

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2015-0034-01
REQUIRING

PLACER COUNTY DEPARTMENT OF FACILITY SERVICES
PLACER COUNTY SEWER MAINTENANCE DISTRICT 1
WASTEWATER TREATMENT PLANT
PLACER COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER R5-2010-0092-01
(NPDES PERMIT NO. CA0079391)

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

1. Placer County Department of Facility Services (Discharger) owns and operates the Placer County Sewer Maintenance District 1 Wastewater Treatment Plant (Facility). The Facility discharges up to 2.18 million gallons per day (MGD) of treated wastewater to Rock Creek, a water of the United States, and a tributary to Dry Creek and, further, the Bear River and the Sacramento River.
2. On 23 June 2005, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2005-0074, which included final effluent limitations, in part, for aluminum, chloroform, dichlorobromomethane, nitrate plus nitrite, and nitrite. Finding the Discharger could not comply with the final effluent limitations, the Central Valley Water Board granted the Discharger compliance schedules for dichlorobromomethane in WDR Order R5-2005-0074, and in Cease and Desist Order (CDO) R5-2005-0075 for aluminum, chloroform, nitrate plus nitrite, and nitrite, that required compliance with the final effluent limitations in March 2010.
3. On 22 September 2010, the Central Valley Water Board adopted WDRs Order R5-2010-0092 prescribing renewed WDRs for the Facility. WDRs Order R5-2010-0092 contains, in part, final effluent limitations for aluminum, ammonia, Biochemical Oxygen Demand 5-day @ 20°C (BOD₅), chloroform, dibromochloromethane, dichlorobromomethane, nitrate plus nitrite, nitrite, total coliform organisms, and total suspended solids (TSS). Finding the Discharger still unable to comply with the final effluent limitations for aluminum, chloroform, dibromochloromethane, dichlorobromomethane, nitrate plus nitrite, and nitrite, the Central Valley Water Board granted the Discharger compliance schedules in CDO R5-2010-0093 for aluminum, chloroform, dibromochloromethane, dichlorobromomethane, nitrate plus nitrite, and nitrite that required the Discharger to comply by 31 August 2015. However, CDO R5-2010-0093 was not legally able to offer protection from mandatory minimum penalties (MMPs) for aluminum, chloroform, nitrate plus nitrite, and nitrite since the previous CDO R5-2005-0075 contained a 5-year compliance schedule that provided MMP protection for aluminum, chloroform, nitrate plus nitrite, and nitrite.
4. However, pursuant to Water Code section 13385, subdivision (j)(3)(C)(ii)(II) that authorizes the Board to grant an additional five years, on 31 May 2013, the Central Valley Water Board amended CDO R5-2010-0093 to provide protection from MMPs for aluminum, chloroform, nitrate plus nitrite, and nitrite, that required compliance with the final effluent limitations by 1 September 2015.

5. On 17 April 2015, WDRs Order R5-2010-0092 was amended (R5-2010-0092-01) to remove interim effluent limitations and compliance schedules, which were then included in Time Schedule Order (TSO) R5-2015-0034.

NEED FOR TIME SCHEDULE EXTENSION AND LEGAL BASIS

6. As of 1 October 2015, per TSO R5-2015-0034, construction of the necessary treatment unit expansions and installation of the pipelines and associated infrastructure, are approximately 99% completed in order to transfer all wastewater for treatment at the Placer County regional facility at City of Lincoln Wastewater Treatment and Reclamation Facility (WWTRF).
- 6A. However, in August and September 2015, the new pipeline experienced failures in pipeline saddle connections during pressure testing with clean water. Up to 69 of the connections have failed or would be expected to fail under current conditions. In order to fix the pipeline, the saddle connections and pipeline sections must be excavated, the affected portions cut out, and new sections put in place. The Discharger has provided the following timeline for the repairs:
 - Research and development will be completed by 30 December 2015,
 - Procurement will be completed by 15 April 2016,
 - Pipeline section replacement and testing will be completed by 25 August 2016, and
 - New SMD1 pump station will start up on 1 September 2016.
- 6B. In a letter dated 28 October 2015, the Discharger requested continued interim limitations and protection from MMPs for aluminum, ammonia, BOD₅, chloroform, dibromochloromethane, dichlorobromomethane, nitrate plus nitrite, nitrite, total coliform organisms, and TSS through 1 September 2016.
7. The Discharger cannot consistently comply with the aluminum, ammonia, BOD₅, chloroform, dibromochloromethane, dichlorobromomethane, nitrate plus nitrite, nitrite, total coliform organisms, and TSS effluent limitations in WDRs Order R5-2010-0092-01 and must implement additional measures to achieve compliance with final effluent limitations.

