

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

**COMPLAINT R2-2014-1030  
ADMINISTRATIVE CIVIL LIABILITY  
IN THE MATTER OF**

**CALIFORNIA WATER SERVICE COMPANY  
UNAUTHORIZED DISCHARGE OF CHLORAMINATED POTABLE WATER TO  
POLHEMUS AND SAN MATEO CREEKS  
SAN MATEO COUNTY**

This complaint assesses an administrative civil liability (Complaint) pursuant to California Water Code section 13385 to California Water Service Company (hereinafter Discharger) for an unauthorized discharge of approximately 8,207,560 gallons of potable water with up to 2.6 milligrams per liter (mg/L) of residual choramines from its water main along Polhemus Road to Polhemus Creek and San Mateo Creek, located in the City of San Mateo. A \$3,060,700 liability is proposed for the alleged Water Code violation.

The Assistant Executive Officer of the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board) hereby gives notice that:

1. The Discharger is alleged to have violated provisions of law for which the Regional Water Board may impose civil liability pursuant to California Water Code section 13385. This Complaint is issued under Water Code section 13323 and proposes to assess \$3,060,700 in penalties for the violations cited based on the considerations described herein.
2. Unless waived, the Regional Water Board will hold a hearing on this matter on February 11, 2015, in the Elihu M. Harris Building, First Floor Auditorium, 1515 Clay Street, Oakland, 94612. You or your representative(s) will have an opportunity to be heard and to contest the allegations in this complaint and the imposition of civil liability by the Regional Water Board. You will be mailed an agenda approximately ten days before the hearing date. You must submit all comments and written evidence concerning this Complaint to the Regional Water Board not later than 5 p.m. on December 17, 2014, so that such comments may be considered. Any written evidence submitted to the Regional Water Board after this date and time will not be accepted or responded to in writing.
3. At the hearing, the Regional Water Board will consider whether to affirm, reject, or modify the proposed administrative civil liability, or whether to refer the matter to the Attorney General for judicial civil liability. You can waive your right to a hearing to contest the allegations contained in this Complaint by signing and submitting the waiver and paying the civil liability in full or by taking other actions as described in the waiver form.

**ALLEGATIONS**

4. The Discharger is a water purveyor and operates a drinking water system in San Mateo County, California. The Discharger operates and maintains a potable water main located along

Polhemus Road and Polhemus Creek, in the City of San Mateo. Polhemus Creek is a tributary of San Mateo Creek, and both are waters of the State and of the United States.

5. From October 25 through October 29, 2013, the Discharger discharged approximately 8,207,560 gallons of potable water from a cracked bell joint in a 12-inch diameter water main buried 10 to 12 feet below the west side shoulder of Polhemus Road, along the bank of Polhemus Creek. The discharge flowed laterally underground until it surfaced at the bank of Polhemus Creek. The discharge then it flowed into Polhemus Creek and downstream approximately 0.3 miles into San Mateo Creek.
6. The discharge contained up to 2.6 milligrams per liter (mg/L) of residual chloramines, which is over 100 times the U.S. Environmental Protection Agency's acute water quality criterion (0.019 mg/L). The chloraminated water killed at least 276 fish in San Mateo Creek, including 70 rainbow trout/steelhead, 94 Sacramento sucker, 96 sculpin and 16 stickle-back.
7. The dead fish were first observed in San Mateo Creek on October 29, 2013, by San Francisco Public Utilities Commission (SFPUC) biologists, about 0.8 miles downstream of the confluence of Polhemus and San Mateo Creeks (see SFPUC memo dated November 1, 2013). California Department of Fish and Wildlife (CDFW) staff collected the dead fish on October 29 and 30, and November 1, 2013. Some of the dead fish were found displaced and stranded outside of the wet channel, likely due to the temporary increase in flow resulting from the discharge. SFPUC notified the Regional Water Board of the dead fish at approximately 9:30 a.m. on October 29, 2013.
8. The discharge also caused significant bank erosion and sedimentation at the discharge site and downstream (see photographs 3-7 of Regional Water Board staff inspection report photographs dated November 1, 2013, documenting erosion and turbid water observed). The discharge rate for the chloraminated water release was approximately 2,280 gallons per minute, almost seven times higher than ambient creek flows. These increased flows eroded the stream bed and banks thereby increasing turbidity and depositing sediment downstream. High turbidity can impair the feeding ability of fish and interfere with fish respiration; excessive sedimentation can impair fish spawning and rearing habitats.
9. The discharge began at approximately 11:30 p.m. on October 25, 2013. The Discharger's automatic supervisory control and data acquisition (SCADA) system generated notifications of a suction pressure drop in the vicinity of the discharge as early as 11:51 p.m. on October 25, 2013. However, the Discharger did not thoroughly investigate the cause of this pressure drop, instead attributing it to algae clogged meter screens in the supply line owned and operated by SFPUC, which supplies the Discharger's lines near the discharge site. The Discharger did not contact SFPUC to inquire about potential algal clogging, and the discharge and SCADA notifications continued.
10. The discharge occurred along a relatively steep and heavily vegetated section of Polhemus Creek. Although visible to an observer standing on the road shoulder, the discharge may have been difficult to see from a vehicle. At least one Discharger staff member failed to observe the discharge between October 25 and October 28. A Discharger staff member finally discovered the discharge at approximately 9:00 a.m. on October 28, 2013. The Discharger closed the main

valve and stopped the discharge at approximately 9:45 a.m. on October 28, and then took steps to repair the broken water main.

