

Attachment B – ACL Complaint No. R5-2011-0587

Specific Factors Considered-Civil Liability

City of Redding, Clear Creek Wastewater Treatment Plant

Each factor of the Enforcement Policy and its corresponding score is presented below for the 25 March 2011 chlorine residual effluent violation.

The Monetary Assessments in Administrative Civil Liability (ACL) Actions is set forth in the Water Quality Enforcement Policy using a nine step approach. The rationale for calculating the ACL is discussed below.

Step 1 – Potential for Harm for Discharge Violations

To determine the actual or threatened impact to beneficial uses caused by the violation is done using a three-factor scoring system to quantify: (1) the potential for harm to beneficial uses; (2) the degree of toxicity of the discharge; and (3) the Dischargers susceptibility to cleanup or abatement for each violation or group of violations.

Factor 1: Harm or Potential Harm to Beneficial Uses.

A score between 0 and 5 is assigned based on a determination of whether the harm or potential for harm is negligible (0) to major (5). In this case the potential harm to beneficial uses was determined to be below moderate (2). A below moderate score means a less than moderate threat to beneficial uses (i.e., impacts are observed or reasonably expected, harm to beneficial is minor). While the no impacts fish or other aquatic life were observed downstream of the discharge, the concentration of chlorine residual did exceed the USEPA recommended 1-hour average criteria for freshwater aquatic life protection of 0.019 mg/L. The concentration of chlorine residual in the discharge exceeded the water quality objective for short term exposure (0.019 mg/L) by 268.4 percent.

Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge.

A score between 0 and 4 is assigned based on a determination of the risk or threat of the discharged material. In this case a score of 3 was assigned. A score of 3 means that the discharged material poses an above-moderate risk or a direct threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material exceed known risk factors and/or there is substantial concern regarding receptor protection). Chlorine residual is known to cause toxicity in fish and aquatic organisms.

Factor 3: Susceptibility to Cleanup or Abatement.

A score of 0 is assigned for this factor if 50% or more of the discharge is susceptible to cleanup or abatement. A score of 1 is assigned for this factor if less than 50% of the discharge is susceptible to cleanup or abatement. This factor is evaluated regardless of whether the discharge was actually cleaned up or abated by the discharger. In this case cleanup or abatement was not possible. Therefore, a factor of 1 is assigned.

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Final Score – “Potential for Harm”

The scores of the three factors are added to provide a Potential for Harm score for each violation or group of violations. In this case, **a final score of 6** was calculated. The total score is then used to determine the Penalty Factors for per gallon discharges and per day discharges.

Step 2 – Assessment for Discharge Volumes

This step addresses per gallon and per day assessments for discharge violations.

Per Gallon Assessments for Discharge Volumes

Where there is a discharge, the Water Boards shall determine an initial liability amount on a per gallon basis using on the Potential for Harm score and the extent of Deviation from Requirement of the violation. Although the discharger violated the 1-hour average chlorine residual effluent limitation of 0.019 mg/L, the deviation from the requirement has been determined to be minor in this case. A minor deviation is defined as the intended effectiveness of the requirement remains generally intact (e.g., there is a general intent by the discharger to follow and meet the chlorine residual requirement). The discharge has not had a long term effect on the actual effluent limitation, monitoring requirements, or any other deadlines.

A discharge volume of 184,164 gallons was determined by multiplying the 30 -second average discharge flow rate (1,674 gpm during the exceedance) by the exceedance time of 55 minutes (actual discharge time above chlorine residual effluent limit). While the volume of the discharge appears to be great (184,164 gallons), it is not considered a High Volume Discharge as defined by the Water Quality Enforcement Policy. Therefore, California Water Code (CWC) section 13385(c)(2) allows for an additional liability of ten dollars (\$10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons. Therefore, the additional liability is calculated on a volume of 183,164 gallons.

Per Day Assessments for Discharge Volumes

CWC section 13385(c)(1) allows for additional ten thousand dollars per day (\$10,000) for each day in which the violation occurs. Since the discharge of violation occurred for approximately one hour, the violation has been determined to be one (1) day. This translates to an additional liability of \$10,000.

Initial Liability Amount: \$147,331 (Number of Days (1) X Maximum Penalty (\$10,000) X Per Day Factor (0.08) + Number of Gallons (183,164) X Max per Gallon (\$10) X Per Gallon Factor (0.08). The per day and per gallon factors are from Tables 1 & 2 of the Water Quality Enforcement Policy and shown below.

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Tables 1 & 2 of the Water Quality Enforcement Policy

Deviation form Requirement	Potential for Harm (per gallon factors and per day factors)									
	1	2	3	4	5	6	7	8	9	10
Minor	0.005	0.007	0.009	0.011	0.060	0.080	0.100	0.250	0.300	0.350
Moderate	0.007	0.010	0.013	0.016	0.100	0.15	0.200	0.400	0.500	0.600
Major	0.010	0.015	0.020	0.025	0.150	0.220	0.310	0.600	0.800	1.000

Step 3 – Per Day Assessment for Non-Discharge Violation: Does not apply**Step 4 – Adjustment Factors**

There are three additional factors to be considered for modification of the amount of initial liability: the violator's culpability, efforts to cleanup or cooperate with regulatory authority, and the violator's compliance history.

Culpability

Adjustments should result in a multiplier between 0.5 and 1.5, with the lower multiplier for accidental incidents, and a higher multiplier for negligent behavior. The Discharger was operating in a bypass/blending manner using the blending structure at the Facility at the time of the violation. The valve at the blending structure was set in the manual setting and remained open for the duration of the discharge allowing the flow to continue to the facilities outfall structure. The bypass valve at the outfall structure was open allowing effluent to be sent to pond #6. The bypass valve to pond #6 was not capable of handling the volume of effluent being sent to the outfall structure from the blending structure valve being open. The Discharger was given a multiplier value of 1.25, due to the blending structure valve being operated in the manual position and not closing it in a timely manner.

Cleanup and Cooperation

Adjustments should result in a multiplier between 0.75 and 1.5, with the lower multiplier where there is a high degree of cleanup and cooperation, and a higher multiplier where this is absent. The Discharger was given a multiplier value of 0.75, which decreases the violation amount. The discharger has a history of providing prompt notification of discharge events and cooperative in the cleanup following up and mitigation measures necessary to protect water quality.

History of Violation

The discharger has had 21 effluent limitation violations since January 2007. Four separate discharges of chlorine residual resulted in nine effluent limitation violations (two on 1/28/2007, one on 1/29/2007, one on 3/8/2007, three on 17 December 2009, and two on 3/25/2011). While the Water Quality Enforcement Policy does not list a multiplier range, where there is a history of repeat violations, a minimum multiplier of 1.1 should be used. Given the number of effluent limitations violation since January 2007, the Discharge was given a 1.25, which increases the initial liability amount by twenty five percent.

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Step 5 - Determination of Total Base Liability Amount

The Total Base Liability is determined by applying the adjustment factors from Step 4 to the Initial Liability Amount determined in Step 2.

Total Base Liability Amount: \$172,653 (Initial Liability Amount (\$147,331) X Adjustment Factors (1.25)(0.75)(1.25).

Step 6 - Ability to Pay and Ability to Continue in Business

The City of Redding, Clear Creek Wastewater Treatment Facility is not a for profit enterprise. The City of Redding has approximately 30,000 service connections, 18,000 being connected to the City of Redding Clear Creek Wastewater Treatment Facility. The proposed ACL would equate to less than \$11.00 per service connection. The City of Redding's, wastewater treatment facilities Annual Operations Budget was \$32,792,940 in 2008-2009, \$58,048,650 (includes capital improvements costs) in 2009-2010, and \$35,872,240 for 2010-2011. The City of Redding appears to have the ability to pay the proposed ACL and remain solvent. The ability to pay and to continue in business factor affects the base liability amount as a straight multiplier. The Discharger was given a neutral multiplier value of 1.0, which neither increases nor decreases the violation amount.

Step 7 – Other Factors as Justice May Require

If the Water Board believes that the amount determined using the above factors is inappropriate, the amount may be adjusted under the provision for "other factors as justice may require," but only if express findings are made to justify this.

Costs of Investigation and Enforcement Adjustment

The costs of investigation and enforcement are "other factors as justice may require", and should be added to the liability amount. The Regional Water Board has incurred \$4,350 in staff costs associated with the investigation of the violation and preparation of the enforcement action.

Step 8 – Economic Benefit

An economic benefit gained from the discharge has not been determined.

Step 9 – Maximum and Minimum Liability Amounts

The maximum and minimum amounts for the 25 March 2011 violations (i.e., two 1-hour average violations) must be determined for comparison to the amounts being proposed.

Maximum Liability Amount

The maximum administrative civil liability which can be imposed under section 13385 of the CWC is \$10,000 per day per violation plus of ten dollars (\$10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons. The calculated discharge is a total of 184,164 gallons, none of which was cleaned up. Therefore, the **maximum administrative civil liability is \$1,841,640** (183,164 gallons at \$10/gallon plus 1 day at \$10,000/day).

Minimum Liability Amount

The minimum administrative civil liability determined under section 13385(h) of the CWC would be \$3,000 for each serious violation. Central Valley Water Board staff has determined that the 1-hour average chlorine residual exceeded the effluent limitation during two separate hours which results in two serious violations. However, only one (1) mandatory minimum penalty is issued for a 24-hour period chlorine residual violations. Therefore, the **minimum administrative civil liability is \$3,000.**

Step 10 – Final liability Amount

The final liability amount consists of the added amounts for each violation, with any allowed adjustments, provided amounts are within the statutory minimum (\$3,000) and maximum (\$1,841,640) amounts. Without further investigation of the discharge, calculation of economic benefits, and additional staff time, the proposed discretionary amount for the Administrative Civil Liability is **\$177,000.**

Table 1. Adjustment Factors

Adjustment Factors	Range	Factors Used
Harm or Potential Harm to Beneficial Uses	0 to 5	2
Physical, Chemical, Biological or Thermal Characteristics of the Discharge	0 to 4	3
Susceptibility to Cleanup or Abatement	0 or 1	1
Final Score	0 to 10	6
Per Gallon Assessment	Minor, Moderate, Major	Minor
Per Day Assessment	Minor, Moderate, Major	Minor
Culpability	0.5 to 1.5	1.25
Cleanup and Cooperation	0.75 to 1.5	0.75
History of Violations	Subjective, based on history	1.25
Ability to Pay	Based on financial information	1
Other Factors as Justice May Require	Subjective, based on investigation	1
Economic Benefit	Subjective, based on investigation	1
Discretionary Violation Amount		\$177,000