

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ADMINISTRATIVE CIVIL LIABILITY ORDER NO. R5-2010-0517

MANDATORY PENALTY
IN THE MATTER OF

CITY OF COLUSA
WASTEWATER TREATMENT PLANT
COLUSA COUNTY

This Order is issued to the City of Colusa (hereafter Discharger) pursuant to California Water Code (CWC) Section 13385, which authorizes the imposition of Administrative Civil Liability (ACL). This Order is based on findings that the Discharger violated provisions of Waste Discharge Requirements (WDRs) Orders R5-2002-0020 and R5-2008-0184 (NPDES No. CA0078999).

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

1. The Discharger owns and operates a wastewater collection, treatment, and disposal system, and provides sewerage service to the City of Colusa. Treated municipal wastewater is discharged to Powell Slough, tributary to the Colusa Trough, and to the Colusa Basin Drain, a water of the United States.
2. On 1 March 2002, the Central Valley Water Board issued WDRs Order R5-2002-0020. On 5 December 2008, the Board issued WDRs Order R5-2008-0184 which rescinded Order R5-2002-0020 and included new effluent limitations and other requirements regarding the waste discharge. Order R5-2008-0184 became effective on 24 January 2009.
3. On 1 October 2008, the Executive Officer of the Central Valley Water Board issued ACL Order R5-2008-0535. The ACL Order charged the Discharger with civil liability in the amount of \$486,000, which represented the sum of the statutory Mandatory Minimum Penalties (MMPs) for effluent limitation violations that occurred at the WWTP from 1 January 2000 to 31 January 2008. The ACL Order allowed the Discharger to apply the \$486,000 penalty towards a compliance project to address the violations pursuant to California Water Code Section 13385(k). ACL Order R5-2008-0554 required the Discharger to achieve full compliance by 1 August 2008 and to submit final documentation of compliance project costs by 1 November 2008. The Discharger complied with the terms of ACL Order R5-2008-0535. The Board considers this matter settled.
4. This Order addresses effluent limitation violations from 1 January 2009 through 31 December 2009. Violations from 1 February 2008 through 31 December 2008 along with violations from the period of 1 January 2000 through 31 January 2008 not addressed in ACLO R5-2008-0535 are addressed in Order R5-2010-0518 because these violations are associated with a different compliance project.

5. On 7 October 2009, Central Valley Water Board staff issued the City a draft Record of Violations and Notice of Violation for effluent limitation violations that occurred at the City's wastewater treatment plant from 1 January 2009 through 31 July 2009. On 20 October 2009, the City responded that it was making every attempt to correct the problem as soon as possible. This Order extends the period of record through 31 December 2009.

6. CWC Section 13385 (i) requires assessment of mandatory penalties and states, in part, the following:

CWC Section 13385(i)(1) states,

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 violation whenever the person does any of the following four or more times in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations:

- A) Violates a waste discharge requirement effluent limitation.
- B) Fails to file a report pursuant to Section 13260.
- C) Files an incomplete report pursuant to Section 13260.
- D) Violates a toxicity effluent limitation contained in the applicable waste discharge requirements where the waste discharge requirements do not contain pollutant-specific effluent limitations for toxic pollutants.

7. CWC Section 13323 states, in part:

Any executive officer of a regional board may issue a complaint to any person on whom administrative civil liability may be imposed pursuant to this article. The complaint shall allege the act or failure to act that constitutes a violation of law, the provision authorizing civil liability to be imposed pursuant to this article, and the proposed civil liability.

8. WDRs Order No. R5-2002-0020 Effluent Limitations No. B.1b. include, in part, the following effluent limitations:

Effluent shall not exceed the following limits (after **31 January 2007**):

<u>Constituents</u>	<u>Units</u>	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>7-Day Median</u>	<u>Average Daily</u>	<u>Instantaneous Maximum</u>
<u>Total Coliform Organisms</u>	MPN/100mL	--	--	2.2	--	23 ⁴

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

9. WDRs Order R5-2008-0184 Effluent Limitations IV.A.1.I. includes, in part, the following effluent limitations:

I. **Total Coliform Organisms.** Effluent total coliform organisms shall not exceed:

- i. 2.2 most probable number (MPN) per 100 mL as a 7-day median; and

ii. 23 MPN/100 mL, more than once in any 30-day period.

10. WDRs Order R5-2008-0184., Total Coliform Organisms Effluent Limitations Compliance Determination VII.F. states:

For each day that an effluent sample is collected and analyzed for total coliform organisms, the 7-day median shall be determined by calculating the median concentration of total coliform bacteria in the effluent utilizing the bacteriological results of the last seven days for which analyses have been completed. If the 7-day median of total coliform organisms exceeds a most probable number (MPN) of 2.2 per 100 milliliters, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period.

