EXHIBIT A

Factors in Determining Administrative Civil Liability

Martinez Refining Company LLC NPDES Permit Violations Martinez, California

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. The Enforcement Policy is at:

https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/040 417_9_final%20adopted%20policy.pdf

ALLEGED VIOLATIONS

Martinez Refining Company LLC (Discharger) owns and operates the Martinