

## **Attachment A – ACL Complaint No. R5-2011-0570**

### **Specific Factors Considered-Civil Liability**

#### **City of Redding, Stillwater Wastewater Treatment Facility**

Each factor of the Enforcement Policy and its corresponding score is presented below.

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 moderate (3). A moderate score means that the threat to beneficial uses (i.e., impacts are observed or reasonably expected and impacts to beneficial uses are moderate and likely to attenuate without appreciable acute or chronic effects). While the Discharger states that 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 (0.02 mg/L) by 7,300%.

##### **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.

#### 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 7** 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 0.02 mg/L and the 4-day chlorine residual effluent limitation of 0.01 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 67,250 gallons was determined by multiplying the 1-minute average discharge flow (1,462 gpm during the exceedance) multiplied by the exceedance time of 46 minutes (actual discharge time above chlorine residual effluent limit). While the volume of the discharge appears to be great (67,250 gallons), it is not considered a High Volume Discharge as defines 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 66,250 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: \$67,253** (Number of Days (1) X Maximum Penalty (\$10,000) X Per Day Factor (0.1) + Number of Gallons (66,250) X Max per Gallon (\$10) X Per Day Factor (0.1)). The per day and per gallon factors are from Tables 1 & 2 of the Water Quality Enforcement Policy and shown below.

**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 given a neutral multiplier value of 1.

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 neutral multiplier value of 1.0, which neither increases nor 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 10 effluent limitation violations since 1993. Four separate discharges of chlorine residual resulted in five of the 10 effluent limitation violations (12/8/1993, 7/21/1998, 1/24/1999, and two on 1/23/2011). Two pH violations in October 2003, as well as the chlorine residual violations in January 2011 were caused by chlorine residual analyzer failures. 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. However, given the long time in between effluent limitation violations, and the facility has not had recent problems with the chlorine residual violations until 2011, so the older violations were not considered. The Discharge was given a neutral value of a 1, which neither increases nor decreases the violation amount.

### **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: \$67,250.00** (Initial Liability Amount (\$66,250) X Adjustment Factors (1)(1)(1)).

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

The City of Redding, Stillwater Wastewater Treatment Facility is not a for profit enterprise. The City of Redding has approximately 30,000 service connections. The proposed ACL would equate to less than \$3.00 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 \$4,750 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. The economic benefit determination will require an inspection at the facility to review of the maintenance records for the failed pump, availability of replacement parts, staffing levels, response time, and employee interviews.

### **Step 9 – Maximum and Minimum Liability Amounts**

The maximum and minimum amounts for the three violations (i.e., two 1-hour average violations and one 4-day violation) 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 67,250 gallons, none of which was

cleaned up. Therefore, the **maximum administrative civil liability is \$672,500** (66,250 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. Regional 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. The 4-day average chlorine residual exceeded the effluent limitation for one 4-day period resulting in one additional serious violation. Therefore, the **minimum administrative civil liability is \$6,000**.

**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 (\$6,000) and maximum (\$672,500) amounts. Without further investigation of the discharge, calculation of economic benefits, and additional staff time, the proposed Administrative Civil Liability is **\$72,000**.

**Table 1. Adjustment Factors**

<b>Adjustment Factors</b>	<b>Range</b>	<b>Factors Used</b>
Harm or Potential Harm to Beneficial Uses	0 to 5	3
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	7
Per Gallon Assessment	Minor, Moderate, Major	Minor
Per Day Assessment	Minor, Moderate, Major	Minor
Culpability	0.5 to 1.5	1.0
Cleanup and Cooperation	0.75 to 1.5	1.0
History of Violations	Subjective, based on history	1.0
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
<b>Violation Amount</b>		<b>\$72,000</b>