11. According to the Discharger's self-monitoring reports, the Discharger committed thirty-one non-serious violations. Twenty-eight of the non-serious violations are subject to mandatory penalties under CWC Section 13385(i)(1), because these violations were preceded by three or more similar violations within a six-month period. The mandatory minimum penalty for these **twenty-eight (28)** non-serious violations is **eighty-four thousand dollars (\$84,000)**.
12. The total amount of the mandatory penalties assessed for the cited effluent violations is **eighty-four thousand dollars (\$84,000)**. A detailed list of the cited violations is included in Attachment A, a part of this Order.
13. CWC Section 13385 (k)(1) states, in part:
- In lieu of assessing all or a portion of the mandatory minimum penalties pursuant to subdivisions (h) and (i) against a publicly owned treatment works serving a small community, the state board or the regional board may elect to require the publicly owned treatment works to spend an equivalent amount towards the completion of a compliance project proposed by the publicly owned treatment works...
14. CWC Section 13385 (k)(2) states, in part:
- For the purposes of this subdivision, "a publicly owned treatment works serving a small community" means a publicly owned treatment works serving a population of 10,000 persons or fewer or a rural county, with a financial hardship as determined by the state board after considering such factors as median income of the residents, rate of unemployment, or low population density in the service area of the publicly owned treatment works.
15. The City of Colusa Wastewater Treatment Plant is a publicly owned treatment works serving a small community within the meaning of CWC Section 13385(k)(2). The Water Quality Enforcement Policy lists Colusa County as a rural county with financial hardship.
16. On 27 January 2010, amended on 7 April 2010 and 22 April 2010, the City submitted a proposed Compliance Project to perform viral bioassay testing (\$40,000), re-coat the UV Channel (\$10,000), expand the tertiary filters (\$40,000), and perform particle size testing (\$8,000). The Discharger stated that the improvements to the tertiary filters and

improvements to the UV disinfection system will address the total coliform violations in this Order. The scope of work is found as Attachment B to this Order.

17. Although the City has not violated its effluent limitation for total coliform organisms since 2 July 2009, the City's compliance was affected, in part by discharging to effluent holding ponds rather than to Powell Slough during the remainder of July 2009, and during August, September, and October 2009. The City has expressed concern that it would continue to violate the total coliform limitation and thereby accrue further penalties if it does not complete the project.
18. The Discharger's 27 January 2010 submittal, amended on 7 April 2010 and 22 April 2010, included a project outline, a project schedule, estimated total project costs of \$98,000, and stated that its existing Capital Improvements Budget would provide project financing.
19. Based upon the information contained in its 27 January 2010 submittal and the 7 April 2010 and 22 April 2010 amendments, the Central Valley Water Board finds that the Compliance Project has been designed to correct the violations that led to the issuance of this Administrative Civil Liability Order within five years, and that the Compliance Project is in accordance with the enforcement policy of the State Water Board. The Discharger plans to expend on the Compliance Project an amount in excess of the mandatory minimum penalty that is required by CWC Section 13385(i).
20. This Order constitutes a settlement of the violations herein mentioned. Notice of this settlement was published on the Central Valley Water Board's website and was provided to all interested parties. The 30-day public notice and comment period mandated by Federal regulations (40 CFR 123.27) has expired.
21. Issuance of this Administrative Civil Liability Order 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).
22. On 23 April 2009, the Central Valley Water Board delegated the authority to issue Administrative Civil Liability Orders, where the matter is not contested by the Discharger, to the Executive Officer, or to an Assistant Executive Officer when the Executive Officer is serving as head of the Board's Prosecution Team (Resolution R5-2009-0027). Pamela Creedon is serving as the head of the Board's Prosecution Team for this matter, and therefore Assistant Executive Officer Kenneth Landau has the authority to issue this Order.

IT IS HEREBY ORDERED THAT:

1. The City of Colusa, its agents, successors and assigns, shall be assessed Administrative Civil Liability in the amount of **eighty-four thousand dollars (\$84,000)**.

- The entire \$84,000 penalty shall be suspended if the Discharger complies with the following time schedule to complete its compliance project. Each component of the project shall be completed as described in Attachment B of this Order.

