



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

April 12, 2012

Mr. Anthony Chu, Chief
Environmental Assessment Branch
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. 7004 1160 0002 8028 1963

Dear Mr. Chu

TRANSMITTAL OF ORDER AMENDING WASTE DISCHARGE REQUIREMENTS (WDRs) AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT, AND TIME SCHEDULE ORDER – CALIFORNIA DEPARTMENT OF WATER RESOURCES, WILLIAM E. WARNE POWER PLANT (NPDES PERMIT NO. CA0059188, CI-6610)

Our letter dated February 1, 2012, transmitted the revised tentative amendment order and the revised tentative time schedule order (TSO) in response to your requests for the revision of the incorrect drainage sump flow in the current permit (Order No. R4-2010-0089) and for the issuance of a time schedule order to address the observed noncompliance with the effluent limitations for copper, lead, zinc, chlorodibromomethane, dichlorobromomethane and tetrachloroethylene included in the current permit.

Pursuant to Division 7 of the California Water Code, this Regional Water Board at a public hearing held on April 5, 2012, reviewed the tentative requirements, considered all factors in the case, and adopted Order No. R4-2010-0089-A01 and TSO No. R4-2012-0076.

Order R4-2010-0089-A01, the amendment Order, has the same expiration date of June 10, 2015, as in the original permit, Order No. R4-2010-0089. Section 13376 of the California Water Code requires that an application/Report of Waste Discharge for a new permit must be filed at least 180 days before the expiration date of the effective permit. The TSO No. R4-2012-0076 expires on June 1, 2016.

The requirements in Order No. R4-2010-0089-A01 and TSO No. R4-2012-0076 become effective on April 5, 2012. The first semiannual progress report required under the TSO No. R4-2012-0076 is due by the 15th of August 2012, as stipulated on page 8 of the TSO.

The Regional Water Board is implementing a paperless office system to reduce paper use, increase efficiency and provide a more effective way for our staff, the public and interested parties to view water quality documents. Therefore, please convert all regulatory documents, submissions, data and correspondence that you would normally submit to us as hard copies to a searchable Portable Document Format (PDF). Documents that are less than 10 megabytes (MB) should be emailed to losangeles@waterboards.ca.gov. Documents that are 10 MB or larger should be transferred to a disk and mailed to the address listed above. If you need additional

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

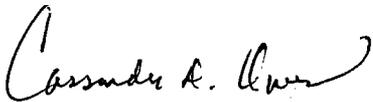
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information regarding electronic submittal of documents please visit the Regional Water Board's website listed above and navigate to Paperless Office.

When submitting monitoring or technical/progress reports to the Regional Water Board as required by your Monitoring and Reporting Program or TSO, please continue to send them ATTN: Information Technology Unit and include a reference to Compliance File CI-6610 and NPDES No. CA0059188. This will assure that the reports are directed to the appropriate electronic file and staff. Also please do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

If you have any questions, please contact Jau Ren Chen at (213) 576-6656.

Sincerely,



Cassandra D. Owens, Chief
Industrial Permitting Unit

Enclosures

cc:(Via Email Only)

Mr. David Smith, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Mr. Kenneth Wong, U.S Army Corps of Engineers
Mr. Bryant Chesney, NOAA, National Marine Fisheries Service
Ms. Jane Touth, Department of Interior, U.S. Fish and Wildlife Service
NPDES Wastewater Unit, State Water Resources Control Board, Division of Water Quality
Mr. William Paznokas, Department of Fish and Game, Region 5
Ms. Diane Shimizu, California Department of Water Resources
Mr. Gary Faulconer, California Department of Water Resources
Mr. Tim Smith, Los Angeles County, Department of Public Works, Waste Management
Division
Mr. Timeyin Dafeta, City of Los Angeles, Industrial Waste Management Division
Ms. RaNae Loveland, AES Redondo Beach LLC
Ms. Katherine Rubin, Los Angeles City Department of Water and Power
Mr. Julie Babcock, GenOn West, LP
Mr. Alexander Sanchez, El Segundo Power, LLC
Ms. Kristen James, Heal the Bay
Ms. Liz Crosson, Santa Monica Baykeeper
Mr. David Beckman, Natural Resources Defense Council
Mr. Jae Kim, TetraTech
Mr. Jason Weiner, Ventura Coastkeeper

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

TIME SCHEDULE ORDER NO. R4-2012-0076

**REQUIRING THE CALIFORNIA DEPARTMENT OF WATER RESOURCES,
(WILLIAM E. WARNE POWER PLANT)
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN
ORDER NO. R4-2010-0089 AND ORDER NO. R4-2010-0089-A01
(NPDES PERMIT NO. CA0059188)**

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board) finds:

1. The California Department of Water Resources (hereinafter Discharger) is currently discharging under Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit (NPDES Permit No. CA0059188) contained in Order No. R4-2010-0089 adopted by this Regional Water Board on June 3, 2010.
2. The Discharger owns and operates William E. Warne Power Plant (hereinafter Facility), a hydroelectric generating station, which produces power to offset the State Water Project pumping costs. The Facility has two hydroelectric generating turbine units that generate up to 78 megawatts of electricity using State Water Project waters via Penstock pipeline. An on-site water treatment plant uses the processes of ultra-filtration and chlorination to provide potable water for the Facility.