11. Upon discovery of the discharge, the Discharger placed de-chlorination tablets in the path of the seeping water on the bank above Polhemus Creek, and visually inspected and collected water samples from the creek within approximately 500 yards of the discharge point.
12. The Discharger did not notify the Regional Water Board or other resource agencies until the afternoon of October 29, 2013, after being notified by SFPUC of the dead fish downstream. By that time, SFPUC had already contacted the Regional Water Board.
13. The Discharger initially indicated that the spill was less than 50,000 gallons, and occurred during one day. Regional Water Board staff responded to the Discharger on October 30, 2013, and required the Discharger to submit a spill report within 5 working days.
14. On November 1, 2013, Regional Water Board staff inspected the discharge and observed significant damage due to creek bank scouring. SFPUC prepared a report the same day documenting the scope of the fish kill.
15. On November 6, 2013, the Discharger submitted a spill report indicating the discharge to be limited to 43,200 gallons over a period of one day. Based on the magnitude of the creek bank scour observed during the November 1 site inspection, and on the documented fish kill, Regional Water Board staff asked the Discharger to thoroughly investigate its records, including flow meters and pressure gauges, and resubmit a spill report by November 14.
16. On November 18, 2013, the Discharger submitted a revised spill report stating that, based on the SCADA readings, the discharge occurred from October 25 through October 29, and totaled 8,207,560 gallons.

### **ALLEGED VIOLATIONS**

17. The Discharger violated Water Code section 13376, Clean Water Act section 301 and the Water Quality Control Plan for the San Francisco Bay Region by discharging approximately 8,207,560 gallons of potable drinking water containing up to 2.6 mg/L of chloramine into Polhemus Creek and San Mateo Creek on October 25 to 29, 2013.

### **LEGAL AUTHORITY**

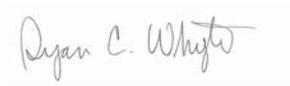
18. Water Code section 13376 prohibits the discharge of pollutants or dredged or fill materials to navigable waters of the United States except as authorized by waste discharge requirements or dredged or fill material permits. A person who violates Water Code section 13376 is liable civilly under Water Code section 13385, subdivision (a)(1).
19. The Regional Water Board's Water Quality Control Plan for the San Francisco Bay Region, Chapter 4, Table 4-1, prohibition 1, prohibits discharges with "particular characteristics of concern to beneficial uses ... to any non-tidal water ...." The Regional Water Board issued the

prohibition pursuant to Water Code section 13243. A person who violates prohibitions issued pursuant to Section 13243 is liable civilly under Water Code section 13385, subdivision (a)(4).

20. Section 301 of the Federal Water Pollution Control Act (“Clean Water Act”) (33 U.S.C. § 1311) prohibits the discharge of pollutants to waters of the United States except in compliance with a National Pollutant Discharge Elimination System (“NPDES”) permit. A person who violates Clean Water Act section 301 is liable civilly under Water Code section 13385, subdivision (a)(5).
21. Water Code section 13385, subdivision (c), authorizes the Regional Water Board to impose administrative civil liability for violations of section 13385, subdivision (a), in an amount not to exceed the sum of both of the following (1) ten thousand dollars (\$10,000) for each day in which each violation occurs; and (2) where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up and the volume discharged but not cleaned up exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.
22. Pursuant to Water Code section 13385, subdivision (e), in determining the amount of any civil liability imposed under section 13385, subdivision (c), the Regional Water Board is required to take into account the nature, circumstances, extent, and gravity of the violations, whether the discharges are susceptible to cleanup or abatement, the degree of toxicity of the discharges, and, with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violations, and other matters that justice may require.
23. On November 17, 2009, the State Water Board adopted Resolution No. 2009-0083 amending the Water Quality Enforcement Policy (Enforcement Policy). The Enforcement Policy was approved by the Office of Administrative Law and became effective on May 20, 2010. The Enforcement Policy establishes a methodology for assessing administrative civil liability. The use of this methodology addresses the factors that are required to be considered when imposing a civil liability as outlined in Water Code sections 13327 and 13385(e). The entire Enforcement Policy can be found at:  
[http://www.waterboards.ca.gov/water\\_issues/programs/enforcement/docs/enf\\_policy\\_final11179.pdf](http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final11179.pdf)
24. This enforcement action is exempt from the provisions of the California Environmental Quality Act, California Public Resources Code section 21000 et seq., in accordance with California Code of Regulations, Title 14, section 15321.
25. There are no statutes of limitation that apply to administrative proceedings. The statutes of limitation that refer to “actions” and “special proceedings” and are contained in the Code of Civil Procedure apply to judicial proceedings, not administrative proceeding. (See *City of Oakland v. Public Employees’ Retirement System* (2002) 95 Cal. App. 4th 29, 48; 3 Witkin, Cal. Procedure (4th ed. 1996) Actions, Section 405(2), p. 510.)

