

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2013-0901
REQUIRING
THE EL DORADO IRRIGATION DISTRICT
DEER CREEK WASTEWATER TREATMENT PLANT
EL DORADO COUNTY

TO COMPLY WITH WASTE DISCHARGE REQUIREMENTS PRESCRIBED
IN ORDER R5-2008-0173-01 AND SUBSEQUENTLY ADOPTED ORDERS
NPDES PERMIT No. CA0078662

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

1. On 4 December 2008, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2008-0173 prescribing waste discharge requirements and accompanying Time Schedule Order (TSO) No. R5-2008-0174 granting compliance time schedules and interim limits, for the El Dorado Irrigation District (hereinafter Discharger) Deer Creek Wastewater Treatment Plant (hereinafter Facility), in El Dorado County. On 10 June 2011, the Central Valley Water Board amended the NPDES Permit by adopting WDR Order R5-2008-0173-01.
2. WDR Order R5-2008-0173-01 contains Final Effluent Limitations IV.A.1.a for Discharge Point No. 001, which reads, in part, as follows:

Table 1. Effluent Limitations – Discharge Point No. 001

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Zinc, Total Recoverable	µg/L	28.6	57.5	--	--

Need for Time Schedule Extension and Legal Basis

3. On 11 July 2008, the Discharger submitted justification for a compliance schedule for zinc. TSO No. R5-2008-0174 included a time schedule requiring full compliance with the final effluent limitations for zinc by 1 December 2013. The Discharger's submittals included: (a) documentation that diligent efforts have been made to quantify pollutant levels in the discharge and the sources of the pollutant in the waste stream; (b) documentation of source control measures and/or pollution minimization measures efforts currently underway or completed; and (c) a proposal for additional or future source control measures, pollutant minimization actions, or waste treatment (i.e., Facility upgrades) with projected time schedules to achieve compliance with final effluent limitations.
4. On 3 December 2009, the Discharger submitted the Pollution Prevention Plan (PPP) for zinc as required by TSO No. R5-2008-0174. In the PPP, the Discharger identified domestic and

industrial users, the water supply, and internal sources within the wastewater treatment process as the main sources of zinc in the intake. The Discharger also believes that infiltration and inflow (I&I) which occurs through seepage of elevated shallow ground water into sewer lines and surface seepage through utility access covers (i.e., manholes) in the roadways, is also a minor source of zinc. The PPP outlined the Discharger's efforts to control and reduce zinc in the intake. This order requires the Discharger to update and implement its PPP.

5. In August 2011, the district began source control measures by replacing zinc orthophosphate with phosphoric acid at its El Dorado Hills Water Treatment Plant to control elevated concentration levels of zinc in the municipal water supply. On 12 October 2012, the district expanded the replacement of zinc orthophosphate with phosphoric acid to its other drinking water treatment plant which ultimately affects zinc levels in the influent to the Facility. However, zinc concentrations in treated effluent remain comparable to levels observed prior to 12 October 2012.
6. Diligent efforts have been made to quantify pollutant levels in the discharge and the sources of the pollutant in the waste stream. The Discharger's industrial pretreatment program regulates discharges of zinc to the collection system from two Significant Industrial Users (SIU) through a local limit issued in wastewater discharge permits. Discharges from the Union Mine Wastewater Treatment Facility (WWTF) must comply with local limits that were based upon maintaining background water quality. To determine compliance, the Union Mine WWTF discharges are subject to chemical analysis prior to discharge, and based upon concentration and loading (pounds per day), the volume of discharge may be limited by the analytical results. Future industrial discharge from JM Eagle (formerly PW Pipe) is not anticipated as manufacturing of pipe at this location has been discontinued.
7. As a policy, the Discharger does not use galvanized piping or plumbing fixtures in facilities it owns and operates, including mainlines and laterals. The Discharger also discourages using galvanized piping in new construction.
8. The Discharger has engaged in an education campaign targeted at the safe and proper disposal of vitamins, medications, and pharmaceutical products and has partnered with the El Dorado County's solid waste disposal service and sheriff's department which provide venues and drop-off points for unwanted or expired pharmaceuticals.
9. On 16 September 2013 the Discharger submitted the Infeasibility Analysis and Time Schedule Justification For Compliance with NPDES Permit Limitations for Zinc and Bis(2-Ethylhexyl)Phthalate for the Deer Creek Wastewater Treatment Plant to the Central Valley Regional Water Board requesting additional time to comply with the final zinc effluent limitation.

Mandatory Minimum Penalties

10. California Water Code (Water Code) sections 13385(h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties (MMP's) upon dischargers that violate

certain effluent limitations. Water Code section 13385(j)(3) exempts the discharge 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 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..."*

