

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2011-0043

REQUIRING THE PLANADA COMMUNITY SERVICES DISTRICT
PLANADA WASTEWATER TREATMENT FACILITY
MERCED COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER R5-2011-0042
(NPDES PERMIT NO. CA0078950)

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

1. On 10 June 2011, the Central Valley Water Board adopted Waste Discharge Requirements Order R5-2011-0042, NPDES Permit No. CA0078950, prescribing waste discharge requirements for Planada Community Services District's (hereinafter Discharger) wastewater treatment facility (hereafter Facility) in Merced County.
2. Order R5-2011-0042 contains Final Effluent Limitations IV.A.1.a for California Toxics Rule constituents, which reads, in part, as follows:

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Carbon Tetrachloride	µg/L	0.25	--	0.50	--	--
Chlorodibromomethane	µg/L	0.41	--	0.82	--	--
Cyanide, Total Recoverable	µg/L	4.2	--	8.5	--	--
Dichlorobromomethane	µg/L	0.56	--	1.1	--	--

3. Order R5-2011-0042 contains Final Effluent Limitations IV.A.1.a, IV.A.1.c, and IV.A.1.e for non-California Toxics Rule constituents, which read, in part, as follows:

- a. The effluent limitations specified in Table 6:

Table 6. Final Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	10	15	20	--	--
	lbs/day	44 ¹	66 ¹	88 ¹	--	--
Total Suspended Solids	mg/L	10	15	20	--	--
	lbs/day	44 ¹	66 ¹	88 ¹	--	--

¹ Based upon a design flow of 0.53 mgd

- c. **Percent Removal.** The average monthly percent removal of 5-day biochemical oxygen demand (BOD₅) and total suspended solids (TSS) shall not be less than 90 percent.
- e. **Total Coliform.** Effluent total coliform shall not exceed:
 - i. 2.2 most probable number (MPN) per 100 mL, as a 7-day median;
 - ii. 23 MPN/100 mL, more than once in any 30-day period; nor
 - iii. 240 MPN/100 mL, instantaneous maximum.

4. Order R5-2011-0042 contains Turbidity Operational Requirements, Section VI.C.4.a., which read as follows:

Turbidity Operational Requirements. The Discharger shall operate the treatment system to ensure that the turbidity measured at INT-001, as described in the MRP (Attachment E), shall not exceed:

- i. 2 NTU, as a daily average;
- ii. 5 NTU, more than 5 percent of the time within a 24-hour period; and
- iii. 10 NTU, at any time.

5. Effective 10 June 2011, Order R5-2011-0042 requires the Discharger to comply with the effluent limitations and operational requirements listed in Findings 2, 3, and 4 above.

6. California Water Code (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.

7. Federal regulation, 40 CFR 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, are defined per federal regulations as water quality standards.

8. CWC subsections 13385(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.

...

(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 CWC section 13385(j)(3), and based upon effluent monitoring results, the Discharger is unable to consistently comply with the final effluent limitations for carbon tetrachloride, chlorodibromomethane, cyanide, dichlorobromomethane, 5-day (at 20°C) biochemical oxygen demand (BOD), total suspended solids (TSS), BOD and TSS percent removal, and total coliform, and the operational requirements for turbidity contained in Order R5-2011-0042.

The final effluent limitations and operational requirements contained in Order R5-2011-0042 are new requirements that became applicable to the discharge on

26 January 2010 under Order R5-2005-0009, and new or modified control measures need to be implemented to comply with the new effluent limitations, and these new or modified control measures cannot be completed and put into operation within 30 calendar days.

