

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2013-0052

REQUIRING
CITY OF ATWATER
ATWATER REGIONAL WASTEWATER TREATMENT FACILITY
MERCED COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER R5-2011-0082
(NPDES PERMIT NO. CA0085308)

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

1. On 1 December 2011, the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2011-0082, prescribing discharge requirements for the City of Atwater (hereafter Discharger), Regional Wastewater Treatment Facility (hereafter Regional Facility) on Bert Crane Road, Merced County.
2. WDR Order R5-2011-0082 contains Final Effluent Limitations IV.A.1., which reads, in part, as follows:

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program:

- a. The effluent limitations specified in Table 6:

Table 6. Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Zinc, Total Recoverable	µg/L	34	--	69	--	--

3. On 22 June 2007, the Central Valley Water Board adopted WDR Order R5-2007-0063 (NPDES Permit No. CA0079197) for the Atwater Wastewater Treatment Plant on Commerce Avenue. WDR Order R5-2007-0063 included new effluent limitations for zinc, which became applicable to the waste discharge on 18 May 2010. On 18 May 2010, the Central Valley Water Board Executive Officer issued Time Schedule Order (TSO) R5-2010-0903 that allowed a time schedule for the Discharger to complete construction of the Regional Facility to replace the Atwater Wastewater Treatment Plant on Commerce Avenue as its primary means of complying with new, more stringent requirements in WDR Order R5-2007-0063. The Regional Facility commenced discharge on 6 June 2012, and WDR Order R5-2007-0063 and TSO R5-2010-0903 were rescinded at the 5 October 2012 Central Valley Water Board meeting.

4. The effluent limitations specified in WDR Orders R5-2007-0063 and R5-2011-0082 for zinc are based on implementation of the California Toxics Rule. WDR Order R5-2011-0082 does not contain a compliance schedule or interim effluent limitations for zinc.

5. 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.

6. 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.

7. 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. CWC 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) ...

- (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 regional board may extend the time schedule for an additional period not exceeding five years in length, if the discharger demonstrates that the additional time is necessary to comply with the effluent limitation...
- (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 for zinc contained in WDR Order R5-2011-0082. The zinc effluent limitations were new requirements that became applicable to the discharge on 18 May 2010 under WDR Order R5-2007-0063, and after 1 July 2000, and for which new or modified control measures were necessary in order to comply with the effluent limitations, and the new or modified control measures could not be designed, installed, and put into operation within 30 calendar days. TSO R5-2010-0903 allowed a time schedule under Water Code section 13385, subdivision (j)(3)(C)(i) for compliance with new, more stringent effluent limitations for various constituents, including zinc. WDR Order R5-2011-0082 for the Regional Facility retained the effluent limitations for zinc. In accordance with Water Code section 13385, subdivision (j)(3)(C)(ii)(II), this Order allows an additional five years for the Discharger to come into compliance with the zinc effluent limitations. This Order requires the Discharger to prepare and implement a pollution prevention plan pursuant to Water Code section 13263.3 for zinc.

8. As mentioned in Finding No. 3 above, the new Regional Facility was built as the Discharger's primary means of complying with new, more stringent requirements. Effluent data show that the Regional Facility can consistently comply with all of the new, more stringent requirements, except for zinc, as described below. Completion of the Regional Facility shows that the Discharger is making diligent progress toward bringing the waste discharge into compliance. Additional time is necessary for the Discharger to achieve compliance with the zinc effluent limitations in WDR Order R5-2011-0082.
9. On 31 October 2012, the Discharger submitted the *Infeasibility to Comply Report*, which included a request for a time schedule to comply with the effluent limitations for zinc contained in WDR Order R5-2011-0082. The Discharger indicates that effluent zinc concentrations have increased at the Regional Facility compared to the effluent zinc concentrations at the Atwater Wastewater Treatment Plant on Commerce Avenue, and requests additional time to investigate the causes of the increased effluent zinc concentrations and to conduct studies. The influent data set is not robust enough to show whether influent concentrations have increased. According to the Discharger,

there have been no changes in the source waters or at its industrial user facility that could account for the increase. The Discharger proposes to conduct a Water Effects Ratio study for zinc, and, if necessary, a polymer addition study. Polymer addition facilities are already in place.

10. The compliance time schedule in this Order includes interim performance-based effluent limitations for zinc. 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). 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 established in this Order by calculating an upper prediction limit. An upper prediction limit is calculated based on past data and is used to predict a value that a specified number of future observations/samples will fall under (USEPA 530-R-93-003). The interim maximum daily effluent limitation was calculated with a confidence level of 99.9% and assuming one sample is collected per month for the next five years.

The following table summarizes the calculations of the interim performance-based effluent limitations for zinc:

Interim Effluent Limitations Calculations

Parameter	Units	MEC	Mean	Standard Deviation	Number of Samples	Interim MDEL	Interim AMEL
Zinc, Total Recoverable	µg/L	71	58	8.6	21	110	86

11. This Order provides time schedules 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.
12. Since the time schedules for completion of actions necessary to bring the waste discharge into compliance with the effluent limitations for zinc exceed one year, this Order includes interim requirements and dates for their achievement. In accordance with Water Code section 13385, subdivision (j)(3)(C)(ii)(II), the time schedule does not exceed five years.

13. 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.
14. 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 contained in WDR Order R5-2011-0082 from 31 May 2013 to 30 May 2018.
15. 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.
16. 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.
17. The Discharger owns and operates the wastewater 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.
18. On 31 May 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.

19. 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 Section IV.A.1.a., contained in WDR Order R5-2011-0082 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 pursuant to Water Code section 13263.3	3 September 2013
2	Submit a work plan and time schedule for completing a Water Effects Ratio (WER) Study for zinc	1 October 2013
3	Submit results of WER Study for zinc and request for modification of WDR Order R5-2011-0082	1 June 2015
4	Submit a work plan and time schedule for conducting a polymer addition study ²	1 June 2015
5	Submit results of polymer addition study, including effluent monitoring data for constituents that may be of concern due to the polymer addition	31 May 2016
6	Progress Reports ³	Semi-annually, 1 February and 1 August until full compliance
7	Full compliance with zinc effluent limitations contained in WDR Order R5-2011-0082	31 May 2018

¹ The PPP shall be prepared for zinc, 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.

² This task is only required if the results of the WER Study do not support modified zinc effluent limitations for which the Discharger can consistently comply with.

³ 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 Discharge Point 001 shall be effective from 31 May 2013 to 30 May 2018, or when the Discharger is able to come

into compliance with the zinc effluent limitations in WDR Order R5-2011-0082, whichever is sooner:

Parameter	Units	Maximum Daily Effluent Limitation	Average Monthly Effluent Limitation	Effective Through
Zinc, Total Recoverable	µg/L	110	86	30 May 2018

3. For the compliance schedules 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 R5-2011-0082 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., 30 days after the date that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final 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 31 May 2013.

Original signed by:

PAMELA C. CREEDON, Executive Officer