

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2012-0035

AMENDING
TIME SCHEDULE ORDER R5-2011-0056

LINDA COUNTY WATER DISTRICT
WASTEWATER TREATMENT PLANT
SUTTER AND YUBA COUNTIES

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

1. On 22 September 2006, the Central Valley Water Board issued Waste Discharge Requirements (WDR) Order R5-2006-0096 and Time Schedule Order (TSO) R5-2006-0097, prescribing waste discharge requirements for Linda County Water District's Wastewater Treatment Plant, Sutter and Yuba Counties. For the purposes of this Order, Linda County Water District is hereafter referred to as "Discharger" and the Wastewater Treatment Plant is hereafter referred to as "Facility."
2. The Facility treats 1.8 million gallons per day (mgd) through a process that includes headworks, primary clarification, trickling filter, secondary clarification, disinfection and dechlorination, and sludge digesters. Treated and disinfected wastewater is normally discharged at Discharge Point No. 002 to land using a series of seven percolation/evaporation ponds that lie within the Feather River floodplain. The Discharger maintains a wastewater outfall pipeline at the discharge point to the Feather River at Discharge Point No. 001.
3. WDRs Order R5-2006-0096 contains final effluent limitations for bis (2-ethylhexyl) phthalate, copper, dibenzo (a,h) anthracene, lead, and zinc, and requires compliance with final effluent limitations upon commencement of discharge from the proposed diffuser or by 18 May 2010, whichever is sooner. WDRs Order R5-2006-0096 also contains final effluent limitations for biochemical oxygen demand (BOD), total suspended solids (TSS), settleable solids, aluminum, manganese, nitrite, electrical conductivity (EC), ammonia, total coliform organisms, and mercury, and requires compliance with final effluent limitations upon commencement of discharge from the proposed diffuser or 21 September 2011, whichever is sooner. The Discharger proposed to upgrade the Facility to comply with the final effluent limitations in WDRs Order R5-2006-0096.
4. On 29 June 2010, the Central Valley Water Board issued amended TSO R5-2006-0097-01 to include compliance schedules for aluminum, ammonia, manganese, bis (2-ethylhexyl) phthalate, copper, lead, zinc, and dibenzo (a,h)

anthracene, requiring compliance with the final effluent limitations by 21 September 2011.

The Discharger proposed \$28.9 million in expansion and upgrades to full nitrification-denitrification and tertiary filtration to comply with WDRs Order R5-2006-0096. The 5 mgd facility currently under construction (New Facility), includes a new headworks, primary clarifiers, secondary biological treatment using air activated sludge for nitrification and denitrification, secondary clarifiers, and tertiary filters with chemical addition. The New Facility will discharge tertiary treated effluent to the Feather River.

5. Construction of the New Facility was scheduled to begin in December 2009 and projected to be completed in September 2011. However, funding delayed construction of the New Facility until 2010, and therefore, completion is projected by 31 December 2012. Thus, the Central Valley Water Board adopted TSO R5-2011-0056 on 4 August 2011, rescinding TSO R5-2006-0097-01, and extended the compliance schedules from 21 September 2011 to 31 December 2012.
6. On **7 June 2012**, the Central Valley Water Board adopted WDRs Order R5-2012-0034 rescinding WDRs Order R5-2006-0096 and prescribing renewed WDRs for the Facility. WDRs Order R5-2012-0034 contains final effluent limitations for ammonia, BOD, copper, nitrite, total coliform organisms, and TSS effective immediately for discharges from the existing Facility to the percolation/evaporation ponds at Discharge Point No. 002 and effective 31 December 2012 for discharges from the New Facility to the percolation ponds at Discharge Point No. 002 and to the Feather River at Discharge Point No. 001.

WDRs Order R5-2012-0034 discontinues effluent limitations for aluminum, dibenzo (a,h) anthracene, lead, settleable solids, and zinc based on updated monitoring data that indicates that these constituents do not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives. WDRs Order R5-2012-0034 includes revised, less stringent effluent limitations based on allowable dilution credits and treatment plant performance for bis (2-ethylhexyl) phthalate, EC, and manganese with which the Discharger is able to comply. WDRs Order R5-2012-0034 includes a performance-based monthly mass loading effluent limitation for mercury which is retained from WDRs Order R5-2006-0096. Monitoring data between July 2008 and June 2011 indicates that the Facility can comply with the mass loading effluent limitation for mercury.