Wastewater flows consist of once-through cooling water and drainage sump water. Order No. R4-2010-0089 authorizes the discharge of up to 1.95 million gallons per day (mgd) of generator, turbine, air, upper and lower guide bearing cooling waters (all once-through, non-contact) from generating turbine units 1 and 2 through two nearby outfalls collectively to be called Discharge Point No. 001(A&B). Backwash from the potable water treatment plant enters a sump, where it combines with compressor cooling water, unit cooling water rotary strainer backwash, turbine shutoff valve water, and ground water seepage. The sump water is discharged periodically when the sump water reaches a certain level. Order No. R4-2010-0089 also authorizes the discharge of up to 2000 gallons per day (gpd) of the sump water through Discharge Point No. 002. The waste water discharged from Discharge Point Nos. 001(A&B) and 002 enters the Facility tailrace where it combines with generated penstock waters that have been passing through generating turbine units to generate electricity. The commingled water is then

discharged into Pyramid Lake, a tributary to the Santa Clara River via Piru Creek and Lake Piru, waters of the United States.

3. The permit amendment, Order No. R4-2010-0089-A01, adopted on April 5, 2012, has increased the permitted flow for the drainage sump from 2,000 gallon per day (gpd) to 20,000 gpd. The amendment also indicates that the unit cooling water rotary strainer backwashes from generating turbine units 1 and 2 are discharged back to the cooling water sumps but not into the drainage sump as previously indicated in Order No. R4-2010-0089.
4. Pursuant to the requirements in the *Policy for the Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, Order No. R4-2004-0172 required the Discharger conduct quarterly monitoring for priority pollutants in the effluent for the first three (3) years of the permit term. Based on the results of reasonable potential analysis evaluated on these monitoring data, Order No. R4-2010-0089 and Order No. R4-2010-0089-A01 prescribed effluent limitations for copper, lead, zinc, chlorodibromomethane, dichlorobromomethane and tetrachloroethylene according to the California Toxics Rule (CTR). The final effluent limitations for the two Discharge Points are:

Constituents	Units	Effluent Limitations		Rationale
		Average Monthly	Maximum Daily	
Discharge Point No. 001				
Copper, Total Recoverable	µg/L	7.6	12	CTR ²
	lbs/day ¹	0.12	0.20	
Discharge Point No. 002				
Copper, Total Recoverable	µg/L	4.5	13	CTR ²
	lbs/day ³	0.00075	0.0022	
Lead, Total Recoverable	µg/L	1.6	5.0	CTR ²
	lbs/day ³	0.00027	0.00083	
Zinc, Total Recoverable	µg/L	42	111	CTR ²
	lbs/day ³	0.007	0.019	
Chlorodibromomethane	µg/L	0.40	1.0	CTR ²
	lbs/day ³	0.000067	0.00017	
Dichlorobromomethane	µg/L	0.56	1.6	CTR ²
	lbs/day ³	0.000093	0.00027	
Tetrachloroethylene	µg/L	0.8	2.3	CTR ²
	lbs/day ³	0.00013	0.00038	

¹. The mass limitations in lbs/day were calculated using the concentration limits and the maximum flow rate of 1.950 mgd.
². CTR – California Toxics Rule

3. The mass limitations in lbs/day were calculated using the concentration limits and the maximum flow rate of 0.02 mgd.
5. On May 31, 2011, the Discharger requested the Regional Water Board to issue a Time Schedule Order (TSO) with interim effluent limitations for copper for Discharger Point No. 001 and for copper, lead and zinc for Discharge Point No. 002. Because of the more stringent effluent limitations based on CTR that are included in Order No. R4-2010-0089 and Order No. R4-2010-0089-A01, the Discharger indicated that Facility modifications will likely be required in order to comply with the permit conditions, particularly with regard to copper. The Discharger requested a time schedule of five (5) years for the completion of a baseline study and the implementation of the suitable alternative for Facility modifications.
6. The Discharger has performed a special copper contamination study that tested water samples from various points in the cooling water and Facility drainage systems. Preliminary findings suggested that the copper concentrations are due to both the source water conveyed in the State Water Project and to internal copper plumbing in the power plant. A few minor plumbing modifications, replacing copper pipe with High Density Polyethylene (HDPE) pipe, have already resulted in reduced copper concentrations in discharge effluent.
7. On December 28, 2011, after reviewing the tentative TSO issued on November 18, 2011, the Discharger requested interim effluent limitations for chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene for Discharge Point No. 002. The Discharger noted consistent exceedances of the newly prescribed effluent limitations for these pollutants at Discharge Point No. 002 since the current permit (Order No. R4-2010-0089) became effective on July 32, 2010.
8. The preliminary investigations conducted by the Discharger indicated that these contaminants in the drainage sump that are discharged through Discharge Point No. 002 are associated with backwash from the on-site water treatment plant. The Discharger needs time to conduct a thorough source evaluation and explore possible alternatives including a dilution study to determine the appropriate method to achieve full compliance with the final effluent limitations for chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene at Discharge Point No. 002.
9. Section 13300 of the California Water Code 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.”