MANDATORY MINIMUM PENALTIES

8. Water Code section 13385, subdivisions (h) and (i), requires the Central Valley Water Board to impose MMPs upon dischargers that violate certain effluent limitations. Water Code section 13385(j)(3) exempts discharges from these MMPs:

... 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 or 13308, if all the [specified] requirements are met...for the purposes of this subdivision, the time schedule may not exceed five years in length...
9. Per the requirements of Water Code section 13385, subdivision (j)(3), the Central Valley Water Board finds that new or modified control measures are necessary in order to comply with new or more stringent effluent limitations, and that the Discharger could not have designed, installed, and put into operation the new or modified control measures within 30 calendar days of the date that the final effluent limitations went into effect. The proposed time schedule is needed to repair construction flaws in the wastewater transmission lines to the Placer County regional facility at City of Lincoln Wastewater Treatment and Reclamation Facility.

10. TSOs generally may only provide protection from MMPs for up to five years. However, Water Code section 13385, subdivision (j)(3)(C)(ii)(II), authorizes the Board to grant an additional five years if the Board finds, following a public hearing, that a Discharger is making diligent progress towards bringing the waste discharge into compliance and that the additional time is necessary to comply with the effluent limitations.
11. Compliance with TSO R5-2015-0034 provided protection for the Discharger from MMPs as follows:
 - a. Aluminum, chloroform, nitrate plus nitrite, and nitrite: Previous CDO R5-2005-0075 provided the Discharger with MMP protection from 23 June 2005 to 1 March 2010, for a period of 4 years, 8 months, and 5 days. Amended CDO R5-2010-0093-01 provided protection from MMPs from 31 May 2013 (the date the amended CDO was adopted) until 31 August 2015, a period of 2 years and 3 months. TSO R5-2015-0034 carried forward MMP protection through 11 December 2015. The time schedule in TSO R5-2015-0034 was as short as possible and did not exceed ten (10) years in length.
 - b. Dibromochloromethane and dichlorobromomethane: CDO R5-2010-0093 provided the Discharger with MMP protection from 22 September 2010 to 31 May 2013, a period of 2 years, 8 months, and 9 days. Amended CDO R5-2010-0093-01 provided protection from MMPs from 31 May 2013 until 17 April 2015, a period of 1 year 10 months, and 17 days. TSO R5-2015-0034 provided protection from MMPs from 17 April 2015 through 11 December 2015. This time schedule was as short as possible and did not exceed ten (10) years in length.
 - c. Ammonia, BOD₅, total coliform organisms, and TSS: TSO R5-2015-0034 provided the Discharger with MMP protection from 17 April 2015 through 11 December 2015. This time schedule was as short as possible and did not exceed ten (10) years in length.
- 11A. Compliance with amended TSO R5-2015-0034-01 provides protection for the Discharger from MMPs from 11 December 2015 through 1 September 2016, a period of 8 months and 21 days, as follows:
 - a. Aluminum, chloroform, nitrate plus nitrite, and nitrite: The total time of MMP protection is 7 years, 11 months, and 5 days. This time schedule is as short as possible and does not exceed ten (10) years in length.
 - b. Dibromochloromethane and dichlorobromomethane: The total time of MMP protection is 5 years, 11 months, and 10 days. This time schedule is as short as possible and does not exceed ten (10) years in length.
 - c. Ammonia, BOD₅, total coliform organisms, and TSS: The total time of MMP protection is 1 year, 4 months, and 14 days. This time schedule is as short as possible and does not exceed ten (10) years in length.
12. The Board finds that the time schedules in Finding No. 11A are as short as possible, considering 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 limitations. Where additional time is granted beyond the initial five (5) years, the Board finds that the Discharger is making diligent progress towards bringing the waste discharge into compliance, that the additional time is necessary to comply with the effluent limitations, and that the time schedule does not exceed ten (10) years in length.

