ATTACHMENT A TO ACL ORDER R7-2024-0012

SPECIFIC FACTORS CONSIDERED FOR ADMINISTRATIVE CIVIL LIABILITY

COACHELLA VALLEY WATER DISTRICT
RIVERSIDE COUNTY

The State Water Resources Control Board's (State Water Board) *Water Quality Enforcement Policy* (Enforcement Policy) establishes a methodology for determining administrative civil liability (ACL) by addressing the factors that are required to be considered under Water Code section 13385(e). Each factor of the ten-step approach is discussed below, as this is the basis for assessing the corresponding score.

The 2017 Enforcement Policy can be found online at:

https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/040417_9_final%20adopted%20policy.pdf

The Coachella Valley Water District (CVWD or Discharger) owns and operates a wastewater collection system and Wastewater Reclamation Plant 10 (Facility), located at 43000 Cook Street, Palm Desert, California, 92211. The Facility is an activated sludge treatment plant that provides secondary and tertiary treatment to domestic municipal wastewater and two (2) septage receiving facilities to the residents and businesses of the Cities of Palm Desert, Rancho Mirage and portions of Cathedral City and Indian Wells. The secondary wastewater treatment system has a design capacity of 18.0 million gallons per day (MGD) and currently treats an average daily flow of approximately 9 MGD. Secondary treated wastewater is discharged to nine evaporation/percolation ponds for disposal. The tertiary treatment system has a design treatment capacity of 15.0 MGD. Disinfected tertiary treated wastewater is used as recycled water for golf course and landscape irrigation. The Facility has been regulated by the Colorado River Basin Regional Water Quality Control Board (Regional Water Board) since its construction in 1971 by Board Order 72-7 and is currently regulated by Order R7-2018-0001, adopted on March 8, 2018 (Facility WDRs). The Facility WDRs also specify that the wastewater collection system is regulated under State Water Resources Control Board (State Water Board) General Order 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. (SSS WDRs).[1] The Facility is assigned the California Integrated Water Quality System (CIWQS) No. CW-247419, Waste Discharge Identification (WDID) No. 7A330105012 and GeoTracker Global ID No. WDR100029854.

The Facility WDRs can be found online at:

https://www.waterboards.ca.gov/coloradoriver/board_decisions/adopted_orders/orders/2018/0001cvwd_wrp10_wdr.pdf

On September 22, 2020, at approximately 10:35 AM, a sanitary sewer overflow (SSO) occurred from the Discharger's collection system. The SSO originated from a manhole junction

[1] The State Water Board updated the SSS WDRs through Order 2022-0103-DWQ (effective June 5, 2023), superseding and replacing Order 2006-0003-DWQ.

structure located on the west side of Cook Street, and ultimately ended up in the dry Coachella Valley Storm Water Channel (CVSC), approximately 830 linear feet south from the appearance point. The SSO was caused by a failure of the "Uninterruptible Power Supply" (UPS) that occurred at approximately 9:57 AM. The failure of the UPS caused the "Programmable Logic Controller" (PLC) to deenergize from both commercial and battery back-up power. The lack of power caused a major influent pump at the Facility's headworks to fail. Likewise, numerous alarms are also powered by the UPS, and therefore, did not operate as intended. The two emergency (secondary) influent pumps that are intended to alleviate any high-water situation, were also deenergized, and thus were unable to alleviate the high flows within the Headworks[2]. After the SSO, the Discharger's electronics team inspected the UPS unit and reported that it showed no external sign of failure and its batteries still tested as working, but when opened, revealed an internal component had failed[3].

At approximately 10:50 AM, a passerby reported the SSO to the Discharger, and it was visually confirmed by the Discharger at approximately 11:03 AM. It is estimated that a total of 156,639[4] gallons of raw sewage spilled into the CVSC from approximately 10:35 to 11:25 a.m. A vacuum truck recovered 28,000 gallons of the spill. The net spill volume of 128,639 gallons ultimately percolated into the sandy, dry CVSC.

