

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2009-0523
IN THE MATTER OF

THE CITY OF CHICO
CHICO WATER POLLUTION CONTROL PLANT
BUTTE COUNTY

This Complaint is issued to the City of Chico (hereafter Discharger) pursuant to California Water Code (CWC) section 13385, which authorizes the imposition of Administrative Civil Liability (ACL), CWC section 13323, which authorizes the Executive Officer to issue this complaint, and CWC section 7, which authorizes the delegation of the Executive Officer's authority to a deputy, in this case the Assistant Executive Officer. This Complaint is based on findings that the Discharger violated provisions of Waste Discharge Requirements (WDRs) Order R5-2004-0073 (NPDES No. CA0079081).

The Assistant Executive Officer of the Central Valley Regional Water Quality Control Board (Central Valley Water Board) finds the following:

1. Waste Discharge Requirements Order R5-2004-0073, which was issued by the Central Valley Water Board on 4 June 2004, prescribes requirements for the Chico Water Pollution Control Plant (CWPCP) operated by the Discharger. The Discharger is solely responsible for collection and treatment of the wastewater at the CWPCP.
2. The CWPCP serves the Chico community, and the treatment facility consists of a screening mechanism to remove large solids, grit removal, primary clarification, activated sludge treatment with secondary clarification, and chlorination/dechlorination.
3. The City of Chico has a population of approximately 85,150 residents, and the CWPCP has an annual capital expenditure budget of \$5,246,000. There are approximately 25,121 connections to the City of Chico sewer system.
4. The secondary treatment system design capacity is 9.0 million gallons per day (mgd) average daily dry weather flow and 11.8 mgd peak wet weather flow.

PREVIOUS ENFORCEMENT ACTIONS

5. On 17 March 2008, the Central Valley Water Board issued Complaint R5-2008-0509, charging the Discharger with administrative civil liability of \$100,000 for effluent chlorine residual violations from incidents on 21 August 2007 and 4 September 2007. The complaint indicated that approximately 3.124 million gallons of secondary treated effluent was discharged to the Sacramento River, which was not properly chlorinated and /or dechlorinated, due to electrical power problems with the chemical feed supply system. The duration of the 21 August 2007 and 4 September 2007 incidents was

approximately 11 hours. On 2 December 2008, the Central Valley Water Board adopted Administrative Civil Liability Order No. R5-2008-0593, requiring the Discharger to submit a check for \$31,981 to the Regional Board, and complete a Supplemental Environmental Project (SEP) for the remaining amount of the Order (\$68,019). The SEP consists of a Water Quality and Citizen Monitoring Program for the Big Chico Creek drainage. The SEP will be completed by 1 April 2010.

6. On 15 May 2007, the Central Valley Water Board issued Complaint R5-2007-0512. Pursuant to CWC section 13385(h), a mandatory penalty of \$3,000 was imposed due to effluent chlorine residual violations from an incident on 9 December 2006. The complaint indicated that approximately 388,180 gallons of effluent was discharged to the Sacramento River, which was not properly chlorinated and /or dechlorinated, due to electrical power problems with the chemical feed supply system. The Discharger paid the Complaint and the Central Valley Water Board considers the matter resolved.
7. The Discharger has settled four other ACL Complaints since November 2000, totaling \$39,000.

DISCHARGE VIOLATIONS

8. WDRs Order R5-2004-0073 contains the following Discharge Prohibition:

Discharge Prohibition A.1:

1. Discharge of treated wastewater at allocation or in a manner different from that described in Findings Nos. 2, 3 and 4 is prohibited.

Finding No. 4:

The treatment system consists of screening for removal of large solids, grit removal, primary clarification, activated sludge treatment with secondary clarification, and chlorination/dechlorination.

