

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401**

ORDER NO. R3-2008-0074

**ADMINISTRATIVE CIVIL LIABILITY
IN THE MATTER OF THE
CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION
CALIFORNIA MEN'S COLONY
SAN LUIS OBISPO COUNTY**

This Order to assess administrative civil liability pursuant to California Water Code section 13385 is issued to the California Department of Corrections and Rehabilitation, California Men's Colony (Discharger or California Men's Colony) based on findings of violations of Waste Discharge Requirements Order No. R3-2006-0032, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0047856.

The Regional Water Quality Control Board, Central Coast Region finds that:

1. The Discharger's wastewater treatment facility, located on Highway 1, on Camp San Luis Obispo property, north of San Luis Obispo, is subject to Waste Discharge Requirements Order No. R3-2006-0032, NPDES Permit No. CA0047856 ("Order") issued by the Central Coast Water Board.
2. Order No. R3-2006-0032 includes the following:

Section IV.A.1.a. - Effluent Limitations Table

Constituent	Units	Effluent Limit		
		Daily Maximum	7-Day Average	Monthly (30-day Average)
Total Chlorine Residual	mg/L	ND ¹	-	-

¹ - ND = less than 0.1 mg/L. Compliance determination for total chlorine residual shall be based on 99% compliance. To determine 99% compliance with the effluent limitation specified above for total chlorine residual, the following conditions shall be satisfied: (1) the total time during which the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month; (2) no individual excursion from 0.1 mg/L shall exceed 30 minutes; and (3) no individual excursion shall exceed 2 mg/L.

mg/L - milligrams per liter

s.u. - standard units

3. According to monitoring reports submitted by the Discharger from July 1, 2006, to August 31, 2008, the Discharger violated the following effluent limitations in Order No. R3-2006-0032:

Table 1 – Effluent Limit Violations

#	Violation Date	CIWQS Violation No.	Constituent	Permit Limit	Reported Value
1	2/15/2007	566486	Chlorine Residual, Total	1	>2.2 mg/L
Plant Upgrade (90 - day adjustment period)²					
2	10/1/2007	698115	Chlorine Residual, Total	1	2.54 mg/L
3	10/2/2007	698118	Chlorine Residual, Total	1	0.61 mg/L
4	10/3/2007	698119	Chlorine Residual, Total	1	0.32 mg/L
5	10/7/2007	698120	Chlorine Residual, Total	1	0.52 mg/L
6	10/16/2007	698116	Chlorine Residual, Total	1	2.92 mg/L
7	10/24/2007	698122	Chlorine Residual, Total	1	1.93 mg/L
8	10/25/2007	698123	Chlorine Residual, Total	1	0.52 mg/L
9	10/26/2007	698124	Chlorine Residual, Total	1	1.02 mg/L
10	11/4/2007	710011	Chlorine Residual, Total	1	10.74 mg/L
11	11/14/2007	710012	Chlorine Residual, Total	1	20.03 mg/L
12	11/17/2007	710013	Chlorine Residual, Total	1	20.03 mg/L
13	12/7/2007	764580	Chlorine Residual, Total	1	2.03 mg/L
14	2/7/2008	783758	Chlorine Residual, Total	1	1.60 mg/L
15	2/8/2008	783759	Chlorine Residual, Total	1	0.45 mg/L
16	2/17/2008	783760	Chlorine Residual, Total	1	1.13 mg/L
17	5/19/2008	775625	Chlorine Residual, Total	1	1.6 mg/L
18	6/16/2008	764651	Chlorine Residual, Total	1	0.52 mg/L
19	6/17/2008	777462	Chlorine Residual, Total	1	2.0 mg/L
20	8/21/2008	786556	Chlorine Residual, Total	1	4.2 mg/L

¹ – Effluent limitation is identified in Finding No. 2 (above) and Section IV.A.1.a. of Order R3-2006-0032.

² – According to Section 13385(j)(1)(D)(i) of the California Water Code, mandatory minimum penalties are not assessed for new or reconstructed wastewater treatment units for a period of 90 days.

