

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2012-0095  
REQUIRING

THE DEPARTMENT OF CORRECTIONS AND REHABILITATION  
SIERRA CONSERVATION CENTER WATER TREATMENT PLANT  
TUOLUMNE COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN  
WASTE DISCHARGE REQUIREMENTS ORDER R5-2007-0117  
(NPDES PERMIT CA0082546)

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

1. On 14 September 2007, the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2007-0117 and Time Schedule Order (TSO) R5-2007-0118, prescribing waste discharge requirements and compliance time schedules, for the California Department of Corrections and Rehabilitation (Discharger) Sierra Conservation Center Water Treatment Plant (Facility), in Tuolumne County.
2. WDR Order R5-2007-0117 contains, in part, Final Effluent Limitations in section IV.A.1.a, as follows:

***Final Effluent Limitations – Discharge to Shotgun Creek – Monitoring Location EFF-001***

| <b><i>Parameter</i></b>             | <b><i>Units</i></b> | <b><i>Effluent Limitations</i></b>           |                                   |                                 |
|-------------------------------------|---------------------|--|-----------------------------------|---------------------------------|
|                                     |                     | <b><i>Annual<sup>1</sup><br/>Average</i></b> | <b><i>Average<br/>Monthly</i></b> | <b><i>Maximum<br/>Daily</i></b> |
| <i>Dichlorobromomethane</i>         | <i>µg/L</i>         | --   | <i>0.56</i>                       | <i>1.1</i>                      |
| <i>Aluminum, Total Recoverable</i>  | <i>µg/L</i>         | --   | <i>71</i>                         | <i>143</i>                      |
| <i>Iron, Total Recoverable</i>      | <i>µg/L</i>         | <i>300</i>                                   | --                                | --                              |
| <i>Manganese, Total Recoverable</i> | <i>µg/L</i>         | <i>50</i>                                    | --                                | --                              |

<sup>1</sup> For a calendar year

The final effluent limitations for aluminum become effective on 1 September 2012, because a compliance schedule is provided in WDR Order R5-2007-0117. The final effluent limitations for iron and manganese became effective on the effective date of WDR Order R5-2007-0117 (3 November 2007). TSO R5-2007-0118 provided time schedules for compliance with the final effluent limits for iron and manganese, with final compliance required by 1 September 2012.

WDR Order R5-2007-0117 expired on 1 September 2012. The Discharger submitted a Report of Waste Discharge for permit renewal 180 days prior to the permit expiration date. Central Valley Water Board staff anticipates renewal of the permit in early 2013.

### **Need for Time Schedule Extension and Legal Basis**

3. In 2009, the discharger submitted a treatment and feasibility study, and pollution prevention plans (PPPs) for aluminum, dichlorobromomethane, iron, and manganese. In the treatment and feasibility study and PPPs the Discharger described feasible alternatives and the process for evaluating and selecting the most appropriate alternative to comply with final effluent limitations. For aluminum, the Discharger's compliance project includes a change in coagulants from an aluminum-based coagulant to a ferric sulfate coagulant. For dichlorobromomethane, the Discharger's compliance project includes improvements to the water treatment plant to reduce the formation of disinfection by-products. This includes the installation of an ACTIFLO rapid settling clarifier and a new chlorine contact basin. For iron and manganese, the Discharger's compliance project includes the installation of an iron and manganese removal unit.

In 2011, the Discharger completed construction and installation of the ACTIFLO rapid settling clarifier and chlorine contact basin to achieve compliance with effluent limits for dichlorobromomethane. These water treatment plant upgrades had a cost of about \$2.2 M. In 2012, the Discharger completed a jar testing study to determine the appropriate dosing levels for a new ferric sulfate coagulant at the Facility. The Facility is expected to change from aluminum-based coagulant to ferric sulfate coagulant in July 2012 to comply with the aluminum effluent limits. In August 2012, the Discharger has scheduled a 30-day bench scale-pilot test to confirm the final treatment technology for iron and manganese removal. The final design is expected to be completed by October 2012, and construction of these upgrades is expected to be completed between May and July of 2013. The Discharger needs additional time to implement these changes and has proposed a schedule to achieve compliance with the final effluent limitations for aluminum, iron, and manganese by 1 September 2013.