9. On 3 November 2004, the Discharger submitted a proposed compliance project to address Administrative Civil Liability Complaint No. R5-2004-0533 and to address the requirement to implement tertiary treatment. The proposed compliance project includes, in part, a plan to implement an alternative method of wastewater disposal. The Discharger originally proposed to cease discharges to Miles Creek by October 2009 by purchasing land to apply undisinfected secondary recycled water to non-human consumption crops. As described below, the Discharger's project has been delayed, and the Discharger was unable to cease discharges to Miles Creek by 26 January 2010. However, the plan to cease discharges to Miles Creek by implementing reclamation remains the cornerstone of the Discharger's strategy to comply with the final effluent limitations and operational requirements presented in Findings 2 through 4 above, and to implement an alternative method of disposal.
10. Subsequent to adoption of Order R5-2005-0009, the Discharger made progress towards completing the compliance project. The Discharger holds a purchase option on 109 acres (pending funding), is currently negotiating a purchase option on an additional 38 acres, completed pre-design of the infrastructure necessary for land discharge, submitted a report of waste discharge for land discharge, and expended significant effort to satisfy CEQA. However, the Discharger encountered significant project delays.
11. On 5 May 2009, the Discharger's attorney submitted a letter citing the following reasons for the Discharger's delay in completing the compliance project by October 2009: (1) members of the public opposed the project and the mitigated negative declaration, which prompted the Discharger to prepare an environmental impact report (estimated 8-10 month delay); (2) members of the public filed two lawsuits against the Discharger challenging the environmental impact report (estimated 8-9 month delay); and (3) the Discharger terminated its contract with its original CEQA consultant hired to work on the project due to delinquent work, and retained a new consultant (estimated 12 month delay). The total project delay is estimated to be 28-31 months. The attorney's letter also includes invoices for services directly related to the compliance project.
12. On 16 November 2009, the Discharger's engineer provided an updated schedule for completion of the compliance project that included an estimated completion date of 3 September 2012. On 11 February 2010, the Central Valley Water Board's Executive Officer issued Time Schedule Order R5-2010-0900 that extended the final compliance date for the final effluent limitations and operational requirements to 3 September 2012.
13. On 19 January 2011, the Discharger's engineer submitted documentation demonstrating the diligent efforts the Discharger has been making to complete the compliance project. However, the Discharger reported that it would not be able to

comply with the final compliance date included in TSO R5-2010-0900. The documentation includes a revised schedule for completion of the compliance project that included a revised estimated completion date of 25 February 2013. The Discharger is currently working on its funding applications and CEQA/NEPA processes to secure funding from the Clean Water State Revolving Fund and the USDA Rural Development. The Discharger needs additional time to complete these items.

14. On 4 April 2011, the Discharger's engineer submitted a revised implementation schedule with an estimated completion date of 8 November 2013. The District's engineer stated the additional time is for delays encountered during CEQA/NEPA compliance and the identification of a possible nesting area for the State threatened Swainson's Hawk that can delay construction for 6 months.
15. The Discharger submitted a pollution prevention plan for carbon tetrachloride, chlorodibromomethane, cyanide, and dichlorobromomethane on 21 March 2011. A pollution prevention plan for BOD, TSS, total coliform, and turbidity is unnecessary for the reasons described in the Findings below, and the Discharger has met the requirements of CWC section 13263.3 for these constituents.
16. The need to meet tertiary treatment-based effluent limitations will be inapplicable once the Discharger ceases discharging to Miles Creek and begins applying undisinfectated secondary recycled water to non-human consumption crops. BOD, TSS and total coliform are components of human sewage and are not feasible to reduce by pollution prevention, but are dependent on additional control measures that are unnecessary for land disposal. Turbidity is an operational parameter used to confirm the effectiveness of tertiary treatment systems, and not a water-quality based requirement in Order R5-2011-0042. Thus, no additional pollution prevention measures or source control measures are necessary for BOD, TSS, total coliform, and turbidity once the Discharger completes the compliance project.
17. The compliance time schedule in this Order includes interim performance-based effluent limitations for carbon tetrachloride, chlorodibromomethane, cyanide, and dichlorobromomethane. The interim effluent limitations consist of maximum daily effluent concentrations derived using sample data provided by the Discharger during the term of Order R5-2005-0009 (approximately 5 years). In developing the performance-based interim effluent limitations, where there are ten sampling data points or more, 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 ten data points available, interim effluent limitations are typically based on 3.11 times the maximum observed effluent concentration (MEC) to obtain the daily interim effluent limitation. However, if either of these procedures produces an interim effluent limitation less than the MEC or significantly higher than the

MEC, the MEC is established as the interim effluent limitation. The following table summarizes the calculation of the interim performance-based effluent limitations for carbon tetrachloride, chlorodibromomethane, cyanide, and dichlorobromomethane:

Parameter	Units	MEC	Mean	Std. Dev. (SD)	# of Data Points	% ND	Formula Used	Interim Limitation Daily Maximum
Carbon Tetrachloride	µg/L	1.1	0.86	0.26	22	86	MEC	1.1
Chlorodibromomethane	µg/L	3.5	1.9	0.86	19	37	3.3xSD + mean	4.8
Cyanide, Total Recoverable	µg/L	22	7.3	6.9	68	79	3.3xSD + mean	30
Dichlorobromomethane	µg/L	23	9.8	6.6	19	16	3.3xSD + mean	32

18. Since the time schedule for completion of actions necessary to bring the waste discharge into compliance exceeds one year, this Order includes interim requirements and dates for their achievement. The time schedule does not exceed five years from the date the final effluent limitations and operational requirements became applicable to the discharge. The interim effluent limitations in Order R5-2005-0009 for BOD, TSS, BOD and TSS percent removal, and total coliform are re-established in this Order.
19. 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.
20. On 10 June 2011, 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 CWC section 13300 to establish a time schedule to achieve compliance with waste discharge requirements.
21. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000, et seq.), in accordance with CWC section 13389 and Title 14, California Code of Regulations, Section 15321(a)(2).