<u>Task</u>	<u>Compliance Date</u>
Viral Bioassay	30 June 2011
Coat UV Channel	31 October 2010
Expand Filters	31 December 2010
Particle Size Testing	30 June 2011
Submit Final Report (including details of funds expended and goals achieved).	31 December 2011

- A progress report shall be submitted no later than two weeks after each compliance date. The report shall describe the work undertaken to comply with this Order, and the funds expended.
- The Assistant Executive Officer may extend the abovementioned deadlines if the Discharger demonstrates that unforeseeable contingencies have created delays, provided that the Discharger continues to undertake all appropriate measures to meet the deadlines. The Discharger shall make any deadline extension request in writing. Under no circumstances may the completion of the Compliance Project extend past five (5) years from the issuance of this Order.
- If, in the judgment of the Assistant Executive Officer, the Discharger fails to complete the compliance project in accordance with the specified time schedule or fails to construct the Compliance Project in accordance with the Proposal without obtaining Central Valley Water Board approval, the suspended mandatory minimum penalty (**\$84,000**) must be paid within 30 days of notification by the Assistant Executive Officer of such failure.
- The Discharger must obtain explicit approval from the Assistant Executive Officer for any significant departures from the project outline submitted on 27 January 2010. Failure to obtain approval for any significant departures will result in the assessment of the full amount of the suspended mandatory minimum penalty.
- Should the Discharger fail to take any of the above actions, the Assistant Executive Officer may refer the matter to the State Attorney General for enforcement of the terms of this Order.

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 CWC 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 that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final falls on a Saturday, Sunday, or

state holiday (including mandatory furlough days), 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.

Original signed by

KENNETH D. LANDAU, Executive Officer

10 June 2010

DATE

Attachment A: Record of Violations
Attachment B: Scope of Work
BLH: 4 June-10

**ATTACHMENT A
ADMINISTRATIVE CIVIL LIABILITY ORDER NO. R5-2010-0517**

COLUSA, CITY OF

Wastewater Treatment Plant

RECORD OF VIOLATIONS (1 January 2009 – 31 December 2009) MANDATORY PENALTIES
(Data reported under Monitoring and Reporting Programs R5-2002-0020 and R5-2008-0184)

	<u>Date</u>	<u>Violation Type</u>	<u>Units</u>	<u>Limit</u>	<u>Measured</u>	<u>Period Type</u>	<u>Remarks</u>	<u>CIWQS</u>
			Violations of Order R5-2002-0020					
1	23-Jan-09	Coliform	MPN/100mL	2.2	4	7-Day Median	3	834270
			Violations of Order R5-2008-0184					
2	26-Mar-09	Coliform	MPN/100mL	2.2	4	7-Day Median	3	834271
3	31-Mar-09	Coliform	MPN/100mL	2.2	4	7-Day Median	3	834272
4	1-Apr-09	Coliform	MPN/100mL	2.2	21	7-Day Median	4	834273
5	7-Apr-09	Coliform	MPN/100mL	2.2	4	7-Day Median	4	834274
6	28-Apr-09	Coliform	MPN/100mL	2.2	4	7-Day Median	4	834275
7	29-Apr-09	Coliform	MPN/100mL	2.2	4	7-Day Median	4	834276
8	12-May-09	Coliform	MPN/100mL	2.2	5	7-Day Median	4	827687
9	13-May-09	Coliform	MPN/100mL	2.2	9	7-Day Median	4	827702
10	14-May-09	Coliform	MPN/100mL	2.2	9	7-Day Median	4	827706
11	19-May-09	Coliform	MPN/100mL	2.2	8	7-Day Median	4	827710
12	20-May-09	Coliform	MPN/100mL	2.2	4	7-Day Median	4	827714
13	21-May-09	Coliform	MPN/100mL	2.2	8	7-Day Median	4	827717
14	26-May-09	Coliform	MPN/100mL	2.2	8	7-Day Median	4	827722
15	27-May-09	Coliform	MPN/100mL	2.2	8	7-Day Median	4	827725
16	28-May-09	Coliform	MPN/100mL	2.2	7	7-Day Median	4	827727
17	9-Jun-09	Coliform	MPN/100mL	2.2	30	7-Day Median	4	833948
18	10-Jun-09	Coliform	MPN/100mL	2.2	30	7-Day Median	4	833952
19	10-Jun-09	Coliform	MPN/100mL	23	30	Daily Max	4	833950
20	11-Jun-09	Coliform	MPN/100mL	2.2	30	7-Day Median	4	833953
21	16-Jun-09	Coliform	MPN/100mL	2.2	17	7-Day Median	4	833954
22	17-Jun-09	Coliform	MPN/100mL	2.2	17	7-Day Median	4	833955
23	18-Jun-09	Coliform	MPN/100mL	2.2	15	7-Day Median	4	833956
24	23-Jun-09	Coliform	MPN/100mL	2.2	17	7-Day Median	4	833958
25	24-Jun-09	Coliform	MPN/100mL	2.2	17	7-Day Median	4	833959
26	25-Jun-09	Coliform	MPN/100mL	2.2	17	7-Day Median	4	833962
27	25-Jun-09	Coliform	MPN/100mL	23	70	Daily Max	4	833960
28	30-Jun-09	Coliform	MPN/100mL	2.2	70	7-Day Median	4	833964
29	30-Jun-09	Coliform	MPN/100mL	23	110	Daily Max	4	833963
30	1-Jul-09	Coliform	MPN/100mL	2.2	23	7-Day Median	4	839378
31	2-Jul-09	Coliform	MPN/100mL	2.2	8	7-Day Median	4	839379