CIWQS – California Integrated Water Quality System

mg/L - milligrams per liter

- The California Men's Colony completed the construction of a new wastewater treatment facility on May 31, 2007. Section 13385 (j)(D)(i) of the California Water Code states that mandatory minimum penalties do not apply to violations occurring during "the operation of a new or reconstructed wastewater treatment unit during a defined period of adjustment of testing, not to exceed 90 days for a wastewater treatment unit that relies on a biological treatment process." This Order does not impose penalties for violations in this 90-day adjustment period between May 31, 2007, and August 29, 2007. The 90-day adjustment period is noted in Table 1 above.

MINIMUM CIVIL LIABILITY

5. California Water Code Section 13385(h) requires that a mandatory minimum penalty of three thousand dollars (\$3,000) be assessed for each serious violation. Section 13385(h)(2) provides that a serious violation occurs if the discharge exceeds the effluent limitations for a Group II pollutant, as specified in Appendix A to section 123.45 of Title 40 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 Code of Federal Regulations, by 40 percent or more. Chlorine is a Group II pollutant.
6. The California Men's Colony had twenty Group II pollutant chlorine violations that are categorized as serious violations.

MAXIMUM CIVIL LIABILITY

7. California Water Code Section 13385 authorizes the Central Coast Water Board to administratively impose civil liability in an amount not to exceed \$10,000 for each day in which any person violates an NPDES permit. Each violation listed in Table 1 is a violation of Order No. R3-2006-0032 and is therefore subject to a maximum penalty of \$10,000, resulting in a maximum potential civil liability of \$200,000

LIABILITY FACTORS

8. Pursuant to California Water Code Section 13385(e), the Central Coast Water Board must consider the following factors in determining the amount of liability for the total chlorine residual violations:
 - Nature, circumstances, extent, and gravity of the violations,
 - Whether the discharge is susceptible to cleanup or abatement,
 - Degree of toxicity of the discharge,
 - Discharger's ability to pay,
 - Effect on the Discharger's ability to continue in business,
 - Voluntary cleanup efforts undertaken by the Discharger,
 - Discharger's prior history of violations,
 - Discharger's degree of culpability,
 - Economic benefit or savings, if any, resulting from the violation, and
 - Other matters that justice may require.
- a. **Nature, circumstances, extent, and gravity of the violations:** The Discharger violated WDR Order No. R3-2006-0032 by failing to comply with the total chlorine residual effluent limitation. The 20 violations indicated in Table 1 are instances where the discharger did not comply with the 99% compliance requirements as stated in Finding No. 2 of this complaint. According to the Discharger, many of

these total chlorine residual violations occurred as a result of inadequate equipment. More specifically, the operators identified the following deficiencies with the new disinfection system:

1. The facility operators identified a lag time between the dechlorination probe and the sodium bisulfide dosing pump. Disinfected wastewater would be pumped to the dechlorination probe (located in the pump room). The dechlorination probe would sense a particular concentration of chlorine residual and would send a signal to the sodium bisulfide dosing pump in order to dose the adequate amount of sodium bisulfide to dechlorinate. The operator found that it takes approximately 1.5 minutes for disinfected wastewater to be pumped to the dechlorination probe, which increased the potential to release chlorinated wastewater to Chorro Creek. The operators have relocated the dechlorination probe next to the chlorine contact chamber, which has reduced the lag time between the dechlorination probe and sodium bisulfide pump by 30 seconds.
2. The facility operators identified that the dosing pipe from the sodium bisulfide pump was inadequately sized, resulting in a lag time to dechlorinate the disinfected wastewater prior to discharge. The operator found that the existing sodium bisulfide dosing pipe was a two-inch diameter pipe. Using a dye test method, the operator was able to identify a four-minute lag time between the sodium bisulfide pump and the dosing on disinfected wastewater. As a result, the operator decreased the dosing pipe size to $\frac{3}{4}$ inches in order to decrease the lag time. Currently, the dosing time from the sodium bisulfide pump to the dechlorinating chamber has been reduced to two minutes.
3. The facility operators identified a lag time between the chlorine probe and the chlorine pumps. The chlorine probe was located in the chlorine contact channel. As chlorine-laden wastewater passed by the probed, information was sent to the chlorine pump to either increase or decrease chlorine dosing. The operator found that the transfer of information from the chlorine probe to the chlorine pump was approximately 15 minutes. As a result, chlorine dosing was inadequate. The Discharger has since moved the chlorine probe out of the channel and closer to the chlorine dosing mixing well. The operators estimate the response time to be 15 seconds, thus reducing the lag time between the probe and the pump.