13. Amended TSO R5-2015-0034-01 provides a time schedule for completing the actions necessary to ensure compliance with final effluent limitations. Since the total time schedule for the completion of these actions exceeds one (1) year, amended TSO R5-2015-0034-01 includes interim effluent limitations and interim requirements and dates for their achievement.
14. The previously established interim maximum daily effluent limitations (MDELs) for aluminum, chloroform, dibromochloromethane, dichlorobromomethane, nitrate plus nitrite, and nitrite are based on the treatment plant performance and are carried forward from CDO R5-2010-0093-01. New interim average monthly effluent limitations (AMELs) for these constituents were calculated by dividing the MDELs by the MDEL/AMEL Multiplier, from the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP), section 1.4, Table 2, and were added to this Order.
15. Amended TSO R5-2015-0034-01 includes interim effluent limitations for BOD₅, total coliform organisms and TSS carried forward from TSO R5-2015-0034.
16. New performance-based interim effluent limitations for ammonia based on the current treatment plant performance were developed using the statistical based approach provided in USEPA's *Technical Support Document for Water Quality-Based Toxics Control* or TSD. The TSD provides guidance on estimating the projected maximum effluent concentration using a lognormal distribution of the observed effluent concentrations at a desired confidence level, as detailed in Section 3.3 of the TSD. The multipliers in Table 3-1 of the TSD were used to calculate the 99th percent confidence level and the 99th percentile of the data set based on the number of effluent samples and the coefficient of variation. The multipliers from the table were multiplied by the highest observed effluent concentration to estimate the maximum expected effluent concentration. However, the estimated maximum expected effluent concentration was 11.2 mg/L while the observed maximum effluent concentration was 15.1 mg/L. Because the MEC for ammonia was greater than the statistically calculated effluent limitation, the interim performance-based cap was established at the MEC. The interim limitations for ammonia in this Order include a performance-based cap of 15.1 mg/L as a Maximum Daily Effluent Limitation (MDEL). The Average Monthly Effluent Limitations (AMEL) was established as the statistically calculated maximum concentration of 11.2 mg/L.

Parameter	Units	MEC	Mean	Number of Data Points	Standard Deviation	Coefficient of Variation	Estimated Maximum Concentration
Ammonia	mg/L	15.1	2.4	1,095	3.0	1.25	11.2

17. The Central Valley Water Board expects that the Discharger can 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 Facility. 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 limitation can be achieved.

18. If an interim effluent limit contained in this Order is exceeded, then the Discharger is subject to MMPs 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 monthly effluent limitation subjects the Discharger to only one MMP for that monthly averaging period. In addition, a violation of an interim daily maximum effluent limit subjects the Discharger to one MMP for the day in which the sample was collected.

REGULATORY BASIS

19. Water Code section 13300 states, in part:
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.
20. Water Code section 13267 states, in part:
In conducting an investigation ... 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 ... 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.
21. The Discharger owns and operates the Facility. The technical and monitoring reports required by amended TSO R5-2015-0034-01 are necessary to determine compliance with WDRs Order R5-2010-0092-01 and with TSO R5-2015-0034-01.
22. Issuance of amended TSO R5-2015-0034-01 is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) pursuant to Water Code section 13389, since the adoption or modification of an NPDES permit for an existing source is statutorily exempt and 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.)
23. On 17 April 2015, in Fresno, 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.
24. On 11 December 2015, 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 amending Time Schedule Order R5-2015-0034 under Water Code section 13300 to establish a time schedule to achieve compliance with waste discharge requirements.