## **PROPOSED CIVIL LIABILITY**

26. **Maximum Liability:** The violation occurred over 4 days, and the volume discharged but not cleaned up is estimated at 8,207,560 gallons. Therefore, the maximum administrative civil liability the Regional Water Board may impose is \$82,105,600.
27. **Minimum Liability:** According to Water Code section 13385, subdivision (e), at a minimum, liability shall be assessed at a level that recovers the economic benefit or saving, if any, derived from the violations.
28. **Proposed Liability:** Based on consideration of the above facts, after applying the Enforcement Policy penalty methodology as set forth in Exhibit A, the Assistant Executive Officer of the Regional Water Board proposes that civil liability be imposed administratively on the Discharger in the amount of \$3,060,700.
29. Notwithstanding the issuance of this Complaint, the Regional Water Board and/or the State Water Board shall retain the authority to assess additional penalties for further unauthorized discharge for which penalties have not yet been assessed or for violations that may subsequently occur.



Dyan C. Whyte  
Assistant Executive Officer

November 17, 2014

Date

Exhibit A –Factors Considered to Determine Administrative Civil Liability

## EXHIBIT A

### **Alleged Violations and Factors Considered in Determining Administrative Civil Liability for California Water Service Company Unauthorized Discharge of Chloraminated Potable Water to Polhemus and San Mateo Creeks, San Mateo County**

The State Water Resources Control Board Water Quality Enforcement Policy (Enforcement Policy) establishes a methodology for assessing administrative civil liability based on the factors in Water Code sections 13327 and 13385 subdivision (e).

Each factor in the Enforcement Policy and its corresponding category, adjustment, or amount for the alleged violation is presented below.

#### **ALLEGED VIOLATION**

For five consecutive days, October 25 to October 29, 2013, the California Water Service Company (Cal Water) released approximately 8,207,560 gallons of potable water with up to 2.6 milligrams per liter (mg/L) of residual chloramines to Polhemus Creek and San Mateo Creek in violation of the Water Quality Control Plan for the San Francisco Bay Basin, Chapter 4, Prohibition 1, Water Code section 13376, and Section 301 of the Clean Water Act (33 U.S.C. § 1311). The discharge resulted from a cracked bell joint in a 12-inch-diameter water main buried 10 to 12 feet below the west side shoulder of Polhemus Road in the City of San Mateo.

#### **ADMINISTRATIVE CIVIL LIABILITY CALCULATION STEPS**

##### **Step 1 – Potential for Harm for Discharge Violations**

The “potential harm” factor considers the harm to beneficial uses that resulted, or may result, from exposure to the pollutants in the discharge, while evaluating the nature, circumstances, extent, and gravity of the violation(s). A three-factor scoring system is used for each violation or group of violations: (1) the harm or potential harm to beneficial uses; (2) the degree of toxicity of the discharge, and (3) whether the discharge is susceptible to cleanup or abatement.

##### 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 to beneficial uses is negligible (0) to major (5).

For the violation, the potential harm to beneficial uses is **above moderate (i.e., a score of 4)**. The discharge contained up to 2.6 mg/L residual chloramine, which is over 100 times the U.S. EPA’s acute water quality criterion of 0.019 mg/L. The chloraminated water killed at least 276 fish, including 70 rainbow trout /steelhead, 94 Sacramento sucker, 96 sculpin, and 16 stickleback in San Mateo Creek. The dead fish were first observed on October 29, 2013, by San

Francisco Public Utilities Commission (SFPUC) biologists in San Mateo Creek, about 0.8 miles downstream of the confluence of Polhemus and San Mateo creeks (See Attachment A, SFPUC biologist memo dated November 1, 2013). The California Department of Fish and Wildlife warden and biologists collected the dead fish on October 29 and 30, and November 1, 2013. Some of the dead fish were found displaced and stranded outside of the wet channel likely due to the temporary increase in flow resulting from the discharge.

Additionally, the discharge also caused significant bank erosion in Polhemus Creek and subsequently sediment deposition in both Polhemus and San Mateo creeks. (See photographs 3-7 of Attachment B, Regional Water Board staff inspection report photographs dated November 1, 2013, documenting erosion and turbid water observed.) The average discharge flow rate was approximately 2,280 gallons per minute<sup>1</sup>, which is almost seven times higher than the ambient creek flow rate<sup>2</sup>. The increased discharge eroded the stream bed and banks thereby increasing turbidity and depositing sediment downstream. High turbidity can impair the feeding ability of fish and interfere with fish respiration; excessive sedimentation can impair fish spawning and rearing habitats.