ATTACHMENT A
CITY OF COLUSA
ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2010-0517

Remarks:

1. Serious Violation: For Group I pollutants that exceed the effluent limitation by 40 percent or more.
2. Serious Violation: For Group II pollutants that exceed the effluent limitation by 20 percent or more.
3. Non-serious violations falls within the first three violations in a six-month period, thus is exempt.
4. Non-serious violation subject to mandatory penalties.

<u>VIOLATIONS AS OF:</u>	<u>12/31/2009</u>
Group I Serious Violations:	0
Group II Serious Violations:	0
Non-Serious Exempt from MPs:	3
Non-serious Violations Subject to MPs:	28
<u>Total Violations Subject to MPs:</u>	<u>28</u>

Mandatory Minimum Penalty = (0 Serious Violations + 28 Non-Serious Violations) x \$3,000 = \$84,000

**ATTACHMENT B
CITY OF COLUSA
ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2010-0517**

CITY OF COLUSA – COMPLIANCE PROJECT 2010

SCOPE OF WORK

1. VIRAL BIOASSAY TESTING

EcoLogic Engineers believe that an under-dosage condition exists causing the disinfection problem, which would signify an equipment problem. They assert that a viral bioassay must be performed to measure dose, instead of relying on a calculation. A bioassay uses a known concentration of a benign virus injected into the flow, sending it through the disinfection process with carefully controlled conditions, and tests for resultant concentrations. The outcome of this test will determine whether or not a problem exists with low UV intensity, a problem with the equipment supplied. If so determined, then the computer program will be updated to adjust the UV intensity.

2. RE-COAT UV CHANNEL

Trojan Technologies, manufacturer of the UV equipment, performed an investigation of the UV channel and equipment at the Colusa WWTP and found discrepancies with some of the distances between lamps and channel surfaces, critical to the disinfection process. The UV radiation decreases in its ability to deactivate microorganisms and disrupt the reproduction process over distances of fractions of an inch. Although these distances are close enough to attain the required disinfection level for a majority of the time, they are essential to maintain this process at all times and under every circumstance. Using additional coats of epoxy, the distances between these surfaces and the lamps can be decreased to within tolerances.

3. EXPAND TERTIARY FILTERS

The filters were constructed with only six (6) disks, but can be expanded to a maximum of eight (8) disks each. Adding these disks will increase the surface area across the filters by twenty five percent (25%). In effect, it will slow the filtering flow per area, therefore enhancing the filtering action.

4. PARTICLE SIZE TESTING

Particle size is highlighted as a contributing factor to the coliform problems experienced in Colusa and a crucial element affecting disinfection. Testing particle sizes in the effluent during a variety of circumstances will give us an idea of the effectiveness of filtration as conditions change. These tests need to span the seasons, so as to capture the conditions unique to those periods. This information will be used to determine whether the filters can adequately treat the secondary effluent to the degree necessary for the UV system to maintain compliance throughout the annual changes. The results will be used to decide the choice between expansion of the existing filters and/or complete replacement of the tertiary filters.

ATTACHMENT B
CITY OF COLUSA
ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2010-0517

Table of Work Summary, Time Schedule and Cost

Task	Approx. Completion Date	Cost Estimate
Viral Bioassay	30 June 2011	\$40,000(a)
Coat UV Channel	31 October 2010	\$10,000
Expand Filters	31 December 2010	\$40,000
Particle Size Testing	30 June 2011	\$8,000
Complete Project and Submit Final Report to the Board	31 December 2011	\$98,000

- (a) Bioassay testing is likely to exceed \$50,000. The cost placed in the estimate is the minimum allotted to the compliance project funding. The compliance date reflects time to conduct two assays, before and after improvements to demonstrate success.