# ATTACHMENT A TO ACL ORDER R7-2022-0012 SPECIFIC FACTORS CONSIDERED FOR ADMINISTRATIVE CIVIL LIABILITY DESERT WATER AGENCY 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 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

Violation: Unauthorized Wastewater Discharged into the Whitewater River Channel, a Water of the United States

## **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 discharge. Toxicity is the degree to which a substance can damage a living or non-living organism. 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.

Raw sewage contains high levels of suspended solids, pathogenic organisms, nutrients, oxygen demanding organic compounds, oil and grease, and other pollutants that have the potential to seriously adversely impact human and environmental receptors. The Cathedral Canyon Force Main connects to Coachella Valley Water District's (CVWD) Collection System, which is connected to the CVWD Palm Desert Water Reclamation Plant #10 (WRP 10). The February 2019 monthly monitoring report submitted by CVWD for WRP 10 indicated the following average influent wastewater characteristics:

- Average Total Suspended Solids: 280 mg/L
- Average Carbonaceous Biochemical Oxygen Demand: 303 mg/L

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).

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

The Enforcement Policy requires a scoring of 0 to 5 based on the actual harm or potential harm to beneficial uses.

Staff has determined the score of 2 for Potential Harm to Beneficial Users. For purposes of settlement, the parties agree that an estimated 268,916 gallons of raw untreated sewage were discharged into the Whitewater River Channel (aka Coachella Valley Storm Channel) from February 15, 2019 to February 19, 2019.

The Whitewater River Channel has the following beneficial uses:

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

The discharge of untreated sewage has the potential to harm beneficial uses because it results in the introduction and exposure of pollutants, such as pathogens, into habitats and recreational areas. However, because of stormwater dilution from the February 14 rain event, where more than 2 billion gallons of water was recorded passing by the Whitewater River Channel, the potential harm is measurable in the short term but not appreciable. Therefore, the potential for harm scored 2.

# 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.

Because the Discharger did not recover any of the spill from the sanitary sewer overflow (SSO), staff 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  $\underline{\mathbf{6}}$  (3 + 2 + 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 Deviation from the Requirement of the violation (see Enforcement Policy, Tables 1 and 2 at Pages 14 and 15).

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#### **Deviation from Requirement**

Section 301 of the Federal Water Pollution Control Act (known as the Clean Water Act) prohibits the discharge of pollutants to waters of the United States except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. (33 United States Code [U.S.C.] § 1311.) State Water Board Order No. 2006-0003-DWQ Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS WDRs) prohibits "Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States [...]." (Order No. 2006-0003-DWQ, Section C [Prohibitions] at Page 7, available online at:

https://www.waterboards.ca.gov/board\_decisions/adopted\_orders/water\_quality/2006/wqo/wqo2006\_0003.pdf).

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)."

In this case, the raw sewage discharge was a major deviation from requirements because it rendered the prohibitions on discharging untreated wastewater to waters of the United States and the prohibitions of Order No. 2006-0003-DWQ ineffective in their essential functions. The prohibitions would be effective only if no discharge had occurred.

#### Per Gallon Assessments for Discharge Violations

When there is a discharge, the Colorado River Basin Water Quality Control Board (Regional Water Board) must determine the initial liability amount on a per gallon basis using the Potential Harm score from Step 1 and the Deviation from Requirement score. Here, the deviation is **Major**.

Table 1 of the Enforcement Policy (Page14) is used to determine a "Per Gallon Factor" based on Step 1 (Potential for Harm) and the Deviation from Requirement scores. Here, the Per Gallon Factor is **0.28**. This Per Gallon Factor value is then multiplied by the volume of discharge and the per gallon assessment of liability, as described below.

For purposes of settlement, the parties agree that approximately 268,916 gallons of raw sewage was discharged from late on February 15, 2019 to 1:40 p.m. on February 19, 2019. 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."

#### 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, based on the severity of impacts to beneficial uses. In this case, the value of \$2.00 was chosen from the range of \$2.00-\$10.00, because the unauthorized

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discharge occurred during a heavy rain event, which warrants a high-volume discharge reduction as rain dilution reduced the harm to beneficial uses.

As set forth in the calculation below, the spill event from late on February 15, 2019 to 1:40 p.m. on February 19, 2019 resulted in an estimated volume of 268,916 gallons of discharge. The per gallon assessment is calculated as (factor from Table 1) x (spill volume – 1,000 gallons) x (\$2.00 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. As discussed above, here the deviation is **Major**.

Table 2 of the Enforcement Policy (Page 15) 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 **0.28**. This Per Day Factor value is then multiplied by maximum per day amounts (\$10,000).

