

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2009-0012-01

REQUIRING
CITY OF LIVE OAK
WASTEWATER TREATMENT PLANT
SUTTER COUNTY

TO CEASE AND DESIST
FROM DISCHARGING CONTRARY TO REQUIREMENTS

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

1. On 9 July 2004, the Regional Water Board adopted Waste Discharge Requirements (WDRs) Order No. R5-2004-0096, and Cease and Desist Order (CDO) No. R5-2004-0097 prescribing waste discharge requirements and compliance time schedules for the City of Live Oak (hereafter Discharger) Wastewater Treatment Plant (WWTP). The WDRs allow for a regulated discharge of 1.4 million gallons per day (mgd) of treated domestic wastewater to Reclamation District 777 Lateral Drain No. 1, which is tributary to Main Canal and the Sutter Bypass.
2. WDRs Order No. R5-2004-0096 includes limits for aluminum, ammonia, biochemical oxygen demand (BOD), copper, cyanide, diazinon, organochlorine pesticides, total coliform, total suspended solids (TSS), and turbidity as contained in Effluent Limitations Section B.2., which states in part:

<u>Constituents</u>	<u>Units</u>	<u>Average Monthly</u>	<u>7-Day Median</u>	<u>Average Weekly</u>	<u>Average Daily</u>	<u>Instantaneous Maximum</u>
BOD ¹	mg/l	10 ²	--	15 ²	20 ²	--
	lbs/day ³	120	--	180	230	--
Total Suspended Solids	mg/l	10 ²	--	15 ²	20 ²	--
	lbs/day	120	--	180	230	--
Total Coliform Organisms	MPN/100 m/	--	2.2	--	--	23 ⁴
Organochlorine Pesticides	µg/l	--	--	--	--	ND ⁵
Turbidity	NTU	--	--	--	2	5 ⁶

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

² To be ascertained by a 24-hour composite

³ Based upon a design treatment capacity of 1.4 mgd (x mg/l X 8.345 X 1.4 mgd = y lbs/day)

⁴ The total coliform organisms concentration shall not exceed 23 MPN/100 m/ more than once in any 30-day period. No sample shall exceed a concentration of 240 MPN/100 m/.

⁵ The Non-Detectable (ND) limitation applies to each individual pesticide. No individual pesticide may be present in the discharge at detectable concentrations. The Discharger shall use EPA standard analytical techniques with the lowest possible detectable level for organochlorine pesticides with a maximum acceptable detection level of 0.05 µg/l.

⁶ The turbidity shall not exceed 5 NTU more than 5 percent of the time within a 24-hour period. At no time shall the turbidity exceed 10 NTU.

<u>Constituents</u>	<u>Units</u>	<u>Average Monthly</u>	<u>Average 4-Day</u>	<u>Average Daily</u>	<u>Average 1-Hour</u>
Aluminum ¹	µg/l	71 ²	--	140 ²	--
	lbs/day ³	0.83	--	1.7	--
Ammonia, Total (as N)	mg/l	Attachment B	Attachment C	--	Attachment D
	lbs/day ⁴	5	5	--	5
Copper (total recoverable)	µg/l	Attachment F ²	--	Attachment F ²	--
	lbs/day ³	6	--	6	--
Cyanide (total recoverable)	µg/l	4.3 ²	--	8.5 ²	--
	lbs/day ³	0.050	--	0.10	--
Diazinon	µg/l	0.04	--	0.08	--
	lbs/day ³	0.0005	--	0.001	--

¹ Acid-soluble or total

² To be ascertained by 24-hour composite

³ Based upon a design treatment capacity of 1.4 mgd [$x \mu\text{g/l} \times (1 \text{ mg}/1000 \mu\text{g}) \times 8.345 \times 1.4 \text{ mgd} = y \text{ lbs/day}$]

⁴ Based upon a design treatment capacity of 1.4 mgd ($x \text{ mg/l} \times 8.345 \times 1.4 \text{ mgd} = y \text{ lbs/day}$)

⁵ The mass limit (lb/day) for ammonia shall be equal to the concentration limit (from Attachments) multiplied by the design flow of 1.4 mgd and the unit conversion factor of 8.345 (see footnote 3 for equation).

⁶ The mass limit (lbs/day) shall be equal to the concentration limit (from corresponding Attachment, for corresponding period) multiplied by the design flow of 1.4 mgd and the unit conversion factor of 8.345 and divided by 1000 µg/l per mg/l (see footnote 3 for equation).

3. WDRs Order No. R5-2004-0096 includes Effluent Limitations B.4., which states:

“The arithmetic mean of 20°C BOD (5-day) and of total suspended solids in effluent samples collected over a calendar month shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (85 percent removal) by 1 April 2009.”