The CVSC is a constructed downstream extension of the Whitewater River and serves as a drainage way for irrigation return flows, treated community wastewater, and stormwater runoff. The Whitewater River is an ephemeral stream and is the major drainage course in the Coachella Valley Planning Area. There is perennial flow in the mountains, but because of diversions and percolation into the basin, the Whitewater River becomes dry downstream. The CVSC is a water of the United States (WOTUS). The CVSC is also a tributary to the Salton Sea, a WOTUS, which serves as habitat for wild and aquatic life. The primary purpose of the Salton Sea is to receive and store agricultural drainage, seepage, and storm waters and is also used for recreational purposes.

Violation: On September 22, 2020, the Wastewater Reclamation Plant No. 10 discharged 156,639 gallons of raw sewage at a location other than the designated disposal areas in violation of the Facility WDRs, the SSS WDRs and/or Clean Water Act Section 301 and Water Code section 13376.

Step 1. Potential for Harm for Discharge Violations

The assessment of potential for harm is based on the following factors.

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

[2] Technical Report for Sanitary Sewer Overflow, General Order 2006-0003-DWQ, dated November 4, 2020
[3] Response Letter to Request for Additional Information, Sanitary Sewer Overflow, dated September 28, 2021
[4] Response Letter to Request for Additional Information, Sanitary Sewer Overflow, dated September 28, 202

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 the Wastewater Reclamation Plant No. 10 (WRP 10). 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 the exceed known risk factors. The high degree of toxicity in untreated sewage poses a direct threat to adversely impact human and environmental receptors.

In this case, a score of 3 is assigned because the chemical and/or physical characteristics of the discharged material poses an above-moderate risk or a direct threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material exceed known risk factors and/or there is substantial concern regarding receptor protection).

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 12.) The Enforcement Policy requires a scorie 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 156,639 gallons of untreated wastewater posed a moderate threat to beneficial uses within the Coachella Hydrologic Subunit and the Whitewater River Channel. Wastewater flowed south down Cook Street on the city streets and east into the Whitewater River Stormwater Channel, a Water of the United States. The drainage channel bed is composed of gravely sand, an extremely porous soil with high infiltration rates. It is likely that a portion of the spill infiltrated into soil overlying the Coachella Hydrologic Subunit. The alleged discharge could also result in adverse impacts to groundwater quality in the area.

The discharge occurred within the Coachella Hydrologic Subunit and to the Whitewater River which have the following beneficial uses:

Coachella Hydrologic Subunit

1. Municipal Supply (MUN),
2. Industrial Supply (IND),
3. Agricultural Supply (AGR)

Whitewater River

1. Recreation (REC I/REC II).[5]
2. Freshwater Replenishment (FRSH)
3. Warm Fresh Water Habitat (Warm)
4. Wildlife Habitat (Wild)
5. Preservation of Rare, Threatened or Endangered Species (RARE)

[5] https://www.waterboards.ca.gov/coloradoriver/water_issues/programs/basin_planning/

Within the receiving water, the discharge of untreated sewage has the potential to harm these beneficial uses because it results in the potential for introduction and exposure of pollutants, including pathogens, into habitats and recreational areas. Here, the discharge flowed from a manhole down the public right of way (Cook Street) which may present a risk to human health due to the presence of pathogens in the untreated wastewater. The Discharger temporarily closed the area of the spill that extended into the CVSC during their attempt to recover part of the SSO. After the clean-up, there was free standing fluid remaining in the affected area. The discharge also had the potential to adversely impact recreational uses in the Whitewater River. However, due to seasonal lack of flow in the Whitewater River, and the relatively quick percolation of the discharge, the risk of actual human exposure to the discharged untreated sewage was limited.

The majority of the constituents in the untreated wastewater exceed the MCLs, thus, posing a moderate threat to the beneficial uses, specifically the total Nitrogen numbers in the discharge were elevated which adversely impacts municipal and domestic supply (MUN) and agricultural supply (AGR) beneficial uses. Based on these circumstances, a factor of 3 is assigned.

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 156,639 gallons of untreated sewer influent was released from a manhole junction structure located on the west side of Cook Street, just south of Sheryl St, and ultimately ended up in the CVSC. The Discharger was able to recover an estimated 28,000 gallons from the storm water channel using vacuum trucks and heavy machinery, less than 50% of the spill. Because the Discharger did not recover 50 percent or more of the spill from the sanitary sewer overflow (SSO), the Prosecution Team has assessed a score of 1 for Susceptibility to Cleanup and Abatement.