Therefore, compliance schedules for aluminum, bis (2-ethylhexyl) phthalate, dibenzo (a,h) anthracene, EC, lead, manganese, mercury, settleable solids, and zinc are no longer necessary. However, compliance schedules and interim limitations continue to be necessary for the final effluent limitations in WDRs Order R5-2012-0034 for ammonia, BOD, copper, nitrite, TSS, and total coliform organisms.

7. On 22 November 2011, the Discharger submitted "Linda County Water District Wastewater Treatment Plant Infeasibility Analysis" that included a request for an extension of the compliance schedule from 31 December 2012 until 1 June 2015 for the final effluent limitations for copper. While the New Facility is expected to achieve some removal of copper, the Discharger is concerned that the effluent from the New Facility may still be unable to comply with the final effluent limitations for copper and has requested additional time to determine the evaluate the ability of the New Facility to comply, conduct a source identification study, and perform a translator or water effects ratio (WER) study, if necessary. Therefore, this Order amends TSO R5-2011-0056 to extend the compliance schedule for copper from 31 December 2012 to 1 June 2015.
8. On 20 April 2012, the Discharger submitted "Linda County Water District Wastewater Treatment Plant Infeasibility Analysis" that included a request for an extension of the start-up compliance schedule seven months from May 2012 for the nitrate plus nitrite final effluent limitations. While the New Facility is expected to achieve compliance with nitrate plus nitrite, the Discharger is concerned that the 90-day start-up period is not sufficient enough time to complete the optimization of the new Facility. Between start-up on 7 February 2012 and April 2012 the Discharger has been consistently reducing the amount of nitrate plus nitrite in the effluent but has not been able to consistently achieve compliance with the proposed 10 mg/L final limit. Therefore, this Order amends TSO R5-2011-0056 to add a compliance schedule for nitrate plus nitrite from this Order's adoption date until 31 December 2012.
9. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 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. City Council of City of Riverside* (1977) 73 Cal.App.3d 546, 555-556.) This Order is also exempt from CEQA in accordance with California Code of Regulations, title 14, section 15321(a)(2). This Order is not subject to the limitations of Government Code section 65962.5(c)(3) [Cortest List] on the use of categorical exemptions because it does not involve the discharge of "hazardous" materials as used in that statute, but rather involves the discharge of domestic sewage. In addition, adoption of this Order does not have the potential to cause a significant impact on the environment (Title 14, CCR section 15061(b)(3) as it is intended to enforce preexisting requirements to improve the quality of ongoing discharges that are part of the CEQA "baseline."
10. On **7 June 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 the Amendment to TSO R5-2011-0056 to reflect the final effluent limitations for discharges at Discharge Point Nos. 001 and 002 in Order R5-2012-0034.

IT IS HEREBY ORDERED THAT:

1. The Facility description is amended in TSO R5-2011-0056 Finding 2, as shown in underline/strikeout format below:
 2. The Facility treats 1.8 million gallons per day (mgd) through a process that includes headworks, primary clarification, trickling filter, secondary clarification, disinfection and dechlorination, and sludge digesters. Treated and disinfected wastewater is normally discharged at Discharge Point No. 002 to land using a series of seven percolation/evaporation ponds that lie within the Feather River floodplain. Portions of the Facility are in both Sutter and Yuba Counties. The Discharger maintains a wastewater outfall pipeline at the discharge point to the Feather River at Discharge Point No. 001.
2. A finding is added in TSO R5-2011-0056 Finding 7, as shown in underline/strikeout format below:
 7. On 7 June 2012, the Central Valley Water Board adopted WDRs Order R5-2012-0034 rescinding WDRs Order R5-2006-0096 and prescribing renewed WDRs for the Facility. WDRs Order R5-2012-0034 contains Final Effluent Limitations IV.A.1 effective immediately for discharges from the existing Facility to the percolation/evaporation ponds at Discharge Point No. 002 and Final Effluent Limitations IV.A.2 effective 31 December 2012 for discharges from the New Facility to the percolation/evaporation ponds at Discharge Point No. 002 and to the Feather River at Discharge Point No. 001 for nitrate plus nitrite, ammonia, BOD, copper, nitrite, total coliform organisms, and TSS.
3. A finding is added in TSO R5-2011-0056 Finding 10, as shown in underline/strikeout format below:
 10. WDRs Order R5-2012-0034 discontinues effluent limitations for aluminum, dibenzo (a,h) anthracene, lead, settleable solids, and zinc and includes revised, less stringent effluent limitations based on allowable dilution credits and treatment plant performance for bis (2-ethylhexyl) phthalate, EC, and manganese with which the Discharger is able to comply. WDRs Order R5-2012-0034 also includes a performance-based monthly mass loading effluent limitation for mercury which is retained from WDRs Order R5-2006-0096 with which the Discharger can comply. Therefore, compliance schedules and interim limitations are no longer necessary. However, compliance schedules and interim limitations continue to be necessary for the final effluent limitations in WDRs Order R5-2012-0034 for nitrate plus nitrite, ammonia, BOD, copper, nitrite, TSS, and total coliform organisms.

