

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

**ADMINISTRATIVE CIVIL LIABILITY
COMPLAINT NO. R2-2021-1023
(COMPLAINT)**

**IN THE MATTER OF
CITY OF SAN MATEO
UNAUTHORIZED DISCHARGE TO SAN MATEO CREEK
SANTA CLARA COUNTY**

This Complaint to the City of San Mateo (Discharger) assesses administrative civil liability pursuant to California Water Code (Water Code) section 13385. The Complaint addresses an unpermitted discharge of approximately 7,720 gallons of potable water and construction site pollutants. The assessed liability is \$73,700.

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 Water Code section 13385.
2. This administrative civil liability complaint is issued under the authority of Water Code section 13323.
3. Section 301 of the Clean Water Act (33 U.S.C. § 1311) and Water Code section 13376 prohibit the discharge of pollutants to surface waters except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.

ALLEGATIONS

4. The Discharger is a city located in San Mateo County, and is the owner and operator of municipal pavement projects in the city.¹ In connection with a street rehabilitation project in its jurisdiction, the Discharger contracted Interstate Grading and Paving, Inc. of South San Francisco (Contractor) to complete construction work that included the reconstruction of Franklin Street (Project).²
5. California Water Service of San Jose (Cal Water), a water purveyor for the Discharger, owns and operates a water distribution system that includes pipelines along Fairfax Avenue and Franklin Street; the Fairfax Avenue pipeline crosses beneath Franklin Street and connects with the Franklin Street pipeline beneath the sidewalk in front of 322 and 316 Franklin Street residences.³

¹ City of San Mateo Website, Paving Our City's Roadways, [City of San Mateo Paving-Our-Citys-Roadways](#) (November 24, 2021).

² City of San Mateo, *Five-Day Report of Unauthorized Discharge – City of San Mateo*, June 2, 2021.

³ California Water Service, *Cal Water San Mateo Response to SWRCB – City of San Mateo Construction Site Discharge*, June 11, 2021.

6. On May 18, 2021, the Contractor ruptured the water pipeline along Fairfax Avenue while carrying out work on Franklin Street for the Discharger. According to a Cal Water report on the discharge, the Contractor was excavating soil in the vicinity of the pipeline when it parked heavy equipment (a scraper) above the pipeline, and the weight and movement of the heavy equipment caused the pipeline to rupture. The rupture of the pipeline resulted in the discharge of approximately 7,720 gallons of polluted water from the Project to San Mateo Creek. Potable water flowing from the ruptured pipeline was chlorinated, and it picked up construction site pollutants (cement, soil, and pulverized asphalt) before flowing into a storm drain and discharging to San Mateo Creek.⁴ The details of this violation are discussed in Exhibit A, which is attached and incorporated herein by this reference.
7. Prior to the discharge, Cal Water had marked the locations of its pipelines at the Project site on six occasions during January through April 2021.³

ALLEGED VIOLATION

8. Prosecution staff alleges that the unauthorized discharge, as described in paragraph 6 and set forth in the attached Factors Determining Civil Administrative Liability (Exhibit A), constitutes a violation of Clean Water Act section 301 (33 U.S.C. § 1311) and Water Code section 13376.
9. Clean Water Act section 301 prohibits the discharge of pollutants to surface waters except in compliance with an NPDES permit. The discharge on May 18, 2021, was not authorized by an NPDES permit.
10. Water Code section 11376 requires that any person “who discharges pollutants or proposes to discharge pollutants to the navigable waters of the United States within the jurisdiction of this state” must file a report of waste discharge. The Discharger did not file a report of water discharge prior to the discharge.

LEGAL AUTHORITY

11. Water Code section 13323 authorizes the Regional Water Board to issue an administrative civil liability complaint under its statutory authority. This Complaint alleges the Discharger’s acts, or failures to act, constitute violations of law authorizing administrative civil liability.
12. Issuance of this Complaint is an enforcement action and is therefore exempt from the provisions of the California Environmental Quality Act (Pub. Res. Code Section 21000 et seq.) pursuant to Title 14, California Code of Regulations sections 15308 and 15321, subdivision (a), paragraph (2).
13. Pursuant to Water Code section 13385(a), any person who violates Clean Water Act section 301 or Water Code section 13376 is subject to administrative civil liability pursuant to Water Code section 13385(c), in an amount not to exceed the sum of both the following: (1) ten thousand dollars (\$10,000) for each day in which the

⁴ City of San Mateo, Five-Day Report of Unauthorized Discharge, June 2, 2021.

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.