IT IS HEREBY ORDERED that Order R5-2010-0900 is rescinded upon the adoption date of this Order except for enforcement purposes, and pursuant to sections 13300 and 13267 of the CWC, that:

- The Discharger shall comply with the following time schedule to ensure compliance with Final Effluent Limitations IV.A.1 for carbon tetrachloride, chlorodibromomethane, cyanide, dichlorobromomethane, BOD, TSS, BOD and TSS percent removal, and total coliform, and the Turbidity Operational Requirements, Section VI.C.4.a. contained in Order R5-2011-0042 as described in the above Findings:

Task	Date Due
Complete California Environmental Quality Act documentation	6 September 2011
Complete final Facility design for modifications necessary to cease discharge to Miles Creek	19 January 2012
Complete land purchase for land disposal	2 July 2012
Quarterly Progress Reports ¹	1 February, 1 May, 1 August, and 1 November until final compliance
Full compliance with the final effluent limitations for carbon tetrachloride, chlorodibromomethane, cyanide, dichlorobromomethane, BOD, TSS, BOD and TSS percent removal, and total coliform, and the operational requirements for turbidity if construction delays are <u>not</u> encountered due to the presence of a Swainson's Hawk nest ²	10 May 2013
-or-	
Full compliance with the final effluent limitations for carbon tetrachloride, chlorodibromomethane, cyanide, dichlorobromomethane, BOD, TSS, BOD and TSS percent removal, and total coliform, and the operational requirements for turbidity if construction delays are encountered due to the presence of a Swainson's Hawk nest ²	8 November 2013

¹ The progress reports for 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 Discharger shall notify the Central Valley Water Board immediately upon learning of the presence of a Swainson's Hawk nest in the area.

- The following interim maximum daily effluent limitations for carbon tetrachloride, chlorodibromomethane, cyanide, and dichlorobromomethane shall be effective from 10 June 2011 to the full compliance date specified above, or when the Discharger is able to come into compliance, whichever is sooner.

Parameter	Maximum Daily Effluent Limitation (µg/L)
Carbon Tetrachloride	1.1
Chlorodibromomethane	4.8
Cyanide, Total Recoverable	30
Dichlorobromomethane	32

3. The following interim effluent limitations for BOD, TSS, BOD and TSS percent removal, and total coliform shall be effective from 10 June 2011 to the full compliance date specified above, or when the Discharger is able to come into compliance, whichever is sooner.

Parameter	Units	Average Monthly	Average Weekly	7-Sample Median ¹	Maximum Daily
BOD ₅ ²	mg/L	30	45	--	60
	lbs/day	133 ³	199 ³	--	265 ³
TSS	mg/L	30	45	--	60
	lbs/day	133 ³	199 ³	--	265 ³
Total Coliform	MPN ⁴ /100 mL	--	--	23	240

¹ Median value based on the last seven samples.

² 5-day, 20°C biochemical oxygen demand (BOD)

³ Based upon a design flow of 0.53 mgd.

⁴ MPN = most probable number

Percent Removal. The average monthly percent removal of 5-day biochemical oxygen demand (BOD₅) and total suspended solids (TSS) shall not be less than 85 percent.

4. For the compliance schedules required by this Order, the Discharger shall submit to the Central Valley Water Board on or before the compliance report due date, the specified document or, if appropriate, 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.

Issuance of this Order does not preclude the Central Valley Water Board from taking additional enforcement actions against the Discharger. If compliance is not achieved by the full compliance date, the discharge will be subject to mandatory minimum penalties for violations of the final effluent limitations for carbon tetrachloride, chlorodibromomethane, cyanide, dichlorobromomethane, BOD, TSS, BOD and TSS percent removal, and total coliform.

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 CWC section 13320 and Title 23, California Code of Regulations, Section 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 is adopted, except that if the thirtieth day following the date that this Order is adopted 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 10 June 2011.

PAMELA C. CREEDON, Executive Officer