Final 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 Enforcement Policy provides that the initial liability amount shall be determined on a per day and a per gallon basis pursuant to Water Code section 13385, using the score from Step 1 in conjunction with the Extent of Deviation from the Requirement of the violation (see Enforcement Policy, Tables 1 and 2 at Pages 14 and 15).

Water Code section 13385(c) provides that the civil liability “may be imposed…in an amount not to exceed the sum of both of the following: (1) $10,000 per day for each day in which the violation occurs. (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 $10 multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons."

Deviation from Requirement

The Facility WDRs Prohibition A.3 provides "WRP 10 shall be operated and maintained to prevent untreated sewage or partially or fully treated effluent from surfacing or overflowing." Discharge Prohibition A.4 prohibits the "discharge of any wastewater from the Facility to any surface waters or surface drainage course." Discharge Prohibition A.5 prohibits the "surfacing or ponding of wastewater outside of the designated disposal locations." The SSS WDRs Prohibition C.1 states that "[a]ny SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited."

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. The WDRs are not an NPDES permit.

The Discharger discharged 128,639 gallons of untreated wastewater on September 22, 2020, in violation of these provisions.

The Enforcement Policy defines a **major** deviation as follows: "The requirement has been rendered ineffective (e.g., discharger disregards the requirement and/or the requirement is rendered ineffective in its essential functions)." (Enforcement Policy, Page 14.)

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 Regional 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 (Page14) 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 128,639 gallons. The Discharger initially reported a spill volume of 156,639. However, in the course of settlement, the Discharger produced additional information documenting the cleanup of 28,000 gallons of the spill. Therefore, the total volume is reduced to 128,639 gallons to reflect the portion of the discharge event that reached the receiving water.

High Volume Discharges

The Enforcement Policy allows the Regional 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. The discharge here of 128,639 gallons merits a reduction from the maximum per gallon liability allowed by the Water Code. In this case, the Prosecution Team has determined $5.00 per gallon is appropriate because the unauthorized discharge mostly occurred into a dry storm water channel, which warrants a high-volume discharge reduction as there was no direct impact to surface waters.

The per gallon assessment is calculated as (factor from Table 1) x (spill volume – 1,000 gallons) x ($5.00 per gallon).

Per Day Assessments for Discharge Violations

When there is a discharge, the Regional Water Board must determine the initial liability amount on a per day basis using the Potential Harm score from Step 1 and the Deviation from Requirement score.

Table 1 of the Enforcement Policy (Page15) is used to determine a "Per Day Factor" based on Step 1 (Potential for Harm) and the Deviation from Requirement scores. Here, the Per Day Factor is **0.41**. This Per Day Factor value is then multiplied by maximum per day amounts ($10,000).

Approximately 128,639 gallons of untreated wastewater was discharged from 10:35 a.m. to 11:30 a.m. on September 22, 2020. As set forth in the calculation below, the spill event occurred on one calendar day. The per day assessment is calculated as (factor from Table 2) x (days of Discharge) x ($10,000 per day).

Initial Liability

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

Per Gallon Liability: 0.41 x (128,639 gallons discharged – 1,000 gallons) x $5.00 per gallon =

$261,659.95

Per Day Liability: 0.41 x (1 days) x $10,000 per day = **$4,100**

Initial Liability = Per Gallon Liability + Per Day Liability = $261,659.95+ $4,100**=**

$265,759.95

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 revised amount for that violation" (Enforcement Policy, Page 17.)

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 ultimately caused by a failure of the UPS internal component. The failure of the UPS caused the PLC to deenergize from both commercial and battery back-up power. The lack of power caused a major influent pump at the Facility's headworks to fail. Likewise, numerous alarms are also powered by the UPS, and therefore, did not operate as intended. The two emergency (secondary) influent pumps that are intended to alleviate any high-water situation were also deenergized, and thus were unable to alleviate the high flows within the headworks. The UPS unit had preventative maintenance service and testing performed on a triennial basis, including new batteries, cleaning, and testing. Preventative Maintenance on the UPS unit at the Headworks at WRP I0 was performed on July 27, 2020. The gravity sewers breached in this SSO are on a routine maintenance schedule of jet cleaning and video inspection every five years. The most recent inspection report was dated December of 2015. The Discharger took appropriate steps to address the SSO in a timely manner by following a Sanitary Sewer Overflow and Response Plan on file, dated December 1, 2019, as part of their Sanitary Sewer Management Plan.