PROPOSED CIVIL LIABILITY

14. Pursuant to Water Code section 13385(e) and in accordance with the State Water Board Water Quality Enforcement Policy effective October 5, 2017 (Enforcement Policy), prosecution staff recommends that the Regional Water Board impose a civil liability of \$73,700 on the Discharger for the 7,720 gallons of polluted water discharged to San Mateo Creek on May 18, 2021. Exhibit A to this Complaint explains the factors considered and the values assessed to calculate the proposed liability in accordance with the Enforcement Policy and Water Code section 13327.

Dated this 15th Day of December 2021

THOMAS E. MUMLEY
Assistant Executive Officer

*Signed pursuant to the authority
delegated by the Executive Officer to
the Assistant Executive Officer*

Exhibit A Attachment: Factors Determining Civil Administrative Liability

EXHIBIT A

FACTORS IN DETERMINING ADMINISTRATIVE CIVIL LIABILITY

CITY OF SAN MATEO UNAUTHORIZED DISCHARGE OF POTABLE WATER AND CONSTRUCTION POLLUTANTS INTO SAN MATEO CREEK SAN MATEO, SAN MATEO COUNTY

The State Water Resources Control Board Water Quality Enforcement Policy ([Enforcement Policy](#)) establishes a methodology for assessing administrative civil liability. Use of the methodology addresses the factors required by Water Code sections 13327 and 13385, subdivision (e). Each factor in the Enforcement Policy and its corresponding category, adjustment, and amount for the alleged violation is presented below. The Enforcement Policy should be used as a companion document in conjunction with this administrative civil liability assessment since the penalty methodology and definition of terms are not replicated herein.

ALLEGED VIOLATION

On May 18, 2021, approximately 7,720 gallons of potable (chlorinated) water and construction site pollutants discharged to San Mateo Creek as follows.¹ The discharge occurred at a City of San Mateo (Discharger) street rehabilitation project when its contractor (Interstate Grading & Paving, Inc.) parked heavy equipment over a 6-inch, underground water pipeline (owned by Cal Water), and the weight and movement of the equipment caused the pipeline to rupture. The pipeline ruptured near 322 Franklin Street, and potable water flowed approximately 225 feet across an unpaved surface. As the water flowed across the unpaved surface, it picked up pollutants from construction materials, such as cement, soil, and pulverized asphalt. The polluted water entered the storm drain system and discharged to San Mateo Creek at an outfall near the intersection of Arroyo Court and Dartmouth Road, approximately 0.35 miles from the pipeline rupture.

The discharge violated California Water Code (Water Code) section 13376 and Clean Water Act section 301. The Discharger is subject to administrative civil liabilities for the unauthorized discharge pursuant to Water Code section 13385, subdivisions (a)(1) and (a)(5). The administrative civil liability calculated using the Enforcement Policy methodology is \$73,700.

¹ City of San Mateo, *Five-Day Report of Unauthorized Discharge – City of San Mateo*, June 2, 2021.

PENALTY FACTOR	SCORE	DISCUSSION
Degree of Toxicity of Discharge	4	<p>Degree of Toxicity: significant</p> <p>The discharge posed significant risk to receptors based on its chemical and physical characteristics. The discharged material was a mixture of potable water, cement, and other construction materials that included soil and pulverized asphalt, which can all acutely affect aquatic life.²</p> <ul style="list-style-type: none"> • Potable Water - Cal Water disinfects potable water in its San Mateo pipelines with chloramine. The average level of chloramine in water throughout the distribution system is 2.5 mg/L.³ For chlorine, the U.S. EPA water quality criterion for acute (one-hour) effects to aquatic life is 0.019 mg/L. The concentration of chloramine in the discharge was two orders of magnitude greater than this value. • Cement – Cement raised the pH of the potable water, which is normally around 9.3 within Cal Water’s water distribution system.³ Cement has a pH greater than 11.5 and reacts slowly with water, forming hydrated compounds, and producing a strong alkaline solution.⁴ Contact with uncured cement is known to significantly increase the pH of waterways and have an adverse effect on aquatic life.⁵ • Turbidity – Construction materials (e.g., soil and pulverized asphalt) were entrained within the discharge as suspended solids. Observations and photographs² showed that the suspended solids significantly increased the turbidity of the discharge. Turbidity can damage fish gills and impede fish respiration.⁶
Actual Harm or Potential Harm to Beneficial Uses	4	<p>Harm or Potential for Harm: above moderate</p> <p>The discharge caused above-moderate harm to beneficial uses because it significantly degraded water quality in San Mateo Creek and was toxic to aquatic life. The Basin Plan designates the following beneficial uses of San Mateo</p>

² City of San Mateo, *Five-Day Report of Unauthorized Discharge – City of San Mateo*, June 2, 2021.
³ California Water Service, *2020 Water Quality Report: Bayshore District, San Mateo System*, 2020.
⁴ Lehigh Hanson, *Safety Data Sheet: Portland Cement*.
⁵ Caltrans Division of Research: Innovation and System Information, *Determining the Appropriate Amount of Time to Isolate Portland Cement Concrete from Receiving Waters*, 2016.
⁶ Berg, L. 1982. The effect of exposure to short-term pulses of suspended sediment on the behavior of juvenile salmonids. P. 177-196 in G.F. Hartman et al. [eds.] *Proceedings of the Carnation Creek workshop: a ten-year review*. Department of Fisheries and Oceans, Pacific Biological Station, Nanaimo, Canada.

PENALTY FACTOR	SCORE	DISCUSSION
		<p>Creek: freshwater replenishment (FRSH), cold freshwater habitat (COLD), fish migration (MIGR), preservation of rare and endangered species (RARE), fish spawning (SPWN), warm freshwater habitat (WARM), wildlife habitat (WILD), water contact recreation (REC1), and non-contact water recreation (REC2). The significant impact on aquatic life was observed on May 18 and 19, when an ecological assessment counted 97 dead fish and one dead crayfish in the creek within 1,000 feet downstream of the discharge location.⁷</p> <p>Some combination of residual chlorine, pH, and turbidity caused acute toxicity in San Mateo Creek. Water quality measurements taken about one hour after Cal Water stopped the discharge did not quantify the discharge toxicity but did record the residual effects of the discharge. Measurements taken by WRA, Inc. detected chlorine (0.01 mg/L) near the U.S. EPA water quality criterion for acute (one-hour) effects to aquatic life (0.019 mg/L), pH (ranging from 10.4 to 12.4)⁸ above the Basin Plan water quality objective (8.5) in instream sediment-water samples collected at the discharge location, and turbidity downstream of the discharge (2.21 NTU) about 25 percent higher than turbidity upstream of the discharge (1.76 NTU). These measurements represent a level of impairment that was unsuitable for a healthy aquatic ecosystem.</p>
Susceptibility to Cleanup or Abatement	1	<p>Susceptibility to Cleanup: no</p> <p>The discharge was not susceptible to cleanup because it quickly comingled with water in San Mateo Creek and flowed downstream. More than 50 percent of the pollutants in the discharge could not be effectively removed or cleaned up.</p>
Per-Gallon and Per-Day Factors for Discharge Violations	0.8 and 0.8	<p>The per-gallon and per-day factors come from Enforcement Policy Tables 1 and 2, and are based on the sum of the toxicity, harm, and susceptibility factors above (totaling 9) and a “major” deviation from requirement (discussed below).</p>

⁷ City of San Mateo, *Five-Day Report of Unauthorized Discharge – City of San Mateo*, June 2, 2021.

⁸ On May 25, the Discharger’s Consultant (WRA, Inc.) evaluated sediment at the outfall to determine how sediment in the discharge altered the pH of the discharge. When WRA, Inc. added tablespoons of sediment from the discharge location to 24-ounce creek water samples, the pH rose from 7.8 (with no addition of sediment), to 10.4 (with addition of 1 tablespoon of sediment), and up to 12.4 (with addition of 8 tablespoons of sediment).

PENALTY FACTOR	SCORE	DISCUSSION
		<p>Deviation from Requirement: major</p> <p>The deviation from requirement was major because the discharge was prohibited by the Water Code, Clean Water Act, and Basin Plan, rendering these requirements to protect waters of the State and United States ineffective.</p> <ul style="list-style-type: none"> • The Discharger did not file a report of waste discharge for authorization to discharge to waters of the United States in accordance with Water Code sections 13260 and 13376. • Clean Water Act section 301 and Water Code section 13376 prohibit the discharge of pollutants to waters of the United States except as authorized by an NPDES permit. • Basin Plan Prohibition 9 (Table 4-1) prohibits the discharge of earthen materials (bottom deposits, turbidity, water discoloration) that unreasonably affect or threaten beneficial uses.
High Volume Discharge Adjustment	Not Applicable	The maximum of \$10 per gallon is appropriate because the discharge volume was well below 100,000 gallons and use of a high-volume adjustment would result in an inappropriately small penalty.
Days of Violation	1	The discharge occurred on one day, May 18, 2021.
Initial Liability	\$61,800 (rounded)	<p>The initial liability is calculated as follows: per-day factor multiplied by gallons discharged to surface water (minus 1,000 gallons) multiplied by maximum per-gallon liability, plus per-day factor multiplied by maximum per-day liability (\$10,000) multiplied by number of days of discharge.</p> <p>Initial Liability:</p> <p>\$61,760 = (0.8 x 6,720 gal x \$10/gal) + (0.8 x \$10,000/day x 1 day)</p>
Adjustments for Discharger Conduct		
Culpability	1.1	A 10 percent increase is assessed because the Discharger and its contractor (Interstate Grading and Paving, Inc.) did not adequately protect a water distribution pipeline from construction activities. Cal Water, the owner of the water distribution system, marked its pipelines at the construction