16/17 May Violation

9. On 16 May 2008, sodium hypochlorite tanks at the CWPCP were changed out in the evening. Sometime after the crew went home for day, these tanks lost prime and ceased discharging sodium hypochlorite to the chlorine contact basin. Sodium hypochlorite treatment is an important part of the disinfection process that disinfects the secondary wastewater (removing pathogens/coliform) prior to the dechlorination process.
10. The Supervisory Control and Data Acquisition (SCADA) system did not indicate an alarm condition because the "set-point" was set at 0.00 mg/L of chlorine. The continuous residual chlorine analyzer "flat-line" at 0.1 mg/L of chlorine, therefore it did not trigger an alarm. The sodium hypochlorite was not being discharged to the chlorine contact basin from 5:00pm (16 May 2008) to 7:40am (17 May 2008). By 5:40 pm (16 May 2008) sodium hypochlorite was not present in the effluent flow. When the operator on weekend duty noticed the absence of residual chlorine in the initial residual

chlorine analyzer, he immediately began diverting the flow to the emergency holding pond. On 18 May 2008, the Discharger notified the Central Valley Water Board of the incident. On 19 May 2008, the discharger collected a sample of the wastewater that was stored in the emergency treatment ponds (after being diverted on 17 May 2008), and the results indicated >1,600 MPN/100 mL of total coliform.

11. Approximately 4.7 million gallons of secondary treated effluent that did not receive any disinfection with sodium hypochlorite was discharged to the Sacramento River over a 16-hour timeframe between 16 May 2008 and 17 May 2008, in violation of WDRs Order R5-2004-0073, Discharge Prohibition A.1.

15 June 2008 Incident

12. On 15 June 2008, a malfunctioning programmable logic controller (PLC) in the chemical feed building caused a significant amount of flow to be discharged without receiving full treatment, in violation of WDRs Order R5-2004-0073, Discharge Prohibition A.1. The PLC was cycling on and off every couple of seconds. This caused the chemical feed pumps to remain off due to the lack of a continuous signal from the PLC. The malfunction caused the sodium hypochlorite and the sodium bisulfite pumps to stop feeding chemicals to the secondary treated unit. When the PLC malfunctioned, the alarm dialer initiated an alarm call out sequence to the plant operators. The plant operator diverted the effluent to the plant emergency storage ponds approximately 23 minutes after the pumps had been shut down.
13. Approximately 113,000 gallons of secondary treated effluent that did not receive any disinfection with sodium hypochlorite was discharged to the Sacramento River for a 23-minute time span in which the plant effluent decreased from 1.92 mg/L of chlorine to 1.58 mg/L of chlorine. The maximum daily residual chlorine (based on 1-hr averages) for the incident was 0.08 mg/L of chlorine.

REGULATORY CONSIDERATIONS

14. CWC section 13385 states, in relevant part:
 - (a) Any person who violates any of the following shall be liable civilly in accordance with this section:
...
 - (2) Any waste discharge requirements or dredged or fill material permit issued pursuant to this chapter or any water quality certification issued pursuant to Section 13160.
 - (c) Civil liability may be imposed administratively by the state board or a regional board pursuant to Article 2.5 (commencing with Section 13323) of Chapter 5 in an amount not to exceed the sum of both the following:
 - (1) Ten thousand dollars (\$10,000) for each day in which the violation occurs.

(2) Where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged but not cleaned up exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) times the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.

15. The maximum administrative civil liability which can be imposed by the Central Valley Water Board under CWC section 13385 is \$10,000 per day per violation plus \$10 per gallon discharged in excess of 1,000 gallons not subject to clean up. As stated in Findings Nos. 11 and 13, a total of approximately 4.813 million gallons of undisinfected secondary treated wastewater were discharged to the Sacramento River on 16 and 17 of May and 15 June. Therefore, the maximum administrative civil liability is \$30,000 (3 days times \$10,000 per day of violation) plus \$48,119,000 (4.813 million gallons minus 1,000 gallons for each discharge not subject to cleanup multiplied by \$10 per gallon), for a **total maximum liability of \$48,149,000.**

16. CWC section 13385(h) states,

(h)(1) Notwithstanding any other provision of this division, and except as provided in subdivisions (j), (k), and (l), a mandatory minimum penalty of three thousand dollars (\$3,000) shall be assessed for each serious violation.

(2) For the purposes of this section, a "serious violation" means any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant, as specified in Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations, by 20 percent or more or for a Group I pollutant, as specified in Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations, by 40 percent or more.