#### Factor 2: The Physical, Chemical, Biological or Thermal Characteristics for the Discharge

A score between 0 and 4 is assigned based on a determination of the risk or threat of the discharged material.

For the violation, the risk or threat of the discharge is **moderate (i.e., a score of 2)**. The discharge was potable water with chloramine at concentrations up to 2.6 mg/L. Chlorine or chloramine exhibits toxicity to aquatic life even at low concentrations, and the U.S. EPA Water Quality Criterion for chlorine or chloramine to prevent acute (lethal) effects to aquatic life is 0.019 mg/L.

#### Factor 3: Susceptibility to Cleanup or Abatement

A score of 0 is assigned for this factor if 50 percent or more of the discharge is susceptible to cleanup or abatement. A score of 1 is assigned if less than 50 percent of the discharge is susceptible to cleanup or abatement. This factor is evaluated regardless of whether the discharge was actually cleaned up or abated.

For the violation, the discharge was **not susceptible to cleanup or abatement (i.e., factor of 1)**. The discharged material flowed into and commingled with ambient water flowing in Polhemus and San Mateo creeks. The discharge occurred at the top of the Polhemus Creek bank and less than 0.3 mile from the confluence with San Mateo Creek.

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<sup>1</sup> Average discharge flow rate was calculated based on a total discharge volume of 8.21 million gallons occurring over a period of approximately 60 hours.

<sup>2</sup> Based on the United States Geological Survey's flow gauge data, the average water flow rate of San Mateo Creek upstream of the confluence of Polhemus Creek between October 25 and 29, 2013, was approximately 0.79 cubic feet per second or 355 gallons per minute. The creek ambient flow data was obtained at <http://waterdata.usgs.gov/ca/nwis>, USGS 11162753 San Mateo C BL LO Crystal Spring RES NR San Mateo California.

## Step 2 – Assessments for Discharge Violations

When there is a discharge, the Regional Water Board determines an initial liability amount on a per-gallon and/or a per-day basis using the sum of the Potential for Harm scores from Step 1 and a determination of degree of Deviation from Requirement.

For the violation, the sum of the three factors from Step 1 is 7. The degree of Deviation for the violation is **moderate**. The requirement violated involved, among other things, a discharge of pollutants without authorization. The intent of this requirement is to allow the Regional Water Board an opportunity to issue a permit establishing discharge requirements to protect water quality and beneficial uses. The discharge was unintentional, so failure to obtain a permit only partially compromised the effectiveness of the requirement. This is because had the Discharger applied and received a permit, the discharge would have likely violated the permit. Moreover, the general prohibitions on discharges to any non-tidal water and discharges without an NPDES permit were only partially compromised, because Cal Water was not permitted and was not under specific order prohibiting the discharge. The application of the "moderate" deviation factor here is due to the unique circumstances of this case, and is not intended to be precedential.

For the violation, the Water Board Prosecution Staff used both per-gallon and per-day factors. The resulting per-gallon and per-day multiplier factor is 0.2, based on a Potential for Harm score of 7 and a "**moderate**" Deviation from Requirement.

### Initial Liability Amount

The Enforcement Policy allows for an adjusted maximum per gallon assessment for "High Volume Discharge." This discharge qualifies as a high volume discharge because it is similar to recycled water and reducing the maximum amount does not result in an inappropriately small penalty. So, a maximum \$1 per gallon is used to determine the initial liability. The initial liability for the violation is calculated on a per-gallon and per-day basis as follows:

Per Gallon Liability:  $(8,206,560 \text{ gallons}) \times (0.2) \times (\$1/\text{gallons}) = \$1,641,312$

Per Day Liability:  $\$10,000/\text{day} \times (0.2) \times (5 \text{ days}) = \$10,000$

Total Initial Liability = \$1,651,312

## Step 3 – Per Day Assessment for Non-Discharge Violations

This assessment is for a discharge violation. Step 3 applies to non-discharge violations.

#### **Step 4 – Adjustments to Determine Initial Liability for Violation**

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

##### Culpability

Higher liabilities should result from intentional or negligent violations as opposed to accidental violations. A multiplier between 0.5 and 1.5 is used, with a higher multiplier for negligent behavior.