4. A finding is added in TSO R5-2011-0056 Finding 11, as shown in underline/strikeout format below:

11. On 22 November 2011, the Discharger submitted "Linda County Water District Wastewater Treatment Plant Infeasibility Analysis" that included a request for an extension of the compliance schedule from 31 December 2012 until 1 June 2015 for the final effluent limitations for copper. While the New Facility is expected to achieve some removal of copper, the Discharger is concerned that the effluent from the New Facility may still be unable to comply with the final effluent limitations and has requested additional time to determine the evaluate the ability of the New Facility to comply, conduct a source identification study, and perform a translator or water effects ratio (WER) study, if necessary.

5. A finding is added in TSO R5-2011-0056 Finding 12, as shown in underline/strikeout format below:

12. On 20 April 2012, the Discharger submitted "Linda County Water District Wastewater Treatment Plant Infeasibility Analysis" that included a request for an extension of the start-up compliance schedule seven months from May 2012 for the nitrate plus nitrite final effluent limitations. While the New Facility is expected to achieve compliance with nitrate plus nitrite, the Discharger is concerned that the 90-day start-up period is not sufficient enough time to complete the optimization of the New Plant. Between start-up on 7 February 2012 and April 2012 the Discharger has been consistently reducing the amount of nitrate plus nitrite in the effluent but has not been able to consistently achieve compliance with the proposed 10 mg/L final limit. Therefore, this Order amends TSO R5-2011-0056 to add a compliance schedule for nitrate plus nitrite from adoption of this Order until 31 December 2012.

6. The finding in TSO R5-2011-0056 Finding 13.b is amended, as shown in underline/strikeout format below:

b. To protect municipal and domestic supply beneficial uses, tertiary treatment was proposed by the Discharger. Reasonable Potential to exceed water quality objectives was noted for nitrate plus nitrite, aluminum, ammonia, bis(2-ethylhexyl) phthalate, copper, dibenzo (a,h) anthracene, EC, lead, manganese, mercury, and nitrite, settleable solids, and zinc. Tertiary treatment is capable of achieving more stringent BOD and TSS limits than secondary treatment. The effluent limitations for nitrate plus nitrite, copper, lead, zinc, bis(2-ethylhexyl)phthalate, dibenzo(a,h)anthracene, aluminum, manganese, ammonia, BOD, TSS, settleable solids, EC, total coliform organisms, and nitrite, and mercury in WDRs Order R5-2006-0096 were new, more stringent, or modified regulatory requirements that became applicable to the waste discharge after the effective date of the waste discharge requirements WDR Order R5-2006-0096 (22 September 2006) and after 1 July 2000. New or modified control

measures are necessary in order to comply with the new effluent limitations. The new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

7. The finding in TSO R5-2011-0056 Finding 16 is amended, as shown in underline/strikeout format below:

16. Compliance with this TSO exempts the Discharger from mandatory minimum penalties for violations of certain Final Effluent Limitations found in WDRs Order ~~R5-2006-0096~~R5-2012-0034, as follows:

- a. ~~Aluminum, ammonia, and manganese~~: Previous Orders provided protection from mandatory minimum penalties from 22 September 2006 through 21 September 2011. This Order provides protection from 4 August 2011 through 31 December 2012.
- b. ~~Bis (2-ethylhexyl) phthalate, copper, dibenzo (a,h) anthracene, lead, and zinc~~: Previous Orders provided protection from 29 June 2010 through 21 September 2011. This Order, as amended by Order R5-2012-0035, provides protection from mandatory minimum penalties from 4 August 2011 through ~~31 December 2012~~21 June 2015.
- c. BOD, TSS, ~~settleable solids, EC~~, total coliform organisms, ~~mercury~~, and nitrite: These constituents have not previously been protected from mandatory minimum penalties. This Order provides protection from mandatory minimum penalties from 4 August 2011 through 31 December 2012.
- d. Nitrate plus nitrite has not previously been protected from mandatory minimum penalties. This Order provides protection from mandatory minimum penalties from adoption of this Order through 31 December 2012.

8. The finding in TSO R5-2011-0056 Finding 18 is amended, as shown in underline/strikeout format below:

18. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for nitrate plus nitrite, copper, lead, zinc, bis(2-ethylhexyl)phthalate, dibenzo(a,h)anthracene, aluminum, manganese, ammonia, BOD, TSS, settleable solids, EC, total coliform organisms, and nitrite, and mercury contained in WDRs Order ~~R5-2006-0096~~R5-2012-0034. Since the time schedule for completion of actions necessary to bring the waste discharge into compliance exceeds 1 year, this Order includes interim effluent limitations and interim requirements and dates for their achievement.

9. The finding in TSO R5-2011-0056 Finding 19 is amended, as shown in underline/strikeout format below:

19. This Order includes the interim effluent limitations for nitrate plus nitrite, BOD, TSS, ~~settleable solids, EC,~~ total coliform organisms, and nitrite, ~~and mercury~~ established in WDRs Order R5-2006-0096. This Order includes the interim effluent limitations for copper, ~~lead, zinc, bis(2-ethylhexyl)phthalate, dibenzo(a,h)anthracene, aluminum, manganese,~~ and ammonia established in amended TSO R5-2006-0097-01.
10. The finding in TSO R5-2011-0056 Finding 22.a is amended, as shown in underline/strikeout format below:
- a. This Order does not modify any compliance dates or other requirements of NPDES Order ~~R5-2006-0096~~R5-2012-0034, which requires compliance with the effluent limitations addressed by this Order. This Order serves to enforce Order ~~R5-2006-0096~~R5-2012-0034. This Order is exempt from CEQA under Water Code Section 13389, since the adoption or modification of a NPDES permit for an existing source is 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.).
11. The finding in TSO R5-2011-0056 Finding 23 is amended, as shown in underline/strikeout format below:
23. 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. This Order may be adopted by the Central Valley Water Board at its ~~August 2011~~June 2012 meeting or may be issued by the Executive Officer of the Central Valley Water Board if no adverse comments are received during the 30-day public comment period.
12. The requirements in TSO R5-2011-0056 Provision 1 are amended, as shown in underline strikeout format below:
1. The Linda County Water District shall comply with the following time schedule to ensure compliance with the nitrate plus nitrite, copper, ~~lead, zinc, bis(2-ethylhexyl)phthalate, dibenzo(a,h)anthracene, aluminum, manganese,~~ ammonia, BOD, TSS, ~~settleable solids, EC,~~ total coliform organisms, and nitrite, ~~and mercury~~ effluent limitations contained in WDRs Order No. R5 2006-0096, and subsequent amendments, as described in the above Findings:

<u>Task</u>	<u>Compliance Date</u>
Complete Construction of Facility upgrades and expansion	30 June 2012
Progress Reports for ammonia, BOD, TSS, total coliform organisms, and nitrite ¹	1 July 2011 1 January 2012 1 July 2012 1 January 2013
Progress Reports for copper ¹	1 July and 1 January, annually
Progress Reports for nitrate plus nitrite ¹	1 July 2012 1 January 2013
Achieve Full Compliance with Final Effluent Limitations for nitrate plus nitrite, copper, lead, zinc, bis(2-ethylhexyl)phthalate, dibenzo(a,h)anthracene, aluminum, manganese, ammonia, BOD, TSS, settleable solids, EC, total coliform organisms, and nitrite, and mercury	31 December 2012
Achieve Full Compliance with Final Effluent Limitations for copper	1 June 2015

1. The progress reports shall detail what steps have been implemented towards achieving compliance with waste discharge requirements, including construction progress, evaluate the effectiveness of the implemented measures and assess whether additional measures are necessary to meet the time schedule.

