ATTACHMENT A TO ACL ORDER R8-2026-0061
SPECIFIC FACTORS CONSIDERED FOR ADMINISTRATIVE CIVIL LIABILITY
EASTERN MUNICIPAL WATER DISTRICT
RIVERSIDE COUNTY

The State Water Resources Control Board's (State Water Board) *Water Quality Enforcement Policy* (Enforcement Policy)[1] establishes a methodology for determining administrative civil liability (ACL) by addressing the factors that are required to be considered under Water Code section 13327. Each factor of the ten-step approach is discussed below, as is the basis for assessing the corresponding score.

Eastern Municipal Water District (EMWD or Discharger) owns and operates five regional water reclamation facilities (RWRF), a series of storage ponds, pump stations, and distribution systems in its service area (Facilities). The Facilities are currently regulated under Waste Discharge Requirements (WDRs) and Producer/User Reclamation Requirements Order R8-2008-0008, which was adopted on September 5, 2008, to discharge up to 59 million gallons per day (mgd) of tertiary treated wastewater from the five RWRFs. The WDRs also specify that the wastewater collection system is regulated under State Water Board General Order 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS WDRs).[2] The Facility is assigned the California Integrated Water Quality System (CIWQS) No. CW-259196, Waste Discharge Identification (WDID) No. 8 332783001 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA8000188.

On December 31, 2024, Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) staff received phone and email notifications from EMWD regarding an ongoing Sanitary Sewer Overflow (SSO) due to a force main failure. The Discharger notified the California Governor's Office of Emergency Services (OES), and the associated notification number provided was CalOES #24-7270. The spill originated from a sewer force main located near the intersection of Cottonwood Avenue and Day Street in the City of Moreno Valley. The discharge was observed surfacing within the Riverside County Flood Control property on the northeast side of the above intersection. The sewage spill was reported to be approximately seven million gallons. The sewage spill reached Edgemont Channel, which flows to Sycamore Canyon Creek, a tributary of the Santa Ana River. Sycamore Creek, also known as Tequesquite Arroyo, is designated in the Santa Ana River Basin Plan (Basin Plan) as an important breeding and nursery area for native fish. Designated beneficial uses include groundwater recharge (GWR), water contact recreation (REC1), non-contact water recreation (REC2), warm freshwater habitat (WARM), wildlife habitat (WILD), rare, threatened or endangered species (Rare), and spawning, reproduction and development (SPWN).

[1] The 2024 Enforcement Policy can be found online at: https://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/2024/2024-enforcement-policy.pdf.
[2] The State Water Board updated the SSS WDRs through Order 2022-0103-DWQ (effective June 5, 2023), superseding and replacing Order 2006-0003-DWQ. The WDID assigned for this enrollment is 8SSO10617.

Violation: On December 31, 2024, Discharger experienced a sewer force main failure resulting in an unauthorized discharge of 7,440,565 gallons of untreated sewage at a location other than the designated disposal areas in violation of the Facility WDRs and the SSS WDRs.

Step 1. Potential for Harm for Discharge Violations

The "potential harm to beneficial uses" factor considers the harm that may result from exposure to the pollutants in the illegal 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 degree of toxicity of the discharge; (2) the actual harm or potential harm to beneficial uses; and (3) whether the discharge is susceptible to cleanup or abatement.

Factor 1: Degree of Toxicity of the Discharge:

This factor evaluates the degree of toxicity of the discharge by evaluating the physical, chemical, biological, and/or thermal nature of the discharged material prior to discharge. Toxicity can refer to the effect on a whole organism, such as an animal, bacterium, or plant, as well as the effect on a substructure of the organism, such as a cell or an organ. A score between 0 (negligible risk) and 4 (significant risk) is assigned based on a determination of the risk or threat of the discharged material on potential receptors. Potential receptors are those identified considering human, environmental, and ecosystem health exposure pathways.

Here, the discharge was of raw sewage wastewater from EMWD's force main sewer line. Untreated sewage contains high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen demanding organic compounds, oil and grease, and other pollutants that have a very high potential to adversely impact human and environmental receptors. The high degree of toxicity in untreated sewage poses a direct threat to adversely impact human and environmental receptors. For human receptors, exposure to untreated sewage can cause gastrointestinal illness, skin and eye infections, and other adverse health effects due to the presence of pathogenic bacteria, viruses, and parasites. For environmental receptors, untreated sewage can degrade aquatic habitat by increasing biochemical oxygen demand, reducing dissolved oxygen concentrations, introducing toxic pollutants and nutrients, and causing acute or chronic stress to aquatic organisms, including fish and benthic communities.

In this case, a score of **3** is assigned because the chemical and/or physical characteristics of the discharged material pose 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).

Factor 2: Actual Harm or Potential Harm to Beneficial Uses:

This factor "considers the harm to beneficial uses in the affected receiving water body." (Enforcement Policy, Page 17.) The Enforcement Policy requires a score of 0 to 5 be assigned in consideration of the nature, circumstances, extent, and gravity of the alleged violation.

The Prosecution Team has determined that the discharge of 7,440,565 gallons of untreated wastewater posed a moderate threat to beneficial uses within Sycamore Creek. The discharge reached Edgemont Channel, which flows to Sycamore Creek, a tributary to the Santa Ana River, which has the following beneficial uses:

Tequesquite Arroyo (Sycamore Creek)

1. Groundwater Recharge (GWR)
2. Recreation (REC I/REC II).[3]
3. Warm Fresh Water Habitat (WARM)
4. Wildlife Habitat (WILD)
5. Preservation of Rare, Threatened or Endangered Species (RARE)
6. Spawning, Reproduction and Development (SPWN)

Within the receiving water, the discharge of untreated sewage has the potential to harm these beneficial uses by introducing pathogens, nutrients, oxygen-demanding substances, suspended solids, and other pollutants into the aquatic environment. For recreational beneficial uses (REC I and REC II), the presence of pathogens in untreated sewage poses a risk to public health and can result in restrictions or closures of recreational waters until pathogen levels decrease to safe levels. For aquatic life beneficial uses (WARM and SPWN), the discharge of oxygen-demanding organic matter can reduce dissolved oxygen concentrations, degrade habitat conditions, and cause acute or chronic stress to fish and other aquatic organisms, potentially interfering with spawning, reproduction, and development. For wildlife habitat and rare, threatened, or endangered species (WILD and RARE), exposure to contaminated water and degraded habitat conditions can adversely affect species health and habitat suitability. Additionally, pollutants in untreated sewage have the potential to degrade water quality conditions relevant to groundwater recharge (GWR) by introducing contaminants to surface waters that may contribute to underlying groundwater.

Here, the spill origin was located within the stormwater basin, which is not publicly accessible. However, the discharge then exited through the basin's outlet structure, flowing west along Cottonwood Avenue into the concrete-lined Edgemont Channel. From Edgemont Channel, the flow continued southwest, crossing Old 215 Frontage Road before transitioning into an unlined drainage channel. The spill then traveled through the unlined drainage system into Sycamore Canyon Park, adjacent to Sycamore Canyon Boulevard in Riverside. The untreated sewage then flowed through the park and continued downstream toward Sycamore Canyon Creek. The trajectory of the spill may have presented a risk to human health due to the presence of pathogens in the untreated wastewater.

Spill response activities impacted a section of Day Street and Cottonwood Avenue in the City of Moreno Valley where the stormwater basin is located. Spill response efforts required both partial and complete road closures of the affected roadway for the duration of the repairs. The

[3] Water Quality Control Plan for the Santa Ana River Basin, Oct. 2025 available at Basin Plan | Santa Ana Regional Water Quality Control Board.

road remained closed until the necessary repairs were completed. The Discharger posted contaminated water signs at all publicly accessible entrance locations into Sycamore Canyon Park (where Sycamore Creek flows through).

The Discharger contracted HELIX Environmental Planning, Inc. (HELIX) to prepare a biological assessment to describe the impacts to the flood control basin and Sycamore Day Creek resulting from the SSO (dated February 14, 2024). They found that solids from the spill were not observed within the earthen/vegetated portion of the creek. Other contaminants from the spill did reach the creek, but water testing showed the level of contamination significantly decreased within one week following the overflow in the creek. HELIX's report concluded that their initial inspection indicated that the spill did not have an immediate detrimental effect on the vegetation or wildlife along the creek.

Water quality sampling conducted by the Discharger demonstrated elevated levels of ammonia, total coliform, and fecal coliform above background conditions, indicating the presence of untreated sewage in the receiving water and a measurable threat to water quality and associated beneficial uses. However, the absence of observed solids deposition, the lack of observed immediate biological impacts, and the documented attenuation of contaminant levels within a short period support a determination that the discharge posed a moderate, rather than severe, threat. Based on these circumstances, a factor of **3** is assigned. A score of 3 (moderate) is appropriate based on the observed and reasonably expected potential impacts, but harm or potential harm to beneficial uses is moderate and likely to attenuate without appreciable medium or long term acute or chronic effects.

Factor 3: Susceptibility to Cleanup or Abatement:

The Enforcement Policy assigns a score of 0 if the discharger cleans up more than 50 percent of the discharge and assigns a score of 1 if less than 50 percent of the discharge is susceptible to cleanup or abatement, or if 50 percent or more of the discharge is susceptible to cleanup or abatement, but the discharger failed to clean up 50 percent or more of the discharge within a reasonable time period.

A total of 7,440,565 gallons of untreated sewage was released at the Riverside County Flood Control and Water Conservation District stormwater detention basin located adjacent to the intersection of Day Street and Cottonwood Avenue in the City of Moreno Valley, adjacent to EMWD's Day Street Lift Station. The spill discharge occurred close to the outlet structure of the stormwater basin, resulting in portions of the spill exiting the stormwater basin through the outlet structure. The outlet structure conveyed flows to Edgemont Channel, a concrete-lined open section of flood control channel that is designed to convey stormwater flows to Sycamore Creek. The Discharger also conducted a geotechnical investigation to evaluate the potential sewage volume that did not reach the flood control channel; the estimated exfiltration volume was 67,940 gallons. The Discharger was able to recover an estimated 1,922,000 gallons from the cleanup efforts within the Edgemont Channel and Stormwater basin using vacuum and pumper trucks, and portable pumps, less than 50% of the spill. Because the Discharger did not

recover 50 percent or more of the spill from the SSO, the Prosecution Team has assessed a score of **1** for Susceptibility to Cleanup and Abatement.

Final Potential for Harm Score:

The scores for the factors are then added to provide a Potential for Harm score for each violation or group of violations. In this case the final score is **7** (3 + 3 + 1) for potential harm and discharge violations.

Step 2. Assessment for Discharge Violations

The proposed administrative civil liability for the unauthorized discharge is based on per gallon liability pursuant to Water Code section 13350.

The Enforcement Policy specifies that the Water Boards shall use the Potential for Harm score from Step 1 and the extent of Deviation from Requirement when determining an initial liability amount on a per gallon basis. The Deviation from Requirement reflects the extent the alleged violation deviated from the specific requirement at issue and characterizes it as minor, moderate, or major. The Potential for Harm score in Step 1 and the Deviation from Requirement determination in Step 2 are used to determine a Per Gallon Factor from Table 1 of the Enforcement Policy. The per gallon assessment is then determined by multiplying the Per Gallon Factor by the number of gallons subject to penalty and the maximum per gallon penalty amount allowed under the Water Code.

Deviation from Requirement

EMWD's WDRs Prohibition III.B and NPDES Permit Prohibition III.C state "the discharge of wastewater at a location or in a manner different from those described in this Order is prohibited." Prohibition III.D of the WDRs prohibits the "bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses." The SSS WDRs Prohibition 4.2 states that "any discharge from a sanitary sewer system, discharged directly or indirectly through a drainage conveyance system or other route, to waters of the State is prohibited."

The Discharger discharged 7,440,565 gallons of untreated wastewater (5,450,624 gallons of which reached the receiving water) from December 20, 2024, to January 2, 2025, in violation of these provisions.

The Enforcement Policy defines a major deviation as follows: "The requirement was rendered ineffective (e.g., the requirement was rendered ineffective in its essential functions)." (Enforcement Policy, Page 19.)