For the violation, the culpability multiplier is **1.2**, because Cal Water did not exercise reasonable care in reacting to a pressure drop it detected on October 25, 2013, the first day of the discharge. The discharge continued until a Cal Water operator noticed water surfacing through the road bed on Polhemus Road and took actions to stop and fix the problem. At least one Cal Water inspector failed to observe the discharge during inspections between October 25 and October 28. Moreover, Cal Water’s supervisory control and data acquisition (SCADA) system had sent notifications to its operators and managers of a suction pressure drop for pump MPS 26 beginning on October 25, 2013, at or around 11:51 p.m. Despite this notification, Cal Water did not thoroughly investigate the cause of the pressure drop and instead stated that it attributed the pressure drop to algae clogging meter screens on the supply line owned and operated by the SFPUC. Cal Water provided no evidence to support that this was a reasonable assumption to make at the time. Cal Water also did not consult with SFPUC staff at the time about its suspicion of algal growth or screen clogging within the SFPUC supply system<sup>3</sup>. Evidence shows that Cal Water staff did not contact SFPUC until October 28, 2013, after it discovered the discharge (based on Cal Water’s June 14, 2014, additional information report). SFPUC then sent crews to inspect its own system on the same day it received a call from Cal Water and found no problem within SFPUC’s system and communicated its findings to Cal Water crews working to repair the broken pipeline at the shoulder of Polhemus Road.

##### Cleanup and Cooperation

This factor reflects the extent to which a discharger voluntarily cooperated in returning to compliance and correcting environmental damage. A multiplier between 0.75 and 1.5 is used, with a higher multiplier when there is a lack of cooperation.

For the violation, the cleanup and cooperation factor multiplier is **1.4**.

Given the relative proximity of the discharge point to Polhemus and San Mateo creeks, there was little opportunity to “cleanup” or mitigate impacts to the creeks. Cal Water did deploy dechlorination tables in its response on October 28, 2013, immediately prior to closing the valve and stopping the discharge. Cal Water did not inspect far downstream on Polhemus Creek, and it

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<sup>3</sup> On August 6, 2014, Water Board asked Cal Water to provide all communication records between SFPUC and Cal Water staff between October 25 and October 28, 2013, concerning clogging of meter screens and algal bloom in SFPUC’s water supply system. Cal Water could provide no such records.

did not inspect San Mateo Creek at all, and Cal Water did not make any attempts to place dechlorination tablets in the creeks.

Overall, Cal Water's cooperation in the investigation was poor. First, it did not thoroughly review past records to accurately and timely report the incident. Second, it was not forthcoming with information to Water Board staff which impeded Water Board staff's investigation and assessment of the extent and impacts of the discharge. Details of each are as explained below:

- (1) Cal Water discovered the discharge on October 28, 2013, at or around 9:00 a.m., but did not thoroughly review its records to accurately determine the full magnitude and potential for harm from the discharge. It simply assumed the discharge occurred for only one day at 20 to 30 gallons per minute based on visual observations. Because of this incorrect assumption, its inspection of Polhemus Creek involved just the immediate area within 500 yards of the discharge point.
- (2) Cal Water did not timely notify the Water Board or other resource agencies of the discharge after it discovered the discharge. Cal Water only provided notice to the Regional Water Board 5 hours after it was notified by the SFPUC on October 29, 2013, at or around 9:30 a.m., that SFPUC biologists had discovered dead fish during a routine fish population survey in San Mateo Creek. These dead fish were about 1.1 mile downstream of the discharge point.
- (3) On October 29, 2013, at or around 2:30 p.m., Water Board staff received a telephone message from Dale Gonzales with Cal Water of the discharge indicating that the estimated volume was less than 50,000 gallons for one day, and that the SFPUC had found dead fish downstream. Water Board staff responded to Mr. Gonzales' message on October 30, 2013, and required Cal Water to submit a spill report within five working days.
- (4) On November 1, 2013, Water Board staff inspected the scene and observed significant creek bank erosion from the incident. Water Board staff asked Mr. Tony Carrasco, Cal Water's District Manager, how it determined the volume to be 43,200 gallons and duration to be only one day considering the significant amount of erosion. Mr. Carrasco said Cal Water inspects the local control system every day around 9:15 a.m. Based on this inspection routine, Mr. Carrasco indicated that Cal Water's operator, Mr. Mike Utz, inspected the local control system on Sunday, October 27, 2013, around 9:15 a.m., and Mr. Utz did not notice or observe any leak that day. Mr. Carrasco further indicated that Mr. Utz discovered the leak on Monday, October 28, 2013, around 9:15 a.m. during the routine daily inspection. Mr. Utz was not available for an interview during the scheduled site inspection for Water Board staff to verify the information.<sup>4</sup> Mr. Carrasco added that Cal Water staff had spoken with Mike Weisenberger with the SFPUC about the incident.

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<sup>4</sup> Water Board staff later learned that Mr. Carrasco's above statement was in error. In fact, the discharge was discovered by Cal Water Operator Mr. Alex Tomaloff not Mr. Utz based on Cal Water's June 4, 2014, submittal. Mr. Utz is the local manager for the Bayshore area, and not on duty operator during the days of discharge.

Upon returning from the site inspection on November 1, Water Board staff contacted Mr. Weisenberger (SFPUC) to ask if he was contacted by Cal Water staff the week of October 20 – 25, and to ask about the nature of the communication. Mr. Weisenberger confirmed that he was contacted by Cal Water but could not remember the exact date only that it was on a weekday. Mr. Weisenberger further indicated that Cal Water staff had asked about a pressure drop in the system, and, following the Cal Water phone call, he sent his inspector to check SFPUC's system and found no problem.