13. The requirements in TSO R5-2011-0056 Provision 2 are amended, as shown in underline strikeout format below:

2. Discharge from the Linda County Water District WWTP shall not exceed the following interim, performance-based effluent limitations at Discharge Point Nos. 001 and 002. These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for the same parameters during the time period indicated in this Order when discharging at Discharge Point Nos. 001 and 002.

Constituent	Units	Interim Effluent Limitations			
		Average Monthly	Average Weekly	Maximum Daily	Derivation
Biochemical Oxygen Demand	mg/L	45	65	--	²
	lbs/day ¹	680	980	--	²
Total Suspended Solids	mg/L	45	65	--	²
	lbs/day ¹	680	980	--	²
Settleable Solids	ml/L	0.1	--	<u>0.2</u>	²
Nitrite	mg/L	60	--	--	²
	lbs/day ¹	900	--	--	²
<u>Nitrate plus nitrite</u>	mg/L	<u>60</u>	--	--	²
	lbs/day ¹	<u>900</u>	--	--	²
Copper, Total Recoverable	ug/L	44	--	84	³
	lbs/day ¹	0.67	--	1.3	³
Lead, Total Recoverable	ug/L	6.8	--	<u>20</u>	²
	lbs/day ¹	0.10	--	<u>0.30</u>	³
Zinc, Total Recoverable	ug/L	240	--	490	³
	lbs/day ¹	3.6	--	7.4	³
Bis (2-ethylhexyl) phthalate	ug/L	84	--	<u>190</u>	³
	lbs/day ¹	1.3	--	<u>2.9</u>	³
Dibenzo(a,h)anthracene	ug/L	11.5	--	--	³
Aluminum, Total Recoverable	ug/L	1,100	--	--	³
Manganese, Total Recoverable	ug/L	46,000	--	--	³

Constituent	Units	Interim Effluent Limitations			
		Average Monthly	Average Weekly	Maximum Daily	Derivation
Ammonia (as N)	mg/L	46.8	--	--	3
	lbs/day ¹	703	--	--	3

1. Based on a design treatment capacity of 1.8 mgd.
2. Existing Interim Effluent Limitation from WDRS Order R5-2006-0096.
3. Existing Interim Effluent Limitation from amended TSO R5-2006-0097-01.

a. **Percent Removal:** The average monthly percent removal of BOD 5-day 20°C and TSS shall not be less than 65 percent. (Existing Interim Effluent Limitation from WDRs Order R5-2006-0096.)

~~b. **Electrical Conductivity:** The 30-day 90th percentile effluent electrical conductivity shall not exceed 860 µmhos/cm.~~

~~EC data was provided by the Discharger from February 2008 through December 2010. The mean of the data was 704.5 µmhos/cm and the standard deviation was 44.46 µmhos/cm. The calculation of the interim limitation was based on normally distributed data where 99.9% 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.)~~

~~eb. **Total Coliform Organisms:** Effluent total coliform organisms concentrations shall not exceed the following:~~

- ~~i. 240 MPN/100 ml as a 30-day median; and~~
- ~~ii. 500 MPN/100 ml at any time.~~

~~(Existing Interim Effluent Limitations from WDRS Order R5-2006-0096.)~~

~~d. **Mercury:** The total monthly mass discharge of total mercury shall not exceed 0.033 pounds/month.~~

14. ~~Mercury data was provided by the Discharger from July 2007 through December 2010. The interim effluent limitation for mercury is based on the maximum reported monthly mass discharge of 0.033 pounds/month.~~ 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 the 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 **7 June 2012**.

Original signed by

PAMELA C. CREEDON, Executive Officer