

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2013-0159

REQUIRING
SOUTHERN CALIFORNIA EDISON COMPANY
BALSAM MEADOWS HYDROELECTRIC PROJECT
EASTWOOD POWERHOUSE FACILITY
FRESNO COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER R5-2013-0158
(NPDES PERMIT NO. CA0081337)

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board) finds that:

1. On 6 December 2013 the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2013-0158, prescribing waste discharge requirements for Southern California Edison Company (hereafter Discharger) at the Balsam Meadows Hydroelectric Project, Eastwood Powerhouse Facility (hereafter Facility), Fresno County.
2. WDR Order R5-2013-0158 contains Final Effluent Limitations IV.A.1.a., which reads, in part, as follows:
 - a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001A, EFF-001B, EFF-001C (WS [Waste Stream] 001A, WS 001B, and WS 003, respectively) as described in the Monitoring and Reporting Program:

Table 6a. WS 001A Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Zinc, Total Recoverable	µg/L	5.0	10.	--	--

Table 6b. WS 001B Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Arsenic, Total Recoverable	µg/L	10.	20.	--	--
Lead, Total Recoverable	µg/L	0.40	0.80	--	--

Table 6c. WS 003 Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	µg/L	0.28	0.56	--	--

3. The effluent limitations specified in WDR Order R5-2013-0158 for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003 are based on implementation of the California Toxics Rule. The effluent limitations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003 are new effluent limitations, which were not prescribed in previous Order R5-2005-0093, adopted by the Central Valley Water Board on 24 June 2005.

4. California Water Code (Water Code) section 13300 states:

Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.

5. 40 Code of Federal Regulations section 122.44 (d)(1)(i) requires that NPDES permit effluent limitations must control all pollutants which are or may be discharged at a level which will cause or have the reasonable potential to cause or contribute to an in-stream excursion above any State water quality standard, including any narrative criteria for water quality. Beneficial uses, together with their corresponding water quality objectives or promulgated water quality criteria, can be defined per federal regulations as water quality standards.

6. Water Code section 13385, subdivisions (h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. Water Code section 13385(j)(3) provides protection from mandatory minimum penalties for violations of an effluent limitation when:

...the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300 or 13308, if all of the following requirements are met:

(A) The ... time schedule order is issued on or after July 1, 2000, and specifies the actions that the discharger is required to take in order to correct the violations that would otherwise be subject to subdivisions (h) and (i).

(B) The regional board finds that, for one of the following reasons, the discharger is not able to consistently comply with one or more of the effluent limitations established in the waste discharge requirements applicable to the waste discharge:

(i) The effluent limitation is a new, more stringent, or modified regulatory requirement that has become applicable to the waste discharge after the effective date of the waste discharge requirements and after July 1, 2000, new or modified control measures are necessary in order to comply with the effluent limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

...

(C) (i) The regional board establishes a time schedule for bringing the waste discharge into compliance with the effluent limitation that is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitation. Except as provided in clause (ii), for the purposes of this subdivision, the time schedule shall not exceed five years in length.

(ii) ...

(iii) If the time schedule exceeds one year from the effective date of the order, the schedule shall include interim requirements and the dates for their achievement. The interim requirements shall include both of the following:

(I) Effluent limitations for the pollutant or pollutants of concern.

(II) Actions and milestones leading to compliance with the effluent limitation.

(D) The discharger has prepared and is implementing in a timely and proper manner, or is required by the regional board to prepare and implement, a pollution prevention plan pursuant to Section 13263.3.

In accordance with Water Code section 13385, subdivision (j)(3), and based upon effluent monitoring results, the Discharger is unable to consistently comply with the average monthly and maximum daily effluent limitations contained in WDR Order R5-2013-0158 for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003. The arsenic, copper, lead, and zinc effluent limitations are new requirements that became applicable to the discharge when WDR Order R5 2013-0158 became effective, and after 1 July 2000, and for which new or modified control measures are necessary in order to comply with the new effluent limitations, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

7. On 19 September 2013, the Discharger submitted the *Waste Stream Discharges Infeasibility Report for Southern California Edison Company Balsam Meadows Hydroelectric Project, Eastwood Powerhouse Facility*, which included a request for a time schedule to comply with the effluent limitations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003. The Discharger indicated that treatment of each waste stream to remove these constituents is not feasible given space limitations, location of the Facility, and engineering and cost constraints. The Facility is located in a cavern that is filled with equipment dedicated to power generation, which limits the availability of space to construct additional treatment facilities. The Discharger indicated that rerouting of the waste streams would require replacement of current discharge pumps and addition of new treatment facilities outside of the Facility. Additionally, the Discharger indicated that due to the low levels of some of the constituents, treatment would be problematic and extremely expensive. The Discharger, thus, proposes to

conduct Water-Effect Ratios studies and mixing zone studies to comply with the effluent limitations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003.