11. Per the requirements of Water Code 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 Water Code section 13385(h) and (i).
 - b. To comply with final zinc effluent limitations the Discharger is requesting additional time to implement four studies. The Discharger proposes to (1) conduct an additional year of monitoring influent total recoverable zinc concentrations on a monthly basis to evaluate the effectiveness of current source control efforts; (2) complete analyses of creek flow data to determine whether dilution will contribute to a compliance solution. Should dilution credit be a viable compliance option for facilitating permit compliance, then an evaluation of the mixing zone, including evaluation of aquatic resources in the mixing zone (e.g., benthic macroinvertebrates) and a tracer study defining the size of the mixing zone, will be completed; (3) evaluate opportunities to optimize operations for improved zinc removal which could include modifications to polymer/coagulant selection, dosing, activation, and metering as well as mean cell residence time or sludge age; (4) re-evaluate the potential for a water-effect ratio (WER) after zinc concentrations in the influent stabilize and implement if necessary.
 - 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. 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.
12. Per the requirements of Water Code Section 13385(j)(3)(C)(ii)(I) for the purposes of treatment facility upgrade, the time schedule shall not exceed 10 years. Per the requirements of Water Code Section 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 an additional five years beyond the initial five years, if the Discharger demonstrates that the additional time is necessary to comply with the effluent limitation.
13. Compliance with this Order exempts the Discharger from MMPs for violations of the effluent limitations found in WDR Order R5-2008-0173-01 as follows:

a. Zinc: Previous TSO R5-2008-0174 provided protection from MMPs at Discharge Point No. 001 from 4 December 2008 until 1 December 2013. This Order provides protection from MMPs at Discharge Point No. 001 from 21 November 2013 until 1 October 2017.

14. In accordance with Water Code section 13385(j)(3), the total length of protection from MMPs for zinc does not exceed ten years from the date the effluent limitations became applicable to the waste discharge.

15. This Order includes performance-based interim effluent limitations for zinc at Discharge Point No. 001. The interim effluent limitations are based on the current treatment plant performance.

The interim effluent limitations consist of statistically calculated performance-based average monthly and maximum daily effluent limits derived using sample data provided by the Discharger. The interim effluent limitations were developed using the statistical based approach provided in EPA'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 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 (MEC) to estimate the maximum expected effluent concentration; this value was used as the interim effluent limitation for the average monthly effluent limit (AMEL). The interim performance-based maximum daily effluent limitation (MDEL) was established in accordance with section 1.4 and Table 2 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP), by multiplying the interim AMEL by the MDEL/AMEL multiplier.

Effluent data from November 2010 through July 2013 was used to calculate the interim effluent limitations in the table below. The following table summarizes the calculations of the daily maximum and average monthly interim effluent limitation for this constituent:

a. Discharge Point No. 001

Parameter	Units	MEC	Number of Data Points	Mean	Standard Deviation	Coefficient of Variation	Interim Average Monthly Effluent Limitation	Interim Maximum Daily Effluent Limitation
Zinc, Total Recoverable	µg/L	95	72	49.6	11.36	0.23	121	166

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.

17. 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 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.

Other Regulatory Requirements

18. California 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."*
19. California 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.*
20. 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 requirements in WDR Order R5-2008-0173-01 and with this Order.
21. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) ("CEQA") pursuant to Water Code 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. Discharger Council of Discharger of Riverside* (1977) 73

Cal.App.3d 546, 555-556.). Issuance of this Order is also exempt from the provisions of CEQA in accordance with California Code of Regulations, title 14, section 15321, subdivision (a)(2).

22. A regional board may delegate issuance of time schedule orders to the Executive Officer. (Wat. Code §13223.). On 10 December 2009, the Central Valley Water Board adopted Resolution No. R5-2009-0114 to provide explicit authority to the Executive Officer to issue or modify time schedule orders, and to make this authority known to the public and regulated community.
23. On 20 September 2013 the Central Valley Water Board notified the Discharger, and interested agencies and persons, of its intent to adopt a new Time Schedule Order for this discharge and provided them with an opportunity to submit their written views and recommendations. Pursuant to Water Code section 13167.5 for a time schedule order adopted pursuant to Water Code section 13300, comments were due 21 October 2013, which is at least a 30-day public notice and comment period. No comments were received by the Central Valley Water Board on the proposed time schedule order.

IT IS HEREBY ORDERED THAT:

Time Schedule Order R5-2008-0174 is rescinded, except for enforcement purposes, and, pursuant to Water Code Sections 13300 and 13267:

1. The Discharger shall comply with the following time schedule to ensure compliance with the final effluent limitations for zinc contained in WDR Order R5-2008-0173-01, and subsequently adopted orders, as described in the above findings:

Task	Compliance Date
Submit Dilution Study evaluation report	1 January 2015
Submit summary report of total recoverable zinc influent monitoring results and observed trends.	1 March 2015
Submit report identifying operational changes implemented.	1 March 2015
Submit updated Pollution Prevention Plan for zinc.	1 March 2015
Submit report of effects of operational changes on zinc effluent concentrations.	1 March 2016

Task	Compliance Date
Submit final WER study report.	1 May 2017
Compliance with final zinc effluent limitation.	1 October 2017

2. The following interim effluent limitations for zinc shall be effective immediately and until 30 September 2017, or when the Discharger is able to come into compliance, whichever is sooner.

Parameter	Units	Average Monthly	Maximum Daily
Zinc, Total Recoverable	µg/L	121	166

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."

4. 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

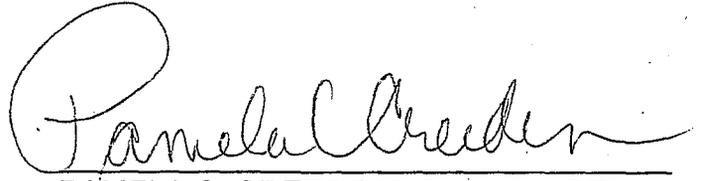
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following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality
or will be provided upon request.

This Order is effective upon signature.



PAMELA C. CREEDON, Executive Officer

21 November 2013

Date