4. WDRs Order No. R5-2004-0096 includes Effluent Limitations B.8., which states:

“Wastewater shall be oxidized, coagulated, filtered, and disinfected, or equivalent treatment provided by 1 April 2009.”

5. WDRs Order No. R5-2004-0096 included time schedules for achieving compliance with Effluent Limitations B.2. for BOD, TSS, total coliform organisms, turbidity, copper, and cyanide by 1 April 2009.

6. CDO No. R5-2004-0097 included a time schedule for achieving compliance with Effluent Limitations B.1. for aluminum, ammonia, diazinon, and organochlorine pesticides by 1 April 2009.

7. Section 13301 of the California Water Code (CWC) states in part, *“When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventative action. In the*

event of an existing or threatened violation of waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to such system by dischargers who did not discharge into the system prior to the issuance of the cease and desist order. Cease and desist orders may be issued directly by a board, after notice and hearing, or in accordance with the procedure set forth in Section 13302.”

8. Section 13267(b)(1) of the California Water Code provides that: *“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.”*
9. In accordance with California Water Code (CWC) Section 13385(j)(3), the Regional Water Board finds that the Discharger is able to consistently comply with Effluent Limitations B.2. for organochlorine pesticides; however, the Discharger is not able to consistently comply with Effluent Limitations B.2. for aluminum, ammonia, BOD, copper, cyanide, diazinon, total coliform, TSS, and turbidity. The schedules for completing the actions necessary to achieve full compliance exceed the 1 April 2009 compliance dates in the WDRs Order No. R5-2004-0096 and CDO No. R5-2004-0097. Additional time is necessary to finalize a decision regarding regionalization and/or onsite plant upgrades and site-specific studies for compliance with waste discharge requirements. New time schedules are necessary in a CDO for aluminum, ammonia, BOD, copper, cyanide, diazinon, total coliform, TSS, and turbidity. The aluminum, ammonia, BOD, copper, cyanide, diazinon, total coliform, TSS, and turbidity effluent limitations are new requirements that became applicable to the Order after the effective waste discharge requirements adoption date and/or after 1 July 2000, for which new or modified control measures are necessary in order to comply with the limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
10. CWC section 13385(h) and (i) require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. CWC section 13385(j) exempts certain violations from the mandatory minimum penalties. CWC 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, if all the [specified] requirements are met.”*

11. Compliance with this Order exempts the Discharger from mandatory penalties for violations of Effluent Limitations B.2. for BOD, copper, cyanide, total coliform, TSS, and turbidity, in accordance with CWC section 13385(j)(3). CWC section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to section 13263.3 of the California Water Code. A pollution prevention plan addresses only those constituents that can be effectively reduced by source control measures.
12. Because CDO No. R5-2004-0097 provided the Discharger with almost 5 years to comply with effluent limitations for aluminum, ammonia, diazinon, and organochlorine pesticides, the exception from mandatory minimum penalties pursuant to CWC section 13385(j)(3) does not apply for these constituents. Pursuant to CWC section 13263.3(d)(1)(D), a pollution prevention plan will be necessary for aluminum, ammonia, diazinon, and organochlorine pesticides in order to effectively reduce the effluent concentrations by source control measures.
13. Since the time schedules 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.
14. The compliance time schedule in this Order includes interim effluent limitations for aluminum, ammonia, BOD, copper, cyanide, diazinon, total coliform, TSS, and turbidity. Interim effluent limitations typically consist of a daily effluent concentration derived using sample data provided by the Discharger demonstrating actual treatment plant performance or previous interim effluent limitations established in Order No. R5-2004-0096. To maintain consistency with interim limitations established in existing WDR Order No. R5-2004-0096, interim limitations for a number of constituents described above are established as average daily effluent limitations. In developing the interim limitations, when there are ten sampling data points or more, sampling and laboratory variability is accounted for by establishing interim limits that are 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*). When there are less than ten sampling data points available, the *Technical Support Document for Water Quality- Based Toxics Control (EPA/505/2-90-001)* (TSD) recommends a coefficient of variation of 0.6 be utilized as representative of wastewater effluent sampling. The TSD recognizes that a minimum of ten data points is necessary to conduct a valid statistical analysis. The multipliers contained in Table 5-2 of the TSD are used to determine a daily limitation based on a long-term average objective. In this case, the long-term average objective is to maintain, at a minimum, the current plant performance level. Thus, when there are less than ten sampling points for a constituent, interim limitations are based on 3.11 times the maximum observed effluent concentration to obtain the daily interim limitation (TSD, Table 5-2). If the statistically-projected interim limitation is less than the maximum observed effluent concentration, the interim limitation is established as the maximum observed concentration.
15. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) ("CEQA"), under Water Code Section 13389, since any adoption or modification of a NPDES Permit for an existing source is exempt and this order only serves to implement such a NPDES

permit. This Order does not modify any compliance dates in WDRs Order No. R5-2004-0096, which modification would be exempt from CEQA under Water Code Section 13389. This Order is also exempt from CEQA in accordance with Section 15321(a)(2), Title 14, California Code of Regulations. This Order is not subject to the limitations of Government Code section 65962.5(c)(3) [Cortese List] on 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; and because the Cortese List exception was not intended to apply to cease and desist orders to existing facilities. In addition, adoption of this Order is not subject to CEQA because 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". Any plant upgrades or replacement are the result of WDRs Order No. R5-2004-0096 and not this Order.