Therefore, the Discharger's conduct falls below what is reasonably expected of a regulated entity, and a score of 1.1 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.

Listed in the November 4, 2020, SSO technical report and confirmed in a letter titled "Response to Request for Additional Information, Sanitary Sewer Overflow", dated September 28, 2021, the Discharger listed six additional best management practices (BMPs) that were planned to be installed or practiced to prevent future occurrences of SSO at this location. In a Second Letter titled "Second Request Additional Information," dated March 15, 2022, submitted in response to a letter from the Regional Water Board dated February 2, 2022, the Discharger confirmed the installation or commencement of the following six BMPs:

1. Hardwiring of Logic Relays to Influent Pumps

- On December 7, 2020, CVWD's Electronic and Electrical Shops started upgrades to the Facility's instrumentation including "hard wiring" of the logic relays to ensure all pertinent alarms have multiple layers of redundancy. For example, the "high-high-water" and wet well alarms will now activate regardless of if the PLC or UPS units fail or lose commercial power. Furthermore, the "High" and "High-High" level float ball levels will also activate plant audible alarms, will generate supervisory control and data acquisition (SCADA) alarms, and will turn on the emergency Influent Pump Nos. 3 and 4 to reduce levels immediately if triggered. In addition, CVWD has implemented a separate controller with its own level transducer that can independently call pumps into service, and has its own power supply backup. The cost of the third pump controller and level transducer, with separate backup power supply was cumulatively totaled $2,685. The "hard wiring" and other upgrades were completed in two weeks and the costs were included in the UPS installation (see below).

2. Installation of Uninterruptible Power Supply Relay Output Card

- During the week of December 14, 2020, CVWD installed a new relay output card for the UPS that is now backed up through the PLC. Furthermore, CVWD installed a secondary and independent UPS system, including backup battery power, to act in parallel to the existing system. The secondary UPS will provide significant redundancies and ensure that the high-level alarms activate the pumps and control levels under all normal and emergency situations. The purchase cost of the two auxiliary battery banks, the new UPS, auxiliary battery banks, maintenance switch and relay output card was $5,170. The total labor cost was included in the UPS installation labor cost of $4,967. The cost of the secondary system, including the redundant level controller, was $2,685. The additional UPS alarms were installed, tested, and fully integrated into SCADA on January 5, 2021. The total labor costs for SCADA personnel to update the SCADA programming for the "No Flow Alarms" was $416. The installation of these items was completed by December 15, 2020.

3. Installation of Alarm at Parshall Flume, downstream of the spill location

- CVWD has implemented PLC signals at the Parshall flume located downstream of the headworks at Wastewater Reclamation Plant -10. The generation of "No Flow Alarms" through SCADA will monitor flow, or the lack of flow, from the headworks to the plants and provide independent notification that the influent pumps are not pumping from the headworks. The installation of level floats, audible and SCADA alarms, and emergency activation of Influent Pump Nos. 3 and 4 was completed in two weeks and the costs were included in the UPS installation.

4. Installation of Smart Covers

- CVWD has procured 4 “smart-covers” as an additional security measure to be installed within Wastewater Reclamation Plant – 10 and at the Cook Street Lift Station, the nearest manhole to the Headworks at Wastewater Reclamation Plant -10,. Smart covers have a level control mechanism which will independently monitor and send email notification alerts when levels are rising in the system. The total cost to procure and install the SMART covers was $19,471. Additionally, CVWD installed twelve (12) locking manhole lids on the ID57, as well as the 24-inch and 30-inch trunk sewers. The cost to procure the twelve locking manhole lids cumulatively totaled $8,007 and the total cost to install the twelve locking manhole lids was $16,200.