IT IS HEREBY ORDERED THAT, Time Schedule Order R5-2015-0034 is amended as shown in Time Schedule Order R5-2015-0034-01, and, pursuant to Water Code sections 13300 and 13267, in order to ensure compliance with the requirements of WDRs Order R5-2010-0092-01 the Discharger shall comply with the following:

- Pursuant to Water Code section 13267, the Discharger shall complete the following Tasks and submit the following technical reports to ensure completion of the compliance projects described in Finding 6A:

Task	Compliance Date
I. Submit Supplemental Progress Reports and documentation of the completion of Tasks II through VII listed below ¹	1 February 2016 1 May 2016 1 August 2016 1 November 2016
II. Complete research and development of pipeline repair/replacement protocol	30 December 2015
III. Complete procurement	15 April 2016
IV. Complete pipeline repairs	14 July 2016
V. Complete pipeline pressure testing	25 August 2016
VI. Startup SMD1 Pump Station – Achieve compliance with final effluent limitations (MMP protection ends)	1 September 2016
VII. Decommission SMD1	1 October 2016
¹ The supplemental progress reports shall detail the steps taken to comply with this Order, including documentation showing completion of tasks, construction progress, evaluation of the effectiveness of the implemented measures, and assessment of whether additional measures are necessary to meet the compliance date.	

- The following interim effluent limitations for aluminum, ammonia, chloroform, dibromochloromethane, dichlorobromomethane, nitrate plus nitrite, and nitrite, shall be effective upon adoption of TSO R5-2015-0034 and its amendments, and shall apply in lieu of the corresponding final effluent limitations in WDRs Order R5-2010-0092-01. The Discharger shall maintain compliance with the following interim effluent limitations through 1 September 2016, or when the Discharger is able to come into compliance with the final effluent limitations, whichever is sooner.

Parameter	Units	Interim MDEL	Interim AMEL
Aluminum, Total Recoverable	µg/L	188	72
Chloroform	µg/L	117	45
Dibromochloromethane	µg/L	3.0	1.1
Dichlorobromomethane	µg/L	17	6.4
Nitrate Plus Nitrite (as N)	mg/L	49	19
Nitrite Nitrogen, Total (as N)	mg/L	9.7	3.7
Ammonia	mg/L	15.1	11.2

3. The following interim effluent limitations for BOD₅, total coliform organisms, and TSS shall be effective upon adoption of TSO R5-2015-0034 and its amendments, and shall apply in lieu of the corresponding final effluent limitations in WDRs Order R5-2010-0092-01. The Discharger shall maintain compliance with the following interim effluent limitations through 1 September 2016, or when the Discharger is able to come into compliance with the final effluent limitations, whichever is sooner.

i. **Total Coliform Organisms.** When the influent flow is greater than 3.5 MGD and the 7-day median receiving water temperature at Monitoring Location RSW-001 (as described in the Monitoring and Reporting Program (MRP) of WDRs Order R5-2010-0092-01) is less than 60°F, effluent total coliform organisms shall not exceed:

- 1) 2.2 most probable number (MPN) per 100 mL, as a as a 30-day median;
- 2) 23 MPN/100 mL, more than once in any 30-day period; and
- 3) 240 MPN/100 mL as an instantaneous maximum.

ii. **BOD₅ and TSS.** When the influent flow is greater than 3.5 MGD and the 7-day median receiving water temperature at Monitoring Location RSW-001 (as described in the MRP) is less than 60°F, effluent BOD₅ and TSS shall not exceed:

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30	50
Total Suspended Solids	mg/L	20	30	50

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 that 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 California 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 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 the WDRs may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its 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 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 date of this Order, 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 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 **17 April 2015** and amended by the California Regional Water Quality Control Board, Central Valley Region, on **11 December 2015**.

Original signed by

PAMELA C. CREEDON, Executive Officer