- (5) On November 6, 2013, Cal Water submitted the spill report for the incident reporting it as 43,200 gallons for one day. However, based on Water Board staff inspection observation of significant creek bank scouring, the magnitude of the fish kill, and evidence from SFPUC staff that Cal Water operators had observed a pressure drop in its system, Water Board staff required Cal Water to thoroughly investigate its records, including flow meters and pressure gauges, and resubmit a spill report by November 14, 2013.
- (6) On November 18, 2013, Cal Water resubmitted a spill report that revised its discharge to approximately 8,207,560 gallons and for five days. The revised values were based on Cal Water SCADA readings.
- (7) On April 3, 2014, Water Board staff required that Cal Water provide copies of its records including its SCADA data, a chronological account of Cal Water personnel actions and communications just before and during the incident, and a narrative explanation of what happened.
- (8) On May 15, 2014, Water Board staff served Cal Water with a subpoena for the information it requested on April 3, 2014, after several reminders and waiting a reasonable time for the information and not receiving it.
- (9) On June 4, 2014, Cal Water submitted the additional information and records originally requested by Water Board staff on April 3, 2014.
- (10) On August 6, 2014, Water Board staff requested Cal Water provide clarification and additional records to substantiate some of the statements it made in its June 4 submittal.
- (11) On August 11, 2014, Cal Water provided the additional records and clarifications requested, but only after at least six reminders from Water Board staff.

### History of Violations

This factor is used to increase the liability when there is a history of repeat violations using a minimum multiplier of 1.1.

For the violation, the history factor multiplier is **1.1** because Cal Water had a similar violation in the past. In 2009, the Water Board issued administrative civil liability Order R2-2009-0006

against Cal Water imposing a \$200,000 fine for an unplanned discharge of chlorinated potable water to Polhemus Creek that also resulted in a fish kill.

### **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**

Total Base Liability = \$1,651,312 (Initial Liability) x 1.2 (Culpability Multiplier) x 1.4 (Cleanup and Cooperation Multiplier) x 1.1 (History of Violations Multiplier)

Total Base Liability = **\$3,051,625**

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

The Enforcement Policy provides that if the Water Board has sufficient financial information to assess the violator's ability to pay the Total Base Liability, or to assess the effect of the Total Base Liability on the violator's ability to continue in business, then the Total Base Liability amount may be adjusted downward if warranted.

In this case, the Water Board Prosecution Staff has sufficient information to suggest Cal Water has the ability to pay the proposed liability. Cal Water is the largest subsidiary of the California Water Service Group, which is the third largest investor-owned water utility in the United States. Cal Water Group has more than 490,000 customers, more than \$500 million in annual revenue, and more than \$1.5 billion in gross utility plant assets, compared to \$434 million in long-term debt, according to the corporation annual report. In 2013, Cal Water Group reported its annual net income of \$47.254 million.<sup>5</sup> The proposed liability is about 6 percent of this net income.

### **Step 7 – Other Factors as Justice May Require**

Regional Water Board prosecution staff incurred \$9,038 in staff costs to investigate this case and prepare this analysis and supporting information. This consists time spent by all members of the prosecution team based on the low end of the salary range for each classification. The Assistant Executive Officer intends to seek additional liability for staff costs incurred in bringing the matter to settlement or hearing. Although the final amount for such costs cannot be determined until completion of the matter, such costs could be quite substantial when additional investigation and analysis is required or if there is a hearing on this matter before the Regional Water Board.

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<sup>5</sup> Financial data taken from California Water Service Group's 2013 Annual Report, page 27 (available at <http://ir.calwatergroup.com/getattachment/a2c7f9cf-bb3d-4504-a8f5-e9e849a1fc89/2013-Annual-Report> )

### **Step 8 – Economic Benefit**

The Enforcement Policy directs the Water Board to determine any economic benefit associated with the violations and to recover the economic benefit gained plus 10 percent in the liability assessment.

We did not find evidence of significant economic benefit associated with the violation. The alleged violation was an accident without a direct cause associated with economic benefit. Reasonable diligence in investigating the cause of the pressure drop detected on October 25 would have resulted in earlier detection of the discharge, which in turn would have resulted in earlier outlay of funds to fix the break by four days and higher costs for completing the fix on a weekend. This time value savings and avoidance of higher weekend costs are negligible relative to the calculated Total Base Liability.

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

#### **a) *Minimum Liability Amount***

The Enforcement Policy requires that the minimum liability amount imposed not to be below a Discharger's economic benefit plus 10 percent. The proposed liability is substantially more than Cal Water's economic benefit plus 10 percent. The mandatory minimum penalty statute does not apply to this discharge because it is unauthorized.