It appears that a combination of these deficiencies resulted in various chlorine residual releases.

- b. Discharge susceptibility to cleanup or abatement:** High concentrations of chlorine residual in surface waters are not susceptible to cleanup because dissolved pollutants in such discharges often move rapidly downstream and disperse over extensive areas. Furthermore, degradation of chlorine in nature

depends on many factors (e.g., concentration of chlorine discharged, volume of receiving water, photodegradation, bioabsorbtion, and other factors.).

- c. **Discharge toxicity:** The discharge of effluent containing chlorine in excess of the allowable effluent limitations can be toxic to fish and other aquatic organisms.

CMC staff contacted the Water Board by telephone on August 21, 2008, to report that the facility exceeded the allowable total chlorine residual effluent limitation in the permit and that the exceedance apparently caused a downstream fish kill. Mr. Dennis Michniuk, Department of Fish and Game staff biologist, conducted an inspection. Mr. Michniuk documented that stickleback fish were alive on the upstream side of the effluent pipe. Mr. Michniuk observed dead fish approximately 300-feet downstream of the effluent pipe. Among the dead fish were four steelhead trout, some stickleback fish, and some crayfish. According to the August monthly self-monitoring report submitted by the discharger, the total chlorine residual concentration released on August 21, 2008, was 4.2 mg/L (Line 20 in the table above). Other total chlorine residual violations identified in the table above 2.0 mg/L (daily maximum effluent limit) may have had deleterious impacts to aquatic life. It is plausible that fish kills have occurred previously as a result of chlorine releases.

The toxicity of chlorine warrants a penalty greater than the minimum. However, some of the chlorine violations are more serious than others. Six violations of the 20 identified in the table above violated the 99% compliance limitation. More specifically, the six violations were based on the exceedance of the 30 minutes excursion limitation.

- d. **Discharger's Ability to Pay the Liability and the Effect on the Discharger's Ability to Continue Business:** The facility is owned and operated by the State of California. The Discharger's ability to pay is dependant on State funds allocated to the Department of Corrections and Rehabilitation. The Discharger is not eligible for state grants or low interest rate loans and does not have the capability to assess utility fees on their users.

The Discharger has provided information concerning the ability to pay (run a prison). However, the Discharger points out the present state financial crisis and claims that the Department has no funding mechanism. However, the Discharger's payment of previous penalties suggests it does have a mechanism of paying the proposed penalty. The Discharger points out that it is seeking funding of over \$7M for a replacement disinfection system to prevent violations, and the penalties would be an unwarranted burden on the taxpaying public, while the Discharge is doing everything possible to prevent violations.

- e. **Violation history:** Cleanup and Abatement Orders and Time Schedule Order: The Discharger has a long history of violations. The Water Board has issued several cleanup and abatement orders (Order No. 96-20, No. 98-82, No. 99-38, and No. 05-36) and a time schedule order (Order No. 06-88) to the Discharger. The Discharger recently upgraded the facility, which has corrected most of the violations and facility deficiencies identified in the enforcement orders.

November 20, 2007 Notice of Violation: Central Coast Water Board staff issued a Notice of Violation (NOV) on November 20, 2007, for deficiencies observed at the newly upgraded facility. The NOV identified deficiencies with the bar screen, grinder pump facility, and the chlorine disinfection system. The Discharger, as a result of the NOV, has corrected issues regarding the bar screen and the grinder pump. The Discharger continues to address the disinfection system.