For purposes of settlement, that parties agree that approximately 268,916 gallons of raw sewage was discharged from February 15, 2019 to 1:40 p.m. on February 19, 2019. 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." As set forth in the calculation below, the spill event from February 14, 2019 to February 19, 2019 resulted in an estimated 4 days of discharge. 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: 0.28 x (268,916 gallons discharged – 1,000 gallons) x \$2.00 per gallon = **\$150,033** 

Per Day Liability:  $0.28 \times (4 \text{ days}) \times \$10,000 \text{ per day} = \$11,200$ 

Initial Liability = Per Gallon Liability + Per Day Liability = \$150,033 + \$11,200 = \$161,232

#### **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 violator's culpability, efforts to clean up or cooperate with regulatory authorities, and the violator's 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

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each violation to determine the revised amount for that violation" (Enforcement Policy at 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 Discharger was given the score of 1.1 for the culpability factor. The February 14, 2019 storm was a significant rain event wherein more than 3 inches of rain were recorded that day. For purposes of settlement, the Parties agree that the sewer line break occurred late on February 15, 2019 and the Discharger did not discover this break until February 19, 2019 at approximately 1:00 p.m., when City of Cathedral City staff notified the agency. This lack of oversight by the Discharger on its sewer system caused additional discharge to the Whitewater River Channel that otherwise might have been prevented.

## 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.

In this case, the Discharger was given the score of 1.0. On February 19, 2019, at approximately 1:00 p.m., the Discharger was notified by the City of Cathedral City field crews of a possible leak on the sewer force main that crosses the Whitewater River Channel. The Construction Superintendent for the Discharger immediately responded to the call, and after confirming the leak was on the sewer main force, implemented the Sanitary Sewer Overflow Response Plan. The Discharger followed protocol prescribed under the SSO order. As such a score of 1.0 is assigned.

#### History of Violations

When there is no history of violations, the Enforcement Policy assigns a neutral multiplier of 1.0. This Discharger does not have a history of violations with the Regional Water Board. 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 (\$161,232) x Adjustments (1.1) (1.0) (1.0) = \$177,356

#### Step 6. Ability to Pay and Continue in Business

The Discharger has the ability to pay the administrative civil liability amount, and there are no factors under this category that warrant an adjustment.

#### Step 7. Economic Benefit

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Pursuant to California Water Code Section 13385(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 violation of the SSS WDRs was potentially due to the failure to properly inspect the force main upon relocation in 1986, properly inspect the downstream manhole during storms, and replace the force main portion across the channel with a material that would protect it from storm events. These avoided and delayed expenses have significantly benefited Desert Water Agency (Discharger).

The Discharger's Sanitary Sewer Construction Specifications Booklet states that "[s]ewer lines smaller than 21 inches will be visually inspected by sewer video taping after completion of acceptable leakage tests." No closed-circuit television (CCTV) inspection records were provided for 1980, when the force main was installed, or for 1986, when the force main was relocated and partially upsized. The force main is 1,400 feet long so the avoided cost of CCTV results in an economic benefit of approximately \$5,297.

Following the SSO, the Discharger identified a corrective action as inspecting the manhole on the north side of the Cathedral Canyon wash "to ensure that when the lift station pumps are operating during a storm event, flow from the force main is reaching the manhole." This action should have been completed each day of the storm event and the day following the event, resulting in an economic benefit of approximately \$253.

In a response provided by the Discharger, it explained that approximately 100 linear feet of 8-inch polyvinyl chloride (PVC) pipe was replaced with ductile iron pipe (DIP) with restrained joints following the storm event and that "the fully restrained DIP will provide significantly improved protection of the force main against future storm and scour events, because DIP is significantly stronger than PVC in every way." This delayed cost results in an economic benefit to the Discharger of approximately \$1,786.

Given the superior strength of DIP and the significantly improved protection it offers against storm and scour events, the entire length of force main across the channel should have been replaced with DIP and restrained joints. The total length across the channel is approximately 500 linear feet. Since 100 linear feet was replaced following the storm, this leaves 400 linear feet that was not replaced. The avoided cost associated with replacing these 400 linear feet result in an economic benefit of approximately \$60,705.

For computational purposes, the penalty payment date was established as February 8, 2022. Changes to this date will affect the total economic benefit. Based on specific assumptions within the model, the total economic benefit of noncompliance was determined to be approximately, \$68,041. The Enforcement Policy state (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 minimum total liability associated with the economic benefit is approximately \$74,845.

# Step 8. Other Factors as Justice May Require

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Regional Water Board staff members spent 35 hours to investigate and prepare this Complaint, including 20 hours of drafting attachment A, 5 hours of drafting the investigative order, and 10 hours of reviewing the technical reports, amounting to \$4,591 in staff costs.

# Step 9. Maximum and Minimum Liability Amounts

Minimum Liability Amount: \$74,845

Maximum Liability Amount: \$2,719,160

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 \$74,845. This number is derived from the Economic Benefit Amount, which is calculated to be \$68,041. The final liability amount is more than the Economic Benefit Amount plus 10 percent. Therefore, the Enforcement Policy's requirements are satisfied in this matter.

# 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 **\$181,947**.