5. Designed Wastewater Reclamation Plant -10 Control Room Operator 24/7/265

- As of September 24, 2020, CVWD requires a designated SCADA Wastewater Reclamation Plant Control Operator to be always in the Wastewater Reclamation Plant -10 Control Room. The Operator is responsible for the SCADA Controls at all times, and monitors SCADA operations and alarms through two 12-hour shifts. Prior to September 23, 2020, operators were present daily and monitored the SCADA system frequently, but not constantly. This new position (created by reorganizing the roles and responsibilities of existing employees), second employee will be required to monitor the SCADA system and alarms at all times.

6. Reinforced Alarm Testing

- The WRP 10 Headworks and Control buildings had audible sirens prior to the SSO event, but CVWD has now added several alarm testing enhancements to the Preventative Maintenance Program, including the enhanced testing of the emergency warning systems, such as beacons, as well as testing of pump response functions in normal operations and emergency modes. Preventative testing of audible and SCADA alarms, as well as the pump operations was also all tested prior to the SSO event on a quarterly basis. The installation of the new additional alarms and the new integration into the SCADA system was completed in three weeks. The total installation cost was $4,967, which included the labor costs for the Electronic Technicians and Information System Programmers. The cost of the new emergency audible sirens were $3,784. The new Headworks Contingency Preventative Testing Program went into effect on December 15, 2020. Full implementation of testing enhancements was completed on December 21, 2020, with monthly testing commencing in January of 2021. The additional UPS alarms were installed, tested, and fully integrated into SCADA on January 5, 2021. The implementation of these additional corrective actions will provide a series of multi-layered and independent operational redundancies to help to minimize the possibility of future failures.

These multiple improvements to prevent future SSOs are better improvements than expected for a reasonable person to conduct after the SSO. Therefore, the Discharger was 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, the Enforcement Policy assigns a multiplier of 1.1. This Discharger does have a history of violations with the Regional Water Board in the last 5 years, but this is the first sanitary sewer overflow that has occurred from this specific junction and manhole. Therefore, a score of **1.1** is assigned. See Table 1, Historical Violations, below.

Table 1 Historical Violations

Violation ID	Violation Date	Description
1048688	06/09/2018 Total	Total Suspended Solids Weekly Average limit is 30 mg/L and reported value was 31 mg/L.
1040761	12/31/2017	Chloride Annual Average (Mean) limit is 70 mg/L and reported value was 79 mg/L.
1040762	112/31/2017	Sulfate, Total (as S) Annual Average (Mean) limit is 70 mg/L and reported value was 73 mg/L
1040752	12/31/2016	Chloride Annual Average (Mean) limit is 70 mg/L and reported value was 80 mg/L.
1040753	12/31/2016	Chloride Annual Average (Mean) limit is 70 mg/L and reported value was 80 mg/L.
1040754	12/31/2015	Chloride Annual Average (Mean) limit is 70 mg/L and reported value was 80 mg/L.

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 **$265,759.95** x Adjustments (1.1) (0.9) (1.1) =

$289,412.59

Step 6. Ability to Pay and 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 Fiscal Year 2020-21 Operating & Capital Improvement Budget[6] states that revenues and other sources of funding, and expenses were both $375,975,000. The Discharger has both loans to pay and lines of credit available. The actual fiscal year 2019 total reserves are $385,132.

Step 7. Economic Benefit

Pursuant to Water Code section 13385, subsection (e), 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 USEPA Economic Benefit Model (BEN)5[7] 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."[8]

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[9] and avoided[10] costs.

The violation of the SSS WDRs was due to the failure of the UPS at the Discharger's Water Reclamation Plant No. 10. Additionally, the failure to install an alarm at the Parshall flume, failure to install Smart Covers on their manholes, failure to install emergency audible sirens in the Headworks and Control Building, failure to install locking manhole lids, failure to have a designated WRP-10 control room operator, failure to implement reinforced alarm testing, and failure to implement a headworks preventative testing program all potentially contributed to the violation. These avoided and delayed expenses have significantly benefited the Discharger.