In this case, the discharge of untreated sewage was a major deviation from requirements because it rendered above-referenced requirements ineffective in their essential functions. Therefore, a score of **major** is appropriate.

Per Gallon Assessments for Discharge Violations

When there is a discharge, the Santa Ana Water Board must determine the initial liability amount on a per gallon basis using the Potential Harm score from Step 1 (7) and the Deviation from Requirement score (Major).

Table 1 of the Enforcement Policy (page 19) is used to determine a "Per Gallon Factor" based on Potential for Harm and the Deviation from Requirement scores. Here, the Per Gallon Factor is **0.41**. This Per Gallon Factor value is then multiplied by the volume of discharge and the per gallon assessment of liability, as described below.

The total gallons discharged in this incident is 5,450,625 gallons. The Discharger reported a spill volume of 7,440,565 gallons and was able to recover approximately 1,922,000 gallons. Therefore, the total volume is reduced to 5,450,625 gallons to reflect the portion of the discharge event that reached the receiving water.

High Volume Discharges

The Enforcement Policy allows the Santa Ana Water Board the discretion to select a value from $2.00 per gallon to $10.00 per gallon, for high volume discharges that are between 100,000 gallons to 2,000,000 gallons. For discharges in excess of 2,000,000 gallons, or for discharges of recycled water that has been treated for reuse, the Santa Ana Water Board may elect to use a maximum of $1.00 per gallon with the above factor to determine the per gallon amount. These provisions are advisory and intended to provide a basis for achieving consistency and substantial justice in setting appropriate civil liabilities. The discharge here of 5,450,625 gallons (the total gallons that reached the receiving water) merits a reduction from the maximum per gallon liability allowed by the Water Code. In this case, the Prosecution Team has determined $1.00 per gallon is appropriate because it supports achieving consistency and substantial justice in setting appropriate civil liabilities.

The per gallon assessment is calculated as (factor from Table 1) x (spill volume) x ($1.00 per gallon).

Per Day Assessments for Discharge Violations

This step is not applicable.

Initial Liability Calculation

The Initial Liability amount for the discharge violation is calculated as follows:

Per Gallon Factor x Gallons Subject to Liability x Statutory Per Gallon Amount = Initial Liability Amount

0.41 x (5,450,625 gallons discharged to surface water) x $1.00 per gallon = $2,234,756.25.

Initial Liability = **$2,234,756.25**.

Step 3. Per-Day Assessment for Non-Discharge Violations

This factor is not applicable in this case, wherein the violation involves a discharge.

Step 4. Adjustment Factors

There are three additional factors to be considered in modifying the amount of initial liability: the Discharger's culpability, efforts to clean up or cooperate with regulatory authorities, and history of violations. When considering these additional factors for the violations involved *"the applicable factor should be multiplied by the initial ACL amount proposed for each violation to determine the Total Base Liability Amount for that violation"* (Enforcement Policy, Page 25.)

Culpability

Higher liabilities should result from intentional or negligent violations as opposed to accidental violations. A multiplier between 0.75 and 1.5 is to be used, with a higher multiplier for intentional or negligent behavior.

The SSO was reportedly caused by a break in the force main pipe. A pipe failure analysis done by the Discharger concluded that the break was due to a manufacturing defect, rather than improper operation or maintenance. However, supervisory control and data acquisition (SCADA) notification thresholds were not in place to potentially alert the Discharger of flow anomalies, and a permanent ultrasonic flow meter was not available at the Day Street Lift Station. EMWD has an Integrated Operations Center (IOC) that provides centralized, 24-hour remote monitoring through SCADA, and automated alerts have been implemented for certain systems, such as recycled water infrastructure. Post-incident review of flow rate trends indicated that the spill may have been ongoing for approximately 12 days prior to repair. While the absence of automated alerts and notification thresholds does not constitute intentional or negligent conduct, these conditions reflect monitoring limitations that reduced the Discharger's ability to promptly detect and respond to the failure.