PENALTY FACTOR	SCORE	DISCUSSION
		<p>site on six separate occasions prior to May 18, 2021.⁹ Despite having this information, the Discharger allowed heavy construction equipment to rupture the pipeline.</p> <p>A reasonable and prudent discharger would have protected the underground pipeline from construction activities (e.g., by maintaining field markings, referencing utility maps, and avoiding its location). By parking heavy equipment directly over the pipeline, the Discharger or its contractor failed to provide the reasonable forethought and ordinary care that would have prevented the unauthorized discharge.</p>
History of Violations	1.0	A neutral multiplier is assessed because the Discharger does not have a history of violations.
Cleanup and Cooperation	1.0	<p>A neutral multiplier is assessed because the Discharger took reasonable and appropriate actions to address the discharge in a timely manner, including the following:</p> <ul style="list-style-type: none"> • The Discharger notified Cal Water immediately after the water main ruptured. Because of the Discharger’s quick notification, Cal Water was able to initiate a rapid response that included stopping the discharge within 31 minutes of the rupture, deploying dichlorination tablets, notifying the Office of Emergency Services, and facilitating field assessments of ecological impacts. • The Discharger provided timely notification to regulatory agencies and coordinated interagency meetings on June 24 and July 19 and 28. • The Discharger removed residual water and sediment from the affected portion of the storm drain system. Residual water was extracted and treated through the sanitary sewer system, and sediment was vacuumed from the storm drain system and outfall. The removal of residual water and sediment minimized the potential for further impacts to San Mateo Creek. • The Discharger retained a consultant to monitor effects of the discharge, which helped inform regulatory decisions regarding mitigation and no further action.

⁹ California Water Service, *Cal Water San Mateo Response to SWRCB – City of San Mateo Construction Site Discharge*, June 11, 2021, p. 7.

PENALTY FACTOR	SCORE	DISCUSSION
Total Base Liability	\$67,900 (rounded)	Each applicable factor relating to the Discharger’s conduct is multiplied by the Initial Liability (above) to determine the Total Base Liability . \$67,936 = (\$61,760, x 1.1 x 1 x 1)
Ability to Pay and Continue in Business	No adjustment	The Discharger is able to pay the proposed administrative civil liability based on publicly available information. The Discharger has an annual operating and capital budget of \$253.6 million for fiscal year 2021-2022, ¹⁰ which is more than adequate to pay the proposed penalty.
Economic Benefit	None	No adjustment is made because the Discharger did not gain any significant economic benefit from the violation. The savings gained in time and labor, such as by not referencing utility maps and not preserving utility markings through construction, were negligible.
Other Factors as Justice May Require		
Staff Costs	\$5,800 (rounded)	The Enforcement Policy gives the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) discretion to consider staff costs in relation to the Total Base Liability. The Regional Water Board incurred at least \$5,800 in staff time to investigate this case, including reviewing spill reports and preparing this analysis and supporting information. This includes time spent by all members of the Prosecution Team, excluding legal counsel, based on the mid-range of the salary for each classification. Increasing the Total Base Liability by \$5,800 in consideration of investigation and enforcement costs is warranted given the totality of the circumstances and is intended to serve as a general and specific deterrent against future violations. The \$5,800 in staff costs was calculated as follows: 35.5 hours of Environmental Scientist time at \$75/hour (\$2,662); 15 hours of Water Resource Control Engineer time at \$108/hour (\$1,631); 5.5 hours of Section Leader time at \$150/hour (\$826); 2.5 hours of Division Chief time at \$164/hour (\$410); and 1.5 hours of Assistant Executive Officer time at \$169/hour (\$253).

¹⁰ City of San Mateo, *City of San Mateo Adopted 2021-2022 Budget*, June 21, 2021, p. 8.

PENALTY FACTOR	SCORE	DISCUSSION
Maximum and Minimum Liabilities		
Maximum Liability	\$77,200	Water Code section 13385(c) allows up to \$10,000 for each day in which the violation occurs, plus \$10 for each gallon exceeding 1,000 gallons discharged and not cleaned up. The maximum liability reflects the unauthorized discharge of 7,720 gallons potable water and cement mixture and one day of violation (6,720 gal x \$10/gal + \$10,000).
Minimum Liability	\$0.0	The violation is not subject to mandatory minimum penalties per Water Code section 13385(h) and (i), and the Discharger did not benefit economically from the violation. Thus, the minimum liability for this violation is zero.
Final Liability	\$73,700	The final liability amount is the total base liability after adjusting for ability to pay, economic benefit, other factors, and the maximum and minimum liabilities.