SSO CIWQS ID 869156 was directly caused by the UPS failure. Following the SSO, the Discharger took several corrective actions including installing a new secondary UPS, relay output card, auxiliary battery banks, and maintenance switch all of which would "provide significant redundancies and ensure that the high-level alarms activate the pumps and control levels under all normal and emergency situations." These actions should have been completed sooner, resulting in an economic benefit of approximately $131. The Discharger also installed additional UPS alarms "to provide redundant notifications through the Supervisory Control and Data Acquisition (SCADA)." The additional alarms resulted in an economic benefit of approximately $14. Finally, they installed a third pump controller and level transducer which will "independently call Pumps Nos. 3 and 4." This resulted in an economic benefit of approximately $69.In addition to the above, the Discharger identified and implemented several corrective actions. Had these actions been completed sooner, they all could have helped mitigate or prevent the SSO. These actions are described below.

The Discharger installed an alarm at the Parshall flume to “provide independent notification that the influent pumps are not pumping from the Headworks.” This component resulted in an economic benefit to the Discharger of approximately $2.

To monitor rising levels in their system, the Discharger installed smart covers at the Cook Street Lift Station and within Water Reclamation Plant No. 10. This should have been done sooner, and the delayed installation resulted in an economic benefit of approximately $78.

The Discharger also installed new emergency audible sirens in their Headworks and Control Building. This delayed action resulted in an economic benefit to the Discharger of approximately $11.

Another effort made by the Discharger to prevent SSOs was to install locking manhole lids on the ID53 Trunk Sewer and the 30-inch and 24-inch trunk sewers. This action should have been completed earlier. The delayed action of procuring the locking manhole lids resulted in an economic benefit of approximately $60.

Additionally, the Discharger implemented several alarm testing enhancements. They stated that, “Adding additional preventative maintenance, testing, and a reinforced Standard Operating Procedures through the implementation of the corrective actions will significantly reduce the risk of future events.” This avoided cost results in an economic benefit of approximately $2,827.

The Discharger also implemented a new Headworks Emergency Contingency Testing Program. This program should have been implemented earlier than it was. This avoided annual cost results in an economic benefit to the Discharger of approximately $26,577.

Finally, the Discharger implemented a UPS Unit Preventative Maintenance SOP as a corrective action. This avoided annual cost results in an economic benefit of approximately $3,818.

For computational purposes, the penalty payment date was established as April 1, 2024. Changes to this date will affect the total economic benefit.

The above-mentioned items have been quantified using USEPA’s BEN Model, as specified in the Enforcement Policy. Staff evaluated the types of actions that the Discharger should have taken to avoid the alleged violations, and in some cases eventually did take, and estimated the cost of these actions.

In total, the State Water Board Staff estimates the delayed and avoided costs were $33,587. 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 (p. 21) 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, ” therefore the total economic liability based on economic benefit in this matter is **$36,945.70.**

Step 8. Other Factors as Justice May Require

No adjustments are made under this factor.

Step 9. Maximum and Minimum Liability Amounts

Minimum Liability Amount: $36,945.70

Water Code section 13385, subdivision (e), requires that at least the economic benefit derived from the violation be recovered. The Enforcement Policy requires the Regional Board to recover, at a minimum, 10% more than the economic benefit. The Enforcement Policy provides that the "Economic Benefit Amount should be compared to the adjusted Total Base Liability Amount [and that the latter] should be at least 10 percent higher than the [former] so that liabilities are not construed as the cost of doing business and that the assessed liability provides a meaningful deterrent to future violations." (Enforcement Policy at Page 21.)

The minimum liability here is $36,945.70. This number is derived from the Economic Benefit Amount, which is calculated to be $33,587 (see Step 7, above).

Maximum Liability Amount:

($10,000/day + (# gallons – 1,000 gallons) x $10/gallon

(128,639 gallons discharged – 1,000 gallons) x $10 = $1,276,390

($10,000) + $1,276,390= **$1,286,390 Maximum Liability Amount**

Step 10. Final Liability Amount

Per day Factor: $10,000/day (1 day)(0.41) = $4,100

Per Gallon Factor: (128,639 gallons discharged – 1,000 gallons)($5/gallon)(0.41)= $261,659.95

Total Liability = $4,100 + $261,659.95 = $265,759.95

Total Liability x Adjustment Factors = $265,759.95(1.1)(0.9)(1.1) = **$289,412.59**