#### **b) *Maximum Liability Amount***

The maximum administrative civil liability amount is the maximum amount allowed by Water Code section 13385: (1) \$10,000 for each day in which the violation occurs; and (2) \$10 for each gallons exceeding 1,000 gallons that is discharged and not cleaned up. The maximum liability for the violation is \$82,105,600.

### **Step 10 – Final Liability Amount**

The final liability amount proposed is **\$3,060,700 (rounded)** for the discharge to Polhemus and San Mateo creeks of over 8 million gallons of chloraminated potable water on October 25 to 28, 2013. This amount is based on consideration of the penalty factors discussed above, it is the sum of the Total Base Liability plus staff costs, and it is within the maximum and minimum liability amounts.

Attachment A – SFPUC biologist memo dated November 1, 2013

Attachment B – Regional Water Board staff inspection photographs dated November 1, 2013

## **ATTACHMENT A**

San Francisco Public Utilities Commission  
Biologist Memo Dated November 1, 2013



Natural Resources and Lands Management Division  
 Water Enterprise

November 1, 2013

On the morning of Tuesday, October 29<sup>th</sup>, just prior to conducting a routine fish population survey on San Mateo Creek, SFPUC biologists were notified by Britt Brown, an SFPUC CMB employee, that there were dead fish in the creek. He had noted the fish while overseeing contractors conducting routine vegetation maintenance along the creek bank, near Casey Quarry, just downstream of the CS2 transmission pipeline (Figure 1). SFPUC Biologists confirmed that there were 5 dead fish in the stream; one trout (*O. mykiss*) and four Sacramento Sucker (*C. occidentalis*) (Figure 2).

At this point, SFPUC biologists abandoned their population survey and began to survey the stream. From 0905 to 0935, SFPUC biologist Randall Renn entered the stream at Woodbridge Rd. and surveyed upstream for approximately 0.22 miles (Figure 1, Survey A). Along this reach, 19 dead fish were counted (Table 1) and five of those fish were noted as stranded on the stream bank (Figure 3). No aquatic vertebrates or invertebrates (crayfish) were noted. From 1025 to 1135, SFPUC biologist Aaron Brinkerhoff entered the stream at Crystal Springs Terrace and surveyed upstream for approximately 0.26 miles (Figure 1, Survey C). Along this reach, 30 dead fish were counted (Table 1), and no aquatic vertebrates or invertebrates (crayfish) were noted. Along both of these reaches, some fish were not intact and had appeared to be partially scavenged. Along survey reaches A and C, dead fish had also settled into debris piles at the bottom of pools.

At 1002, SFPUC biologist Randall Renn arrived at the Cal Water facility on Polhemus Rd. (Figure 1) and noted the ground appeared both saturated and recently graded (Figure 4). The creek bank just below the graded area was heavily eroded with large amounts of fine sediment observed in and around the creek and, what appeared to be, dechlorination tablets were observed placed in various locations along the eroded hillside (Figure 5). He then surveyed downstream along Polhemus Creek to the confluence of San Mateo Creek. No aquatic vertebrates or invertebrates (crayfish) were noted. He then proceeded upstream along San Mateo Creek, for a total of approximately 0.37 miles (Figure 1, Survey B), where numerous live fish, including trout, were noted.

From 1035 to 1105, SFPUC biologist Scott Taylor gathered water quality data at two locations on Polhemus Creek, up and downstream of the Cal Water Facility location, and at two locations on San Mateo Creek, up and downstream of the confluence with Polhemus Creek (Table 2).

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SFPUC biologists did not inspect for aquatic insects. No reptiles or amphibians were noted within the surveyed reaches.