8. The compliance time schedule in this Order includes interim performance-based effluent limitations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003. The interim effluent limitations consist of a maximum daily effluent concentration and an average monthly effluent concentration derived using sample data provided by the Discharger. In developing the performance-based interim average monthly effluent limitation, where there are 10 data points or more and only once per month sampling is required, sampling and laboratory variability is accounted for by establishing interim effluent limitations that are based on normally distributed data where 99.9 percent of the data points will lie within 3.3 standard deviations of the mean (*Basic Statistical Methods for Engineers and Scientists*, Kennedy and Neville, Harper and Row, 3rd Edition, January 1986). When at least 80 percent of the data points are reported as non-detect (ND) values, or if there are less than 10 data points available, the interim average monthly effluent limitation is based on 3.11 times the maximum observed effluent concentration (MEC) when once per month sampling is required. Additionally, if either of these procedures produces an interim average monthly effluent limitation less than the MEC, the MEC is sometimes established as the interim average monthly effluent limitation. The interim maximum daily effluent limitation is calculated by multiplying the calculated AMEL with an AMEL/MDEL multiplier from Table 2 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, assuming a CV of 0.6 based on less than ten effluent data points.

The following table summarizes the calculations of the interim performance-based effluent limitations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003:

Interim Effluent Limitations Calculations at WS 001A

Parameter	Units	MEC	Mean	Standard Deviation	Number of Samples	Interim MDEL	Interim AMEL
Zinc, Total Recoverable	µg/L	17	--	--	8	110	53

Interim Effluent Limitations Calculations at WS 001B

Parameter	Units	MEC	Mean	Standard Deviation	Number of Samples	Interim MDEL	Interim AMEL
Arsenic, Total Recoverable	µg/L	35	--	--	8	220	110
Lead, Total Recoverable	µg/L	0.69	--	--	8	4.3	2.1

Interim Effluent Limitations Calculations at WS 003

Parameter	Units	MEC	Mean	Standard Deviation	Number of Samples	Interim MDEL	Interim AMEL
Copper, Total Recoverable	µg/L	7.2	--	--	6	45	22

9. This Order provides a time schedule for the Discharger to develop, submit, and implement methods of compliance, including developing and implementing pollution prevention activities, completing studies, and/or constructing necessary treatment facilities to meet the effluent limitations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003.
10. Since the time schedule for completion of actions necessary to bring the waste discharge into compliance with the effluent limitations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003 exceeds one year, this Order includes interim requirements and dates for their achievement. The time schedule does not exceed five years.
11. The Discharger can, in addition to other treatment and control options, undertake source control to maintain compliance with the interim effluent limitations included in this Order. Interim effluent limitations are established when compliance with the final effluent limitations cannot be achieved by the existing discharge. Discharge of constituents in concentrations in excess of the final effluent limitations, but in compliance with the interim effluent limitations, can significantly degrade water quality and adversely affect the beneficial uses of the receiving stream on a long-term basis. The interim effluent limitations, however, establish an enforceable ceiling concentration until compliance with the final effluent limitations can be achieved.
12. Compliance with this Time Schedule Order exempts the Discharger from mandatory minimum penalties for violations of the average monthly and maximum daily effluent limitations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003 contained in WDR Order R5-2013-0158 from 6 December 2013 to 5 December 2018.
13. If an interim effluent limitation contained in this Order is exceeded, then the Discharger is subject to mandatory minimum penalties for that particular exceedance as it will no longer meet the exemption in Water Code section 13385, subdivision (j)(3). It is the intent of the Central Valley Water Board that a violation of an interim average monthly effluent limitation subjects the Discharger to only one mandatory minimum penalty for that monthly averaging period. In addition, a violation of an interim maximum daily effluent limitation subjects the Discharger to one mandatory minimum penalty for the day in which the sample was collected.
14. Water Code section 13267 states, in part:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship

to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

15. The Discharger owns and operates the Facility, which is subject to this Order. The technical and monitoring reports required by this Order are necessary to determine compliance with the WDRs and with this Order.
16. On 6 December 2013 in Rancho Cordova, California, after due notice to the Discharger and all other affected persons, the Central Valley Water Board conducted a public hearing at which evidence was received to consider a Time Schedule Order under Water Code section 13300 to establish a time schedule to achieve compliance with waste discharge requirements.
17. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000, et seq.) ("CEQA"), in accordance with CWC section 13389 since this Order only serves to implement a NPDES permit (*Pacific Water Conditioning Ass'n., Inc. v. City Council of City of Riverside* (1977) 73 Cal.App.3d 546, 555-556.). Issuance of this Order is also exempt from CEQA pursuant to California Code of Regulations, title 14, section 15321, subdivision (a)(2).

IT IS HEREBY ORDERED, pursuant to Water Code sections 13300 and 13267 that:

1. The Discharger shall comply with the following time schedule to ensure compliance with the average monthly and maximum daily effluent limitations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003 at Section IV.A.1.a., contained in WDR Order R5-2013-0158 as described above in the Findings:

<u>Task</u>	<u>Description</u>	<u>Due Date</u>
1	Submit and begin implementing a Pollution Prevention Plan (PPP) ¹ for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003 pursuant to Water Code section 13263.3	5 December 2014
2	Submit a work plan and time schedule for completing the Water-Effect Ratios and mixing zone studies	5 December 2014
3	Submit results of the Water-Effect Ratios and mixing zone studies	6 June 2016
4	Submit a request to amend WDR Order R5-2013-0158	6 June 2017
5	Submit Progress Reports ²	Annually on 1 February
6	Full compliance with the effluent limitations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003 contained in WDR Order R5-2013-0158	6 December 2018

¹ The PPP shall be prepared for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003, in accordance with Water Code section 13263.3, subdivision (d)(3). The PPP shall describe pollution

prevention activities the Discharger will implement in the short-term and the long-term to reduce effluent concentrations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003.

- ² The progress reports shall detail what steps have been implemented towards achieving compliance with waste discharge requirements, including studies, construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to achieve full compliance by the final date.

2. The following interim effluent limitations for zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003 shall be effective from 6 December 2013 to 5 December 2018, or when the Discharger is able to come into compliance with the zinc at WS 001A, arsenic and lead at WS 001B, and copper at WS 003 effluent limitations in WDR Order R5-2013-0158, whichever is sooner:

Interim Effluent Limitations at WS 001A

Parameter	Units	Maximum Daily Effluent Limitation	Average Monthly Effluent Limitation	Effective Through
Zinc, Total Recoverable	µg/L	110	53	5 December 2018

Interim Effluent Limitations at WS 001B

Parameter	Units	Maximum Daily Effluent Limitation	Average Monthly Effluent Limitation	Effective Through
Arsenic, Total Recoverable	µg/L	220	110	5 December 2018
Lead, Total Recoverable	µg/L	4.3	2.1	5 December 2018

Interim Effluent Limitations at WS 003

Parameter	Units	Maximum Daily Effluent Limitation	Average Monthly Effluent Limitation	Effective Through
Copper, Total Recoverable	µg/L	45	22	5 December 2018

3. For the compliance schedule required by this Order, the Discharger shall submit to the Central Valley Water Board on or before each compliance due date, the specified document or, if applicable, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, and shall include an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board by letter when it returns to compliance with the time schedule.
4. Any person signing a document submitted under this Order shall make the following certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my knowledge and on my inquiry of those individuals immediately responsible for

obtaining the information, I believe the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

5. In accordance with Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain work plans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain the professional's signature and/or stamp of the seal.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order or with WDR Order R5-2013-0158 may result in the assessment of administrative civil liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to Water Code sections 13268, 13350, and 13385. The Central Valley Water Board reserves the right to take any enforcement actions authorized by law.

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 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., within 30 days after the date that this Order is adopted, except that if the thirtieth day following the date that this Order is adopted 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

or will be provided upon request.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 6 December 2013.

Original signed by:

PAMELA C. CREEDON, Executive Officer