4. On 6 June 2012 the Discharger submitted an Infeasibility Analysis and justification for a request for extension of the Time Schedule Order for iron and manganese and a new Time Schedule Order for aluminum. The Infeasibility Analysis provided information supporting the infeasibility to comply with final effluent limitations for aluminum, iron, and manganese by 1 September 2013 (final limits are described in Finding 2 above). The Infeasibility Analysis also included a summary of completed tasks towards achieving compliance (as described in Finding 3).

### **Mandatory Minimum Penalties**

5. California Water Code (CWC) sections 13385(h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties (MMPs) upon dischargers that violate certain effluent limitations. CWC section 13385(j)(3) exempts the discharge from 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...*".

6. Per the requirements of CWC section 13385(j)(3), the Central Valley Water Board finds that:
  - a. This Order specifies the actions that the Discharger is required to take in order to correct the violations that would otherwise be subject to CWC section 13385(h) and (i).
  - b. To comply with final effluent limitations, the Discharger has determined that an additional year is necessary to install and start-up the iron and manganese removal unit and switch to a ferric sulfate coagulant instead of an aluminum-based coagulant. The final effluent limitations for aluminum are new, more stringent, or modified regulatory requirements that become applicable to the waste discharge on 2012. The final effluent limitations for iron and manganese were new, more stringent, or modified regulatory requirements that became applicable to the waste discharge after the effective date of WDR Order R5-2007-0117 (3 November 2007). New or modified control measures are necessary in order to comply with the final effluent limitations for aluminum, iron, and manganese. The new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
  - c. This Order establishes a time schedule to bring the waste discharge into compliance with the effluent limitations 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 limitations.
7. The final effluent limitations for aluminum become applicable to the waste discharge on 1 September 2012, because a compliance schedule is provided in WDR Order R5-2007-0117. The final effluent limitations for iron and manganese became applicable on the effective date of WDR Order R5-2007-0117 (3 November 2007). TSO R5-2007-0118 provided protection from MMPs from 3 November 2007 to 31 August 2012 for violations of effluent limitations for iron and manganese. A cease and desist order has not been issued pursuant to CWC Section 13301 or a time schedule order issued pursuant to CWC Sections 13300 or 13308 for the final effluent limitations for aluminum. Therefore, protection from MMPs for violations of the final effluent limitations for aluminum has not previously been provided.
8. By statute, a Cease and Desist Order or Time Schedule Order may provide protection from MMPs for no more than five years, except as provided in CWC section 13385(j)(3)(C)(ii).
9. Per the requirements of CWC Section 13385(j)(3)(C)(ii)(I) for the purpose of treatment facility upgrade, the time schedule shall not exceed 10 years. Per the requirements of 13385(j)(3)(C)(ii)(II) following a public hearing, and upon a showing that the Discharger is making diligent progress toward bringing the waste discharge into compliance with the effluent limitation, the Central Valley Water Board may extend the time schedule for up to an additional five years, if the Discharger demonstrates that the additional time is necessary to comply with the effluent limitation. In accordance with CWC Section 13385(j)(3)(C)(ii)(I) the total length of the compliance schedules is less than ten years. The Central Valley Water Board finds, as described in previous findings in this Order, that the Discharger has

demonstrated due diligence and is making diligent progress to bring the waste discharge into compliance with final effluent limitations for aluminum, iron, and manganese contained in WDR Order R5-2007-0117. The Central Valley Water Board also finds that because of the Discharger's construction schedule, additional time is necessary to comply with the final effluent limitations.