10. Based on the monitoring data submitted after June 2010, the Discharger cannot consistently achieve compliance with the final effluent limitations for copper, lead, zinc, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene in Order No. R4-2010-0089 and Order No. R4-2010-0089-A01. Accordingly, pursuant to Water Code section 13300, a discharge of waste is taking place and/or threatens to take place that violates requirements prescribed by the Regional Water Board.
11. Water Code section 13385, subdivisions (h) and (i), require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. Section 13385(j)(3) exempts violations of an effluent limitation from mandatory minimum penalties "where 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, *if all of the [specified] requirements are met.*" (emphasis added).
12. The temporary copper lead, zinc, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene exceedances allowed by this TSO are in the public interest given the significant benefits associated with the ability of this Facility to generate and supply 78 megawatts of electricity. There are also water quality benefits associated with Discharger's ability to promptly achieve compliance with the final effluent limitations for these metals.
13. Therefore, this TSO establishes interim effluent limitations for copper, lead, zinc, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene based on performance. This TSO will provide the required time for the Discharger to investigate and implement any required upgrades to bring William E. Warne Power Plant into compliance with the final effluent limitations for copper, lead, zinc, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene. The established time schedule is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures and Facility modifications that are necessary to comply with the final effluent limitations.

14. Since the time schedule for completion of the actions necessary to bring the waste discharge into compliance exceeds one year from the effective date of this TSO, this TSO includes interim requirements and the dates for their achievement. The interim requirements include both interim effluent limitations for copper, lead, zinc, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene and actions and milestones leading to compliance with the final effluent limitations for these pollutants.
15. Full compliance with the requirements of this TSO exempts the Discharger from mandatory minimum penalties only for violations of the final effluent limitations for copper, lead, zinc, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene in Order No. R4-2010-0089 and Order No. R4-2010-0089-A01 pursuant to Water Code section 13385(j)(3).
16. The Regional Water Board has notified the Discharger, interested agencies, and interested persons of its intent to issue this TSO concerning compliance with the waste discharge requirements. The Regional Water Board heard and considered all testimony pertinent to this matter in a public hearing.
17. Issuance of this TSO is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with section 15321(a)(2), title 14 of the California Code of Regulations.
18. Any person aggrieved by this action of the Regional Water Board may petition the State Water 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 Board must *receive* the petition by 5:00 p.m., 30 days after the Regional Water Board action, except that if the thirtieth day following the action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water 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.

IT IS HEREBY ORDERED that, pursuant to the California Water Code section 13300, the California Department of Water Resources, as owner and operator of William E. Warne Power Plant, shall comply with the requirements listed below to ensure compliance with the final effluent limitations for copper, lead, zinc, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene contained in Order No. R4-2010-0089 and Order No. R4-2010-0089-A01:

1. Comply immediately with the following interim effluent limitations:

Constituents	Units	Interim Effluent Limitations	
		Average Monthly	Daily Maximum
Discharge Point No. 001			
Copper	µg/L	26 ^[1]	27 ^[1]
Total Recoverable	lbs/day ^[2]	0.42	0.44
Discharge Point No. 002			
Copper	µg/L	67 ^[1]	77 ^[1]
Total Recoverable	lbs/day ^[3]	0.011	0.013
Lead	µg/L	2.7 ^[1]	5 ^[4]
Total Recoverable	lbs/day ^[3]	0.00045	0.00083
Zinc	µg/L	79 ^[1]	111 ^[4]
Total Recoverable	lbs/day ^[3]	0.013	0.019
Chlorodibromomethane	µg/L	3.8 ^[1]	4.7 ^[1]
	lbs/day ^[3]	0.00063	0.00078
Dichlorobromomethane	µg/L	2.2 ^[1]	2.4 ^[1]
	lbs/day ^[3]	0.00037	0.00040
Tetrachloroethylene	µg/L	1.4 ^[1]	2.3 ^[4]
	lbs/day ^[3]	0.00023	0.00038

^[1] Interim effluent limitations were established as follows:

The daily maximum effluent limitations and average monthly effluent limitations were set as the 99 percentile and 95 percentile of the Facility's monitoring data obtained between July 2010 and September 2011 (August 2011 for metals), respectively. Two outliers, 120 µg/L and 372 µg/L of copper reported in May 2011 and July 2011, and one outlier of 26 µg/L for tetrachloroethylene reported in June 2011, respectively for Discharge Point No. 002, were excluded.