17. WDRs Order R5-2004-0073 contains the following effluent limitations that were violated by the Discharger by discharging partially-treated wastewater to the Sacramento River:

Effluent Limitation B.1:

1. Effluent shall not exceed the following limits at Discharge 001:

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Median</u>	<u>4-day Average</u>	<u>Daily Maximum</u>
Chlorine Residual	mg/L	--	--	--	0.01	0.02 ^c
Total Coliform Organisms	MPN/10 0 ml	--	--	23	--	500

^c - 1-hour average

18. Chlorine residual is a group II pollutant under 40 CFR 123.45, and the measured exceedances for the 15 June 2008 violation is a serious violation (instantaneous reading of 1.58 mg/L of chlorine, with a daily calculated maximum of 0.08 mg/L (max 1-hr average), and is therefore subject to a **mandatory minimum penalty of \$3,000.**

19. CWC section 13385(e) states:

In determining the amount of any liability imposed under this section, the regional board, the state board, or the superior court, as the case may be, shall take into account the nature, circumstances, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters that justice may require. At a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation.

20. Pursuant to CWC section 13385(e), the minimum administrative civil liability the Board may impose is equivalent to the economic benefit accrued by the Discharger for not implementing management and/or physical improvements necessary to prevent the discharges. The 4.813 million-gallon discharges were the result of the Discharger's failure to provide adequate control measures to prevent fluctuations of the programmable logic controller and/or the SCADA system properly registering alarms due to the low residual alarm point on the residual chlorine analyzer. The administrative civil liability is primarily based on the gallons discharged, with acknowledgement that the liability is at least as much as the amount that the City of Chico saved in one year by not hiring an after hours operator. It is estimated that if personnel were onsite during the peak flow periods, they would have been able to divert the flow of effluent to the three-holding/oxidation ponds instead of the Sacramento River. If an after hours operator were onsite, they could have addressed the violation in a timely matter. It is estimated that the Discharger may have saved at least **\$52,657 - \$70,565** by not taking the actions required to prevent the violations described in this Complaint. This savings is based on a cost estimate of providing for a Grade III WWTP operator. This operator could have been present during the non-working hours of the CWPCP (evenings and weekends). Cost estimates have been obtained from a City of Chico 2007-2008 Summary of Salaries. This indicates an annual salary of approximately \$52,657.00 to \$70,565.42 per year for a WWTP Operator Grade III to be at the plant and to take action when alarm conditions occur and/or when the alarm system malfunctions. Pursuant to Title 23, Division 3, Chapter 26, California Code of Regulations, Section 3680, Grades of Operator Certification, (l) In Class II, III, and IV plants, supervisors and shift supervisors shall possess valid operator certificates no more than one grade lower than the class of plant operated. The Plant is a Grade IV wastewater treatment plant, therefore a Grade III Operator as a shift supervisor on weekend and evenings. Therefore, the minimum liability for the two occurrences is at least \$52,657 to \$70,565.
21. On 3 June 2008, the Discharger submitted information regarding the expansion of the City of Chico Water Pollution Control Plant. During this expansion project, several items will be added to prevent non-disinfected effluent from discharging to the Sacramento River. Some of the improvements will be: installation of two new sodium hypochlorite storage tanks, installing flow meters on the chemical feed pumps, and installing an automatic diversion gate to divert flow from the Sacramento River to the effluent storage

ponds if the effluent is not within permit effluent limitations. Additional flow alarms will also be installed as part of the plant expansion. The expansion activities have already started, and will be complete by 16 November 2009. The total expansion budget is approximately \$38.6 million.

22. Issuance of this Administrative Civil Liability Complaint to enforce CWC Division 7, Chapter 5.5 is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code section 21000 et seq.), in accordance with California Code of Regulations, title 14, section 15321(a)(2).

