA) are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for total suspended solids, settleable solids (monthly average), arsenic, copper, lead, zinc, and acute toxicity. The effluent limitations for these pollutants are less stringent than those in Order R5-2013-0158. Backsliding on effluent limitations based on Best Professional Judgment (BPJ) to new effluent limitations based on new BPJ is not subject to anti-backsliding provisions of the CWA; thus, relaxation of the effluent limitations for total suspended solids and the average monthly effluent limitation for settleable solids is allowed. For arsenic, copper, lead, zinc, and acute toxicity the relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

- a. **CWA section 402(o)(1) and 303(d)(4).** CWA section 402(o)(1) prohibits the establishment of less stringent water quality-based effluent limitations “*except in compliance with Section 303(d)(4).*” CWA section 303(d)(4) has two parts: paragraph (A) which applies to nonattainment waters and paragraph (B) which applies to attainment waters.
  - i. For waters where standards are not attained, CWA section 304(d)(4)(A) specifies that any effluent limit based on a Total Maximum Daily Load (TMDL) or other Waste Load Allocation (WLA) may be revised only if the cumulative effect of all such revised effluent limits based on such TMDLs or WLAs will assure the attainment of such water quality standards.
  - ii. For attainment waters, CWA section 303(d)(4)(B) specifies that a limitation based on water quality standards may be relaxed where the action is consistent with the antidegradation policy.

Shaver Lake is considered an attainment water for arsenic, copper, lead, zinc, and acute toxicity, and North Fork Stevenson Creek is considered an attainment water for acute toxicity because the receiving waters are not listed as impaired on the 303(d) list for these constituents.<sup>1</sup> As discussed below, removal of the effluent limits complies with federal and state antidegradation requirements. Thus, removal of the effluent limitations for arsenic, copper, lead, zinc, and acute toxicity from Order R5-2013-0158 meets the exception in CWA section 303(d)(4)(B).

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<sup>1</sup> “The exceptions in Section 303(d)(4) address both waters in attainment with water quality standards and those not in attainment, i.e. waters on the section 303(d) impaired waters list.” State Water Board Order WQ 2008-0006, Berry Petroleum Company, Poso Creek/McVan Facility.

- b. **CWA section 402(o)(2).** CWA section 402(o)(2) provides several exceptions to the anti-backsliding regulations. CWA 402(o)(2) allows a renewed, reissued, or modified permit to contain a less stringent effluent limitation if information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

Updated information that was not available at the time Order R5-2013-0158 was issued indicates that arsenic, copper, lead, zinc, and acute toxicity do not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water. The updated information that supports the relaxation of effluent limitations for these constituents includes the following:

- i. **Arsenic, Copper, Lead, and Zinc.** At the time Order R5-2013-0158 was issued, there was thought to be no single monitoring location representative of all the separate waste streams. Thus, effluent limitations were assigned to Shaver Lake (Discharge Point 001) applicable to individual waste streams and based on data collected at the individual waste streams. Recently, the Discharger has identified a single monitoring location (Gate 5) representative of the comingled waste streams before discharging to Discharge Point 001. Based on 13 sampling events at Gate 5 from May 2017 through June 2018, representative metals results show that there is no reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water.
- ii. **Acute Toxicity.** For all acute toxicity testing under Order R5-2013-0158, the test results complied with the standard (survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than: minimum 70% for any one bioassay and 90% median for any three consecutive assays). The data indicate that acute toxicity in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of the minimum water quality objectives in the Basin Plan for acute toxicity.

Thus, removal of the effluent limitations for arsenic, copper, lead, zinc, and acute toxicity is in accordance with CWA section 402(o)(2)(B)(i), which allows for the removal of effluent limitations based on information that was not available at the time previous Order R5-2013-0158 was issued.

## 2. Antidegradation Policies

This NOA does not allow for an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not necessary. The NOA requires compliance with applicable federal technology-based standards and with WQBELs where the discharge could have the reasonable potential to cause or contribute to an exceedance of water quality standards. The permitted surface water discharge is consistent with the antidegradation provisions of 40 CFR section 131.12 and State Water Board Resolution No. 68-16. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.

This NOA does the following: 1) removes effluent limitations for arsenic, copper, lead, zinc, and acute toxicity based on updated monitoring data demonstrating that the effluent does not cause or contribute to an exceedance of the applicable water quality criteria or objectives in the receiving water, and 2) relaxes the effluent limitations for total suspended solids and the average monthly effluent limitation for settleable solids based on new BPJ. Neither the removal nor relaxation of effluent limitations for these parameters will result in an increase in pollutant concentration or loading, a decrease in the level of treatment or control, or a reduction of water quality. Therefore, the Central Valley Water Board finds that the removal or relaxation of effluent limitations does not result in an increase in pollutants or any additional degradation of the receiving water. Thus, the removal or relaxation of effluent limitations is consistent with the antidegradation provisions of 40 CFR section 131.12 and State Water Board Resolution No. 68-16.