16. Any person adversely affected by this action of the Regional Water Board may petition the State Water Resources Control Board (State Water Board) to review the action. The petition must be received by the State Water Board Office of Chief Counsel, P.O. Box 100, Sacramento CA 95812-0100, within 30 days of the date in which the action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

IT IS HEREBY ORDERED that CDO No.R5-2004-0097 is rescinded, and, pursuant to CWC section 13301:

1. The Discharger shall comply with the following time schedule to assure compliance with WDRs Order No. R5-2004-0096 Effluent Limitations B.2., for aluminum, ammonia, BOD, copper, cyanide, diazinon, total coliform, TSS, turbidity, Effluent Limitations B.4 requiring 85 percent BOD and TSS removal, and Effluent Limitations B.8. requiring tertiary treatment:

<u>Task</u>	<u>Compliance Date</u>
Implement PPP ¹	Ongoing
Progress Reports ²	1 March and 1 September of each year
Submit Formal Decision For Compliance ³ Onsite WWTP Improvements and Regionalization	1 February 2010
If Formal Decision for Compliance includes Onsite WWTP improvements, achieve Full Compliance with Effluent Limitations B.2. for aluminum, ammonia, BOD, coliform, copper, cyanide, TSS, turbidity, and diazinon.	30 September 2012

If Formal Decision for Compliance includes Regionalization, achieve Full Compliance with Effluent Limitations B.2. for aluminum, ammonia, BOD, coliform, copper, cyanide, TSS, turbidity, and diazinon.

1 February 2014

¹ The Discharger shall continue to implement its Pollution Prevention Plan shall for all constituents listed in Provision 1 above and shall meet the requirements specified in California Water Code Section 13263.

² The progress reports shall detail steps implemented towards achieving compliance with waste discharge requirements, including construction progress regarding onsite WWTP improvements and/or regionalization, whichever is applicable. The progress reports shall also evaluate the effectiveness of the implemented treatment and pollution prevention measures and assess whether additional measures are necessary to comply with final effluent limits.

³ "Formal Decision for Compliance" means formal written statement submitted to Regional Water Board Executive Officer regarding option Discharger has selected for compliance.

2. For the compliance schedules required by this Order, the Discharger shall submit to the Regional Water Board on or before each 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 Regional Water Board by letter when it returns to compliance with the time schedule.
3. The following interim effluent limitations for aluminum, ammonia, copper, cyanide and turbidity shall be effective immediately, and shall remain in effect until the final compliance date, in accordance with Provision 1 above, or when the Discharger is able to come into compliance with the final effluent limitations, whichever is sooner.

Parameter	Average Daily Effluent Limitation
Aluminum	7300 µg/L
Ammonia	23.7 mg/L
Turbidity	102 NTUs
Copper	22 ug/L
Cyanide	16 ug/L

The following interim effluent limitations for BOD, Total Suspended Solids (TSS), coliform and diazinon shall be effective immediately, and shall remain in effect until the final compliance date, in accordance with Provision 1 above, or when the Discharger is able to come into compliance with the final effluent limitations, whichever is sooner.

<u>Constituents</u>	<u>Units</u>	<u>Average Monthly</u>	<u>7-Day Median</u>	<u>Average Weekly</u>	<u>Average Daily</u>	<u>Instantaneous Maximum</u>
BOD ¹	mg/l	45 ²	--	65 ²	90 ²	--
	lbs/day ³	530	--	760	1,100	--
Total Suspended Solids	mg/l	70 ²	--	110 ²	140 ²	--
	lbs/day	820	--	1300	1600	--
Total Coliform Organisms	MPN/100 m/	--	23	--	--	500
Diazinon	µg/l	0.04	--	0.08	--	
	lbs/day ³	0.0005	--	0.001	--	

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

² To be ascertained by 24-hour composite

³ Based upon a design treatment capacity of 1.4 mgd [x □g/l x (1 mg/1000 □g) x 8.345 x 1.4 mgd = y lbs/day]

4. If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability.
5. 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."

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 24 April 2009.

Original Signed by

 PAMELA C. CREEDON, Executive Officer