11. Compliance with this Order exempts the Discharger from MMPs for violations of the final effluent limitations for aluminum, iron, and manganese from the date of this Order until 1 September 2013.
12. 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 CWC Section 13385(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.
13. In accordance with CWC section 13385(j)(3), the total length of protection from MMPs for aluminum does not exceed five years and the total length of protection from MMPs for iron, and manganese does not exceed ten years from the date the effluent limits became applicable to the waste discharge.
14. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for aluminum, iron, and manganese contained in WDR Order R5-2007-0117. This Order includes interim effluent limitations and interim requirements and dates for their achievement.
15. This Order includes performance-based interim limitations for aluminum, iron, and manganese. The performance-based interim limits for aluminum and manganese are carried forward from the WDR Order R5-2007-0117 and previous TSO Order R5-2007-0118, respectively. The performance-based interim limit for iron is increased from 995 µg/L to 3,800 µg/L to account for a temporary increase in iron concentrations due to the change from aluminum-based coagulant to ferric sulfate coagulant. This increase in iron concentration will be temporary and is expected to cease once the installation of the final treatment technology for iron and manganese removal is completed (as described in Finding 3).
16. The Central Valley Water Board finds 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.

### Other Regulatory Requirements

17. CWC 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.”*
18. CWC 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.”*
19. The Discharger owns and operates the treatment 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.
20. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) (“CEQA”) pursuant to CWC section 13389, since the adoption or modification of a 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.).
21. On 4 October 2012, 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 this Time Schedule Order under CWC section 13300 to establish a time schedule to achieve compliance with waste discharge requirements.

**IT IS HEREBY ORDERED THAT:**

1. Time Schedule Order R5-2007-0118 is rescinded upon the effective date of this Order except for enforcement purposes.
2. Pursuant to CWC Section 13300, the Discharger shall comply with the following time schedule to ensure completion of the compliance project described in Finding 3, above, and comply with the final effluent limitations for aluminum, iron, and manganese required in WDR Order R5-2007-0117, or subsequently renewed permits, by **1 September 2013**:

| <b>Task</b>  | <b>Compliance Date</b>                      |
|--|---|
| i. Continue Implementation Pollution Prevention Plan (PPP) <sup>1</sup> pursuant to CWC  | <b>Complete</b>                             |
| ii. Submit Progress Reports <sup>1</sup> Including:<br>(a) Progress on aluminum reduction using ferric sulfate coagulant<br>(b) Pilot test results of iron and manganese removal process<br>(c) Status on final design and construction upgrades for iron and manganese removal unit   | <b>1 November 2012 and<br/>1 April 2013</b> |
| iii. Submit a report demonstrating the facility improvements described in Finding 3, above, have been completed and the Facility is in compliance with the final effluent limits for aluminum, iron, and manganese in Order R5-2007-0117, or subsequently renewed permit.  | <b>1 September 2013</b>                     |
| <sup>1</sup> The 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 dates. |   |

2. The following interim effluent limitations for aluminum, iron, and manganese shall be effective upon adoption of this Order. The Discharger shall maintain compliance with the following interim effluent limitations through **31 August 2013**, or when the Discharger is able to come into compliance with the final effluent limitations shown in Finding 2, whichever is sooner.

| <b>Constituent</b>                  | <b>Units</b> | <b>Interim Effluent Limit</b> |                      |
|-------------------------------------|--------------|-------------------------------|----------------------|
|                                     |              | <b>Average Monthly</b>        | <b>Maximum Daily</b> |
| <i>Aluminum, Total Recoverable</i>  | <i>µg/L</i>  | <i>2,053</i>                  | <i>2,053</i>         |
| <i>Iron, Total Recoverable</i>      | <i>µg/L</i>  | <i>--</i>                     | <i>3,800</i>         |
| <i>Manganese, Total Recoverable</i> | <i>µg/L</i>  | <i>--</i>                     | <i>373</i>           |

3. 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."*

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 CWC, 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 CWC 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](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 signed by the Executive Officer of the California Regional Water Quality Control Board, Central Valley Region, on **4 October 2012**.

Original Signed by Pamela C. Credon

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PAMELA C. CREEDON, Executive Officer