

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

CEASE AND DESIST ORDER NO. R5-2008-0165

REQUIRING CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION  
DEUEL VOCATIONAL INSTITUTION  
SAN JOAQUIN 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 that:

1. On 25 April 2003, the Regional Water Board adopted Waste Discharge Requirements (WDRs) Order No. R5-2003-0065 (NPDES No. CA0078093) prescribing waste discharge requirements for the California Department of Corrections and Rehabilitation (hereafter Discharger), Deuel Vocational Institution (hereafter Facility), San Joaquin County.
2. Order No. R5-2003-0065 contained requirements that read, in part, as follows:

**“B. Effluent Limitations (Outfall 001):**

1. *Effluent shall not exceed the following limits:*

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Electrical Conductivity	µmhos/cm	700	---	---	1,600
Nitrate	mg N/l	10	---	---	15
	lb N/day <sup>3</sup>	52	---	---	77
Bromodichloromethane <sup>5</sup>	µg/l	0.56	---	---	1.06
	lb/day <sup>3</sup>	0.003	---	---	0.006
Bromoform <sup>5</sup>	µg/l	4.3	---	---	8.39
	lb/day <sup>3</sup>	0.022	---	---	0.043
Dibromochloromethane <sup>5</sup>	µg/l	0.41	---	---	0.67
	lb/day <sup>3</sup>	0.002	---	---	0.003

<sup>3</sup> Based upon a dry weather flow of 0.62 mgd

<sup>5</sup> Effective 1 March 2008

**H. Provisions:**

1. *The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.”*

3. On 25 April 2003, due to the inability of the Discharger to comply immediately with effluent limitations contained at sections B.1, B.8, and C.1 of Order No. R5-2003-0065, the Regional Water Board adopted Cease and Desist Order (CDO) No. R5-2003-0066, which provided time schedules for compliance with the effluent limitations.
4. On 21 October 2005, because the Discharger had committed to the design and construction of a new water treatment plant and a new state-of-the-art wastewater treatment plant to comply with the effluent limitations contained in Order No. R5-2003-0065, the construction of which would not be complete until 1 March 2009, the Regional Water Board rescinded CDO No. R5-2003-0066 and adopted CDO No. R5-2005-0152.

CDO No. R5-2005-0152 requires, in part, that the Discharger comply with the effluent limitations contained in section B.1 of Order No. R5-2003-0065 for electrical conductivity, nitrate, bromoform, chlorodibromomethane, and dichlorobromomethane; and the provision contained in section H.1 by 1 March 2009.

5. On **24 October 2008**, the Regional Water Board adopted Order No. R5-2008-0164 rescinding Order No. R5-2003-0065 and prescribing revised waste discharge requirements for the Facility. Order No. R5-2008-0164 contains requirements that read, in part, as follows:

**“IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

**A. Effluent Limitations – Discharge Point No. 001**

**1. Final Effluent Limitations – Discharge Point No. 001**

*The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001 as described in the attached MRP (Attachment E):*

- a. *The Discharger shall maintain compliance with the effluent limitations specified in the following table:*

**Table 6. Effluent Limitations**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
<b>Priority Pollutants</b>						
Bromoform	µg/L	4.3	--	5.8	--	--
Chlorodibromomethane	µg/L	0.41	--	0.58	--	--
Dichlorobromomethane	µg/L	0.56	--	0.82	--	--
<b>Non-Conventional Pollutants</b>						
Electrical Conductivity	µmhos/cm	700 <sup>2</sup>	--	--	--	--

@ 25°C		1,000 <sup>3</sup>				
Nitrate Nitrogen, Total (as N)	mg/L	10	--	--	--	--

- <sup>1</sup> Based on a design flow of 0.62 MGD.
- <sup>2</sup> Applies from 1 April through 31 August.
- <sup>3</sup> Applies from 1 September through 31 March.

**VI. PROVISIONS**

**C. Special Provisions**

**4. Construction, Operation and Maintenance Specifications**

- a. *The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.”*

The effluent limitations for bromoform, chlorodibromomethane, and dichlorobromomethane contained in Order No R5-2008-0164 have been revised as calculated according to the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The effluent limitations for electrical conductivity have been modified to be consistent with the applicable requirements contained in the Bay-Delta Plan. The average monthly effluent limitation for nitrate and the provision for the construction, operation, and maintenance of the Facility have been retained in Order No. R5-2008-0164 from Order No. R5-2003-0065.

- 6. The construction of the new water treatment plant is scheduled to be completed by 1 October 2009 and the new wastewater treatment plant is scheduled to be operational by 31 December 2009. In accordance with California Water Code (CWC) section 13385(j)(3), the Regional Water Board finds that until the new treatment systems are operational, the Discharger is not able to consistently comply with the effluent limitations for bromoform, chlorodibromomethane, dichlorobromomethane, electrical conductivity, and nitrate, as well as the provision for the construction, operation, and maintenance of the Facility.
- 7. 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. ... For the purposes of this subdivision, the time schedule may not exceed five years in length...” The time schedules for achieving

compliance with effluent limitations for electrical conductivity and nitrate contained in Order No. R5-2003-0065 were adopted on 25 April 2003 with an effective date of 14 June 2003. Notwithstanding compliance schedules set forth in this Order, in accordance with the provisions of CWC section 13385(j), if the Discharger violates the effluent limitations in Order R5-2008-0164 for electrical conductivity or nitrate the Discharger may be subject to penalties set forth in section 13385(i) of the California Water Code.