The discharge occurred near the outlet of the basin, where a wall had been constructed after the force main was installed; however, the available information does not indicate that this condition was a contributing cause of the failure. In addition, while the Discharger did not provide detailed information regarding the frequency of routine maintenance or visual inspections, the record does not establish that maintenance deficiencies contributed to the incident. Nonetheless, the Discharger implemented its Sewer System Management Plan Overflow Emergency Response Plan and the regulatory notification process, including timely communication with key stakeholders reporting to outside agencies, which mitigated potential impacts.

Therefore, the Discharger's conduct is what is reasonably expected of a regulated entity, and a score of **1.0** is assigned.

Cleanup and Cooperation

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

The Discharger submitted a Corrective Action Plan dated March 31, 2025, in response to the Notice of Violation issued on January 28, 2025, regarding the SSO. The following corrective actions were implemented, with some efforts still ongoing:

1. Implementation of updated SCADA notification thresholds

- On January 9, 2025, EMWD updated SCADA notification thresholds to enhance real-time monitoring and early detection of abnormal flow conditions. These thresholds are designed to detect flow anomalies, triggering automated alarms within the SCADA system. The alarms are configured to notify the IOC of unexpected fluctuations in lift station flows, allowing for immediate investigation and response. The newly established SCADA thresholds aim to prevent undetected failures by providing early warnings of potential system malfunctions or unauthorized discharges. These improvements strengthen EMWD's proactive monitoring capabilities, reducing the risk of undetected sewer system failures.

2. Installation of Ultrasonic Meters

- On January 9, 2025, EMWD installed ultrasonic meters at the Day Street Lift Station to provide continuous flow monitoring of the force main system. These meters use ultrasonic sound waves to measure flow velocity and volume, ensuring accurate tracking of wastewater movement into the force main. By integrating with the SCADA system, ultrasonic meters allow for real-time monitoring, early detection of abnormal flow conditions, and automatic alarm notifications in the event of unexpected changes. This is critical in identifying potential pipeline failures, pump malfunctions, or blockages, helping to prevent undetected SSOs. The use of ultrasonic flow metering at the Day Street Lift Station enhances operational efficiency, regulatory compliance, and proactive maintenance strategies.

3. Installation of Pressure Monitoring Devices

- On January 9, 2025, EMWD installed pressure monitoring devices used for tracking force main conditions and detecting abnormal pressure fluctuations that may indicate potential failures. These devices measure internal pipeline pressure, ensuring that force mains operate within safe limits and helping to identify issues such as leaks, blockages, pump malfunctions, or transient pressure surges (water hammer events). By integrating with the SCADA system, pressure monitoring allows for real-time data analysis and automated alarms, enabling operators to respond promptly to abnormal flow conditions. Implementing enhanced pressure monitoring at the Day Street Lift Station supports

proactive maintenance, reduces the risk of prolonged SSOs, and ensures regulatory compliance by providing early indicators of system vulnerabilities.

4. Water Quality Sampling

- EMWD conducted daily water quality sampling throughout the duration of the SSO and transitioned to weekly thereafter until results indicated a return to ambient conditions. Samples were collected from various locations including upstream (Stormwater Basin Day St. and Cottonwood Ave.), point of entry (Stormwater Basin Day St. and Cottonwood Ave.), downstream (Old 215 Frontage Road, Canyon Crest Country Club, and Sycamore Canyon Park SoCalGas Creek Crossing) and Edgemont Channel Upstream. Samples collected were analyzed for Ammonia, Total Coliform, and Fecal Coliform.

5. Mutual Aid Agreement

- EMWD has existing agreements, including the Metropolitan Water District of Southern California Member Agency Response System (MARS) and Water Agency Response Network (WARN), for coordination of emergency response associated with state or regional emergencies and disasters. As detailed in the Technical Report, EMWD received mutual aid from Western Municipal Water District (WMWD) to assist with response to the Day Steet force main spill. This assistance provided EMWD with timely resources (e.g., additional staff and vacuum trucks) that assisted EMWD with the spill response. Given the nature of the multi-day spill response occurring over New Year's Eve with staff and contractors working 24-hour shifts, the mutual aid was beneficial. In the Technical Report, a mutual aid agreement with WMWD was referenced, however, the mutual aid provided by WMWD was extended based on a good-faith effort. EMWD is currently discussing with WMWD formalizing a mutual aid agreement that would provide expedited assistance during emergencies such as the Day Street force main break. In response to a follow-up inquiry from Santa Ana Water Board staff, EMWD stated that as of Fall 2025 it was still coordinating to finalize the agreement. EMWD further indicated that this is an ongoing effort that has not been completed to date. EMWD was unable to provide an updated timeline for when this effort would be completed as they have additional steps in the process that may include additional legal review prior to being circulated for approval.