Sanitary Sewer Overflow Penalty: Most recently, the Central Coast Water Board issued an order in the amount of \$40,000 for a spill of untreated wastewater that occurred in January 2008 (Administrative Civil Liability Order No. R3-2008-0026 issued on September 5, 2008).

Mandatory Minimum Penalties Complaint: The Discharger is currently subject to a proposed mandatory minimum penalty action for other effluent violations of Order No. R3-2006-0032. These violations are alleged in MMP Order No. R3-2008-0075 and include violations of effluent limitations for total coliform, sulfate, dissolved oxygen, pH, chlorodibromomethane, dichlorobromomethane, and copper.

- f. **Voluntary cleanup efforts:** The Discharger did not conduct voluntary cleanup efforts in the receiving water, but there are no voluntary cleanup activities the Discharger could have undertaken once the discharge occurred because of the nature of the discharge. The Discharger has made efforts to correct the problem that resulted in the violation..
- g. **Degree of culpability:** As the owner of the regulated facility, the Discharger is responsible for compliance. The current provisions of Order No. R3-2006-0032 have been in effect for the past two permit cycles.

The discharger is continually trying to optimize the current disinfection system; however, the current system is not adequate to prevent the releases of chlorine residual above the effluent limits. The continued use of chlorine for disinfection maintains the potential for receiving water impacts to aquatic life. The Discharger appears to be making an effort to meet effluent limits through daily monitoring, adjustments to the existing system, and, ultimately, conversion to a UV disinfection system.

- h. Economic benefit or savings:** California Water Code Section 13385(e) provides that, at a minimum, civil liability shall be assessed at a level that recovers the economic benefit or savings, if any, derived from the acts that constitute the violation. During the period of violations addressed by this complaint, there appears to be no significant economic benefit by the Discharger. The Discharger benefited from saving the amount of sodium bisulfide (a dechlorination agent), which resulted in elevated concentrations of chlorine in the discharger's effluent. However, most of these violations occurred as a result of malfunctioning dechlorination probes, lag times between the probes and the sodium bisulfide dosing pumps, and other factors. The civil liability imposed by this Order recovers the Discharger's perceived economic benefit derived from the alleged violations.
- i. Other matters as justice may require:** Central Coast Water Board staff spent time preparing and reviewing documents related to this enforcement action. Prior to this complaint, Water Board staff proposed MMP Order No. R3-2008-0054 to the Central Coast Water Board on September 5, 2008. Estimated staff costs (including Central Coast Water Board technical staff, administrative staff, supervisors, and legal counsel) are \$10,000.

$$\$125/\text{hour} \times 80 \text{ hours} = \$10,000$$

All of the above factors considered as a whole indicate a penalty higher than the minimum penalty of \$60,000 and less than the maximum liability of \$200,000 is warranted.

9. 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 the California Code of Regulations Title 14, Chapter 3, section 15321.

IT IS HEREBY ORDERED, pursuant to California Water Code section 13385, that California Men's Colony is assessed administrative civil liability in the amount of One Hundred Forty Thousand Dollars (\$140,000).

The Discharger shall submit a check payable to State Water Resources Control Board in the amount of **\$140,000** to *SWRCB Accounting, Attn: Enforcement, P.O. Box 100, Sacramento, California 95812-0100* by **March 8, 2009**. A copy of the check shall also be submitted to *Regional Water Quality Control Board, Attn: Harvey Packard, 895 Aerovista Place, Suite 101, San Luis Obispo, California 93401* by **March 8, 2009**.

Any person aggrieved by this action of the Central Coast 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 the order, except that if the thirtieth day following the date of the order falls on a Saturday, Sunday, or state holiday, the petition must be received 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, **Roger W. Briggs, Executive Officer**, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the Central Coast Water Board on February X, 2009.

Roger W. Briggs
Executive Officer

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