THE CITY OF CHICO, CHICO WATER POLLUTION CONTROL PLANT IS HEREBY GIVEN NOTICE THAT:

1. The Assistant Executive Officer of the Central Valley Water Board proposes that the Discharger be assessed an Administrative Civil Liability in the amount of **one hundred and fifty-three thousand dollars (\$153,000)**.
2. A hearing on this matter will be held at the Central Valley Water Board meeting scheduled on **11/12 June 2009**, unless the Discharger does either of the following by **16 April 2009**:
 - a) Waives the hearing by completing the attached form (checking off the box next to item #4) and returning it to the Central Valley Water Board, along with payment for the proposed civil liability of **one hundred and fifty-three thousand dollars (\$153,000)**; or
 - b) Agrees to enter into settlement discussions with the Central Valley Water Board and requests that any hearing on the matter be delayed by signing the enclosed waiver (checking off the box next to item #5) and returning it to the Central Valley Water Board along with a letter describing the issues to be discussed.
3. If a hearing on this matter is held, the Central Valley Water Board will consider whether to affirm, reject, or modify the proposed Administrative Civil Liability, or whether to refer the matter to the Attorney General for recovery of judicial civil liability.

original signed by

JAMES C. PEDRI, Assistant Executive Officer

17 March 2009

(Date)

GC: sae

ADMINISTRATIVE CIVIL LIABILITY COMPLAINT

By signing this waiver, I affirm and acknowledge the following:

1. I am duly authorized to represent the City of Chico (hereinafter "Discharger") in connection with Administrative Civil Liability Complaint R5-2009-0523 (hereinafter the "Complaint");
2. I am informed that California Water Code section 13323, subdivision (b), states that, "a hearing before the regional board shall be conducted within 90 days after the party has been served" with the Complaint;
3. I hereby waive any right the Discharger may have to a hearing before the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) within ninety (90) days of service of the Complaint; and
4. **(Check here if the Discharger will waive the hearing requirement and will pay the fine)**
 - a. I certify that the Discharger will remit payment for the proposed civil liability in the amount of one hundred and fifty three **thousand dollars (\$153,000)** by check, which will contain a reference to "ACL Complaint R5-2009-0523" and will be made payable to the "State Water Pollution Cleanup and Abatement Account." Payment must be received by the Central Valley Water Board by **16 April 2009** or this matter will be placed on the Central Valley Water Board's agenda for adoption at the **11/12 June 2009** Central Valley Water Board meeting.
 - b. I understand the payment of the above amount constitutes a settlement of the Complaint, and that any settlement will not become final until after the 30-day public notice and comment period mandated by Federal regulations (40 CFR 123.27) expires. Should the Central Valley Water Board receive new information or comments during this comment period, the Central Valley Water Board's Executive Officer may withdraw the complaint, return payment, and issue a new complaint. New information or comments include those submitted by personnel of the Central Valley Water Board who are not associated with the enforcement team's issuance of the Complaint.
 - c. I understand that payment of the above amount is not a substitute for compliance with applicable laws and that continuing violations of the type alleged in the Complaint may subject the Discharger to further enforcement, including additional civil liability.

-or-

5. **(Check here if the Discharger will waive the 90-day hearing requirement, but will not pay at the current time. The Central Valley Water Board must receive information from the Discharger indicating a controversy regarding the assessed penalty at the time this waiver is submitted, or the waiver may not be accepted.)** I certify that the Discharger will promptly engage the Central Valley Water Board staff in discussions to resolve the outstanding violation(s). By checking this box, the Discharger is *not* waiving its right to a hearing on this matter. By checking this box, the Discharger requests that the Central Valley Water Board delay the hearing so that the Discharger and Central Valley Water Board staff can discuss settlement. It remains within the discretion of the Central Valley Water Board to agree to delay the hearing. A hearing on the matter may be held before the Central Valley Water Board if these discussions do not resolve the liability proposed in the Complaint. The Discharger agrees that this hearing may be held after the 90-day period referenced in California Water Code section 13323 has elapsed.
6. If a hearing on this matter is held, the Central Valley Water Board will consider whether to issue, reject, or modify the proposed Administrative Civil Liability Order, or whether to refer the matter to the Attorney General for recovery of judicial civil liability.

(Print Name and Title)

(Signature)

(Date)