8. CWC section 13385(j)(3) requires the preparation and implementation of a pollution prevention plan (PPP) pursuant to section 13263.3 of the CWC. Provision H.7 of Order No. R5-2003-0065 required the Discharger to submit a PPP for bromoform, chlorodibromomethane, and dichlorobromomethane. CDO No. R5-2003-0066 required the Discharger to submit a PPP for electrical conductivity. This Order requires the Discharger to update and implement the existing PPPs for these parameters.
9. This Order includes interim requirements and dates for their achievement. The time schedules do not exceed 5 years.
10. The compliance time schedule in this Order includes interim effluent limitations for bromoform, chlorodibromomethane, dichlorobromomethane, electrical conductivity, and nitrate. Interim effluent limitations typically consist of a maximum daily effluent concentration derived using sample data provided by the Discharger. In developing the interim limitations, where there are 10 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 10 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 10 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 maximum 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 10 sampling points for a constituent, interim limitations are based on 3.11 times the maximum observed effluent concentrations to obtain the daily maximum interim limitation (TSD, Table 5-2). Because the maximum effluent concentrations for bromoform, chlorodibromomethane, dichlorobromomethane, electrical conductivity, and nitrate were greater than the statistically calculated effluent limitations, interim limitations were established at the maximum effluent concentration. The interim limitations for total coliform organisms are established at the interim levels required in Order No. R5-2003-0065.
11. The Regional Water Board finds that the Discharger can undertake source control and treatment plant measures to maintain compliance with the interim limitations included in

this Order. Interim 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 limitations, however, establish an enforceable ceiling concentration until compliance with the effluent limitation can be achieved.

12. Section 13301 of the 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.”*
13. The issuance of this Order is not a “project” as defined by the California Environmental Quality Act (Public Resources Code, Section 21000, *et seq.*) (CEQA), and does not have the potential to cause a significant adverse impact on the environment (Title 14 CCR section 15061(b)(3)). This Order enforces preexisting requirements to improve the quality of ongoing discharges that are part of the CEQA “baseline”; and includes interim effluent limitations to ensure that discharges do not increase above the CEQA baseline. Any measures to meet effluent limitations are the result of WDRs Order No. R5-2003-0065 and not this Order. Even assuming the issuance of this Order is a “project” within the meaning of CEQA, issuance of this Order is exempt from the provisions of in accordance with Water Code Section 13389, which exempts the adoption or modification of a NPDES Permit for an existing source. This Order only serves to implement a NPDES permit and is therefore exempt under Section 13389. The issuance of this Order is also exempt under Section 15321(a)(2), Title 14, California Code of Regulations (CCR).
14. On **24 October 2008**, in Sacramento, California, after due notice to the Discharger and all other affected persons, the Regional Water Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order under CWC section 13301 to establish a time schedule to achieve compliance with waste discharge requirements.
15. Any person adversely affected by this action of the Regional Water Board may petition the State Water Resources Control Board to review this action. The petition must be

received by the State Water Resources Control Board, Office of the Chief Counsel, P.O. Box 100, Sacramento, CA 95812-0100, within 30 days of the date on which this action was taken. Copies of the law and regulations applicable to filing petitions will be provided upon request.

**IT IS HEREBY ORDERED THAT** Cease and Desist Order No. R5-2005-0152 is rescinded, and, pursuant to CWC Section 13301:

1. The Discharger shall comply with the following time schedule to ensure compliance with the effluent limitations for bromoform, chlorodibromomethane, dichlorobromomethane, electrical conductivity, and nitrate and the provision for the construction, operation, and maintenance of the Facility as described in Finding 5 above:

<b>Task</b>	<b>Compliance Date</b>
a. Update and implement Pollution Prevention Plan as specified in CWC Section 13263.3 for bromoform, chlorodibromomethane, dichlorobromomethane, and electrical conductivity.	<b>12 December 2008</b>
b. Complete construction of treatment facilities to comply with the effluent limitations for bromoform, chlorodibromomethane, dichlorobromomethane, electrical conductivity, and nitrate contained at sections IV.A.1.a and IV.A.1.f and the provision contained at section VI.C.4.a of Order No. R5-2008-0164.	1 October 2009
c. Final compliance with the effluent limitations for bromoform, chlorodibromomethane, dichlorobromomethane, electrical conductivity, and nitrate contained at sections IV.A.1.a and IV.A.1.f and the provision contained at section VI.C.4.a of Order No. R5-2008-0164.	31 December 2009
d. Submit Progress Reports <sup>1</sup> .	1 January 2009 and 1 July 2009

<sup>1</sup> The progress reports 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 following interim effluent limitations for bromoform, chlorodibromomethane, dichlorobromomethane, electrical conductivity, and nitrate shall be effective immediately, and shall remain in effect until 31 December 2009, or when the Discharger is able to come into compliance with the final effluent limitation, whichever is sooner.

<b>Parameter</b>	<b>Units</b>	<b>Maximum Daily Effluent Limitations</b>
Bromoform	µg/L	148
Chlorodibromomethane	µg/L	78
Dichlorobromomethane	µg/L	15
Electrical Conductivity @ 25°C	µmhos/cm	3,000
Nitrate Nitrogen, Total (as N)	mg/L	171

3. 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.

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 October 2008**.

Original signed by Pamela C. Creedon

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PAMELA C. CREEDON, Executive Officer