^[2] The mass limitations in lbs/day were calculated using the concentration limit and the maximum flow rate of 1.95 mgd for Discharge Point No. 001.

^[3] The mass limitations in lbs/day were calculated using the concentration limits and the maximum flow rate of 0.02 mgd for Discharge Point No. 002

^[4] These are final effluent limitations. No interim effluent limitations are required for these pollutants.

The foregoing interim effluent limitations for copper, lead and zinc are in effect from June 1, 2011 through June 1, 2016. The interim effluent limitations for chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene are in effect from January 1, 2012 through June 1, 2016. During this time, the Discharger shall investigate and implement any required upgrades to ensure compliance with the final effluent limitations contained in NPDES Order No. R4-2010-0089 and Order No. R4-2010-0089-A01.

2. Achieve full compliance with the final effluent limitations for copper, lead, zinc, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene in

Order No. R4-2010-0089 and Order No. R4-2010-0089-A01 no later than June 1, 2016.

3. Comply with the following schedule that is based on the Work Plan proposed by the Discharger:

Task	Deadline
Complete baseline study conditions review, sources of contaminants review and existing receiving water and effluent flow data review	March 1, 2012
Submit dilution study workplan to Regional Water Board for review	June 1, 2012
Identify strategies to minimize discharge of chlorinated pollutants	January 1, 2013
Complete dilution and, if needed, mixing zone study	March 1, 2013
If dilution study does not result in compliance, evaluate other alternatives	April 1, 2013
Prepare Summary Report describing dilution study results and, if needed, assessment of other alternatives	June 1, 2013
Review and Decide Course of Action <ul style="list-style-type: none"> • Assumes Division of Engineering (DOE) Project to Design & Construct 	September 1, 2013
DOE Design, if needed	November 1, 2013
DOE Approval for Advertise, if needed	January 1, 2014
DOE Bid, if needed	June 1, 2014
DOE Execute Contract, if needed	September 1, 2014
Construct Facility Revisions, if needed	December 1, 2015
Sampling & Testing, if needed	March 1, 2016
Water Board Review of Results	June 1, 2016
Submit Semiannual Report	February 15 and August 15 of each year
Achieve Compliance with Final Effluent Limitations	June 1, 2016

4. Submit semiannual progress reports of efforts taken towards compliance with the final effluent limitations. The reports shall summarize the progress to date, activities conducted during the reporting period, and the activities planned for the upcoming period. Each report shall be submitted to this Regional Water Board by February 15th and August 15th for the second half

(July through December) of the previous reporting year and the first half (January through June) of the reporting year, respectively, and include milestones completed and any new pertinent updates. The first semiannual progress report is due on August 15, 2012.

5. Submit a Pollution Prevention Plan (PPP) workplan, with the time schedule for implementation, for approval of the Executive Officer within 180 days after the adoption of this TSO, pursuant to California Water Code section 13263.3.
6. Submit a final report on the results of the implementation and evaluation of the selected actions/measures by August 15, 2016. The report shall include:
 - a) a description of the actions/measures selected, b) the monitoring data collected after the implementation of the selected actions/measures including treatment process, if any, and c) an evaluation of the effectiveness of the selected actions/ measures.
7. All technical and monitoring reports required under this TSO are required pursuant to California Water Code sections 13267 and 13383. The Regional Water Board needs the required information in order to determine compliance with this TSO, Order No. R4-2010-0089 and Order No. R4-2010-0089-A01. The Regional Water Board believes that the burdens, including costs, of these reports bear a reasonable relationship to the needs for the reports and the benefits to be obtained from the reports.
8. Any person signing a document submitted under this TSO shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”
9. If the Discharger fails to comply with any provisions of this TSO, the Regional Water Board may take any further action authorized by law. The Executive Officer, or his/her delegee, is authorized to take appropriate administrative enforcement action pursuant, but not limited to, Water Code sections 13350 and 13385. The Regional Water Board may also refer any violations to the Attorney General for judicial enforcement, including injunction and civil monetary remedies.

10. All other provisions of NPDES Order No. R4-2010-0089 and Order No. R4-2010-0089-A01 not in conflict with this TSO are in full force and effect.

11. This Time Schedule Order expires on June 1, 2016.

I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on April 5, 2012.



Samuel Unger, P.E.
Executive Officer