6. Condition Assessment

- EMWD's sewer collection system condition assessment is an ongoing effort that was underway prior to the Day Street sewage spill. The purpose of the condition assessment is to identify and prioritize infrastructure issues to support proactive maintenance, regulatory compliance, and long-term system reliability. Since the spill, the condition assessment has been modified to identify options for diverting sewer flows during

emergencies so that EMWD can mitigate spills from reaching a receiving water. The first phase, which was completed in 2024, was the development of risk profiles for sewer segments. Phase two, which is currently taking place, will develop a comprehensive set of parameters for evaluating risk, perform Consequence of Failure analysis to establish program for identifying critical and high-risk sewer segments. A new addition to this project includes identifying options for diverting sewer flows during emergencies. In the future, phase three will include performing closed-circuit television inspections of high priority segments identified in phase two to establish capital improvement plan projects.

7. Pipe Failure Analysis

    - EMWD sent the failed PVC pipe segment to a third-party contractor for a detailed forensic analysis to conduct a pipe failure investigation to determine the root cause of the PVC force main failure near the Day Street Lift Station and to develop preventive measures to mitigate future risks. The analysis evaluated four primary categories of failure: weakness in the pipeline material, high-pressure (surge) events, inadequate pipeline design for normal operating conditions, and excessive strain from external loading or differential settlement. The analysis concluded that the force main pipe cracking initiated at a void near the center of the pipe wall created by a manufacturing defect.

8. Surge Analysis

    - A surge analysis was conducted to evaluate transient pressure fluctuations (water hammer effects) within a force main system and assess their potential impact on pipeline integrity. EMWD hired consultant Scott Foster to conduct this analysis. The surge analysis was completed on May 2, 2025, and concluded that surge protection (a surge tank) would be beneficial at the Day Street Lift Station. EMWD will be developing a request for proposal for design of a surge tank. Additionally, as a result of the spill, EMWD is conducting a district-wide surge analysis to evaluate other lift stations through their service area that could benefit from surge protection.

9. Volume Estimate Investigation

    - EMWD conducted a volume estimate investigation to determine the extent of infiltration and exfiltration losses related to the Day Street Lift Station force main failure. The percolation study assessed soil absorption characteristics, and the exfiltration study estimated potential wastewater loss from the force main into the surrounding environment. This investigation was completed on May 30, 2025, and concluded that a portion of the spill volume was likely retained within the trench backfill prior to sewage reaching the basin. The estimated exfiltration volume was 67,940 gallons.

A reasonable and prudent response to a discharge violation or timely response to a formal or informal enforcement action should receive a neutral adjustment as it is assumed a reasonable amount of cooperation is the warranted baseline. The above-mentioned improvements to prevent future SSOs are above what is expected for a reasonable person to conduct after the SSO. Therefore, the Discharger is given the score of **0.9** for the Cleanup and Cooperation factor.

History of Violations

When there is no history of violations, the Enforcement Policy assigns a neutral multiplier of 1.0. However, when the Discharger does have a history of violations within the last five years, the Enforcement Policy assigns a multiplier of 1.1. This Discharger does not have a history of violations with the Santa Ana Water Board in the last 5 years. Therefore, a score of **1.0** is assigned.

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 3.

Total Base Liability = Initial Liability **$2,234,756.25** x Adjustment Factors: (1.0 for Culpability) (1.0 for History of Violations) (0.9 for Cleanup and Cooperation) = **$2,011,280.63**

Step 6. Economic Benefit

Pursuant to Water Code section 13327 and the Enforcement Policy, civil liability, at a minimum, must be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute a violation.