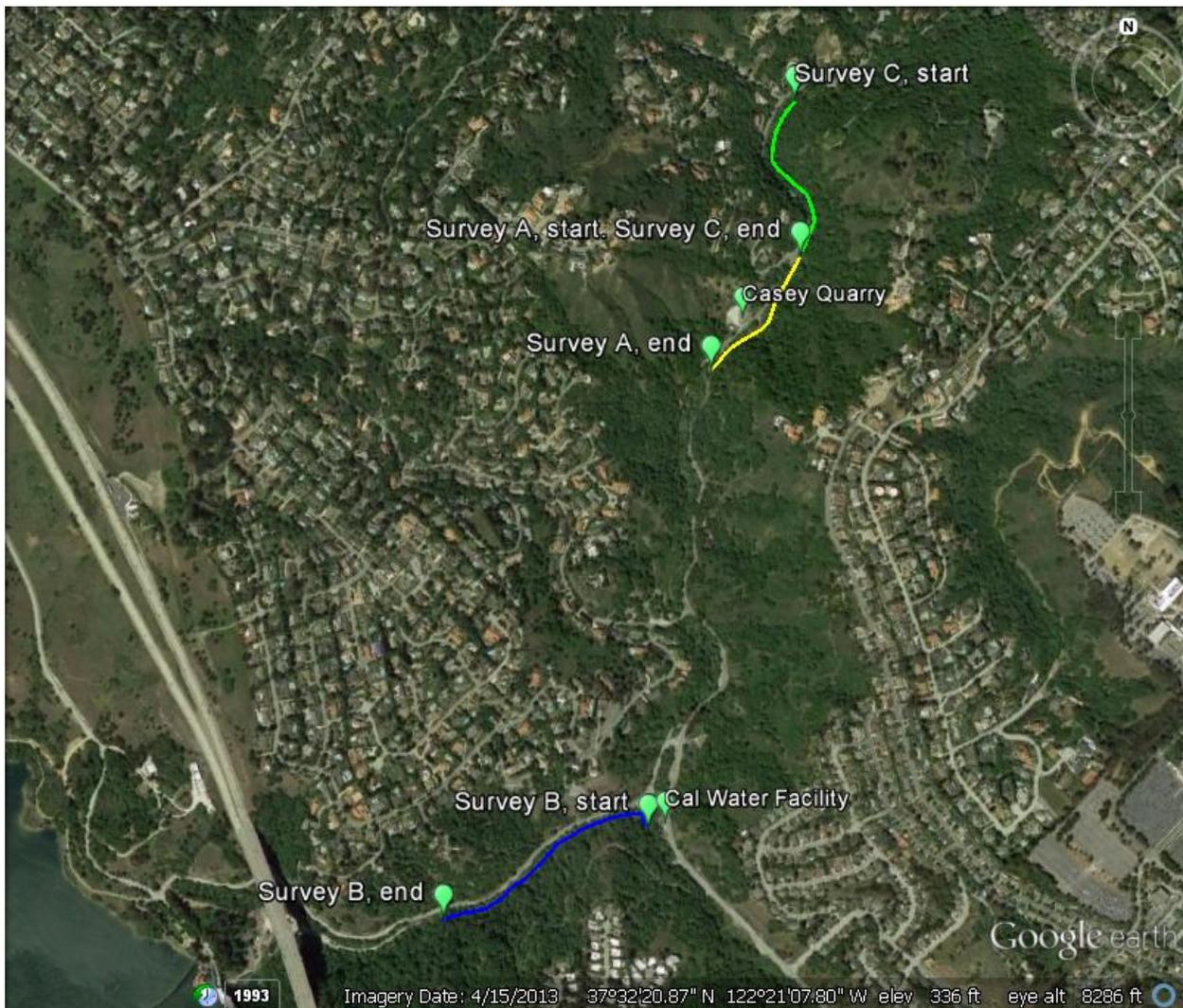


Figure 1. Locations of site incidents and survey reaches.



Figure 2. Dead fish noted by SFPUC employee Britt Brown, located just downstream of CS2 transmission line crossing San Mateo Creek.

Table 1. Total fish noted within survey reaches

Survey reach A	RTR	SSU	PSC	Total fish
mortalities	4	9	6	19
size ranges (mm)	85-175			
Survey reach C	RTR	SSU	PSC	Total fish
mortalities	10	12	8	30
size ranges (mm)	95-150			
Total mortalities observed				49



Figure 3. Dead trout (*O. mykiss*) noted stranded on the stream bank.



Figure 4. Cal Water facility on Polhemus Road, adjacent to Polhemus Creek, stream right.



Figure 5. Tablets noted in the eroded stream bank, just below the Cal Water facility on stream right of Polhemus Creek.

Table 2. Water quality data.

Time	Location	Temp	pH	DO	CL2
1035	Polhemus Creek- pool just downstream of Cal Water site	11.37	8.38	10.52	0.19
1050	Polhemus Creek- approx. 100ft. Upstream of Cal Water site				0.05
1055	San Mateo Creek- approximately 100 ft. upstream of Polhemus confluence	12.73	7.7	9.19	0.07
1105	San Mateo Creek- approximately 120 ft. downstream of Polhemus confluence	12.7	7.8	9.35	0.08

## **ATTACHMENT B**

Regional Water Board Staff Inspection Photographs  
November 1, 2013

**Inspection Photographs**  
**Chlorinated (Potable) Water Discharge to Polhemus and San Mateo Creeks**  
**California Water Service Company**

**Taken by Habte Kifle on November 1, 2013**

Photographs 1 and 2: The point of discharge, less than three feet from the top of Polhemus Creek bank. The green vegetation outlines the creek, and Cal Water's pump and control system that is inspected daily is right upgradient of the enclosure shown in the upper corner of photograph 2.



Photograph 3: Recent backfill of an erosion gully caused by the discharge.



Photographs 4 and 5: Recent erosion of creek banks downstream from the point of discharge (Photographs 1 and 2).



Photograph 6: A recent sediment deposition in a pool along Polhemus Creek, downstream of the point of discharge (Photographs 1 and 2).



Photograph 7: Vegetation in the flood zone flattened by the discharge.



Photograph 8: Arrows show the locations of three undissolved dechlorination tablets in the creek that were placed by a Cal Water spill response crew.