The Enforcement Policy provides that the economic benefit of noncompliance should be calculated using the US EPA Economic Benefit Model (BEN)[4] penalty and financial modeling program unless it is demonstrated that an alternative method of calculating the economic benefit is more appropriate. For this case, BEN was determined to be the appropriate method. Using standard economic principles such as time-value of money and tax deductibility of compliance costs, BEN calculates a permittee's economic benefit derived from delaying or avoiding compliance with environmental statutes. *"The economic benefit is equal to the present value of the avoided costs plus the 'interest' on delayed costs."*

State Water Board staff evaluated the types of actions that the Discharger should have taken to avoid the alleged violations and estimated the cost of these actions. Two types of costs were considered: delayed[5] and avoided[6] costs.

[4] At the time this document was prepared, BEN was available for download at http://www2.epa.gov/enforcement/penalty-and-financial-models.
[5] Delayed costs include expenditures that should have been made sooner, such as alarms that were installed too late to avoid the violation.
[6] Avoided costs include expenditures for services that the permittee should have incurred to avoid the incident of noncompliance, such as additional staffing and preventative maintenance.

In total, State Water Board staff estimates the delayed and avoided costs were $311,434. Based on this information, in addition to standard accounting assumptions, the BEN model calculated the economic benefit of the avoided and delayed expenditures of the alleged violations, and in compliance with the Enforcement Policy, which states that the total liability shall be at least 10% higher than the economic benefit, "so that liabilities are not construed as the cost of doing business and the assessed liability provides meaningful deterrent to future violations, " (p. 27) therefore the total economic liability based on economic benefit in this matter is $342,577.

Step 7. Other Factors as Justice May Require

No adjustments are made under this factor.

Step 8. Ability to Pay and Ability to Continue in Business

The Discharger has the ability to pay the administrative civil liability amount or raise its rates, and there are no factors under this category that warrant an adjustment. The Discharger's Biennial Budget for Fiscal Years 2023-24 and 2024-25[7] identifies the following revenues and expenses:

Category	FY 23-24 Budget	FY 24-25 Budget
Total Revenues	$466,753,100	$499,008,900
Total Expenses	$387,237,689	$399,206,747
Total Capital Commitments	$170,009,414	$148,101,233
Total Expenditures	$557,247,103	$547,307,980

The Biennial Budget states that other significant funding sources[8] include reserve funding of $90.5 million and $48.3 million in FY23-24 and FY24-25, respectively.

Step 9. Maximum and Minimum Liability Amounts

Minimum Liability Amount:

The Enforcement Policy states that the Total Base Liability Amount should be at least 10 percent higher than the economic benefit amount, "so that liabilities are not construed as the cost of doing business and that the assessed liability provides a meaningful deterrent to future violations." (2024 Enforcement Policy, page 27).

The minimum liability associated with the economic benefit is $342,577.40.

[7] Available online at https://content.emwd.org/sites/default/files/migrate-documents/biennial_budget_fy_2023-24_and_fy_2024-25.pdf.
[8] Additional sources of funds include property taxes and infrastructure availability charges, connection fees, and interest/grant/other funds.

Maximum Liability Amount:

Pursuant to California Water Code section 13350 subdivision (e) the Santa Ana Water Board may impose civil liability either on a daily basis or on a per gallon basis, but not on both. Civil liability assessed on a daily basis shall not exceed five thousand dollars ($5,000) for each day the violation occurs, and civil liability assessed on a per gallon basis shall not exceed ten dollars ($10) for each gallon of waste discharged.

(Days of violations) x $5,000

12 days of violation x $5,000 = $60,000

or

(Number of Gallons) x $10/gallon

(5,450,625 gallons discharged) x $10 = $54,506,250

Maximum Liability Amount = **$54,506,250.**

Step 10. Final Liability Amount

Based on the foregoing analysis, and consistent with the Enforcement Policy, the final liability amount for the unauthorized discharge is $2,011,280.63 which is within the statutory minimum and maximum.

Per Gallon Factor: (5,450,625 gallons discharged to receiving water)($1/gallon)(0.41) = $2,234,756.25

Total Liability = $2,234,756.25

Total Liability x Adjustment Factors = $2,234,756.25 (1)(1)(0.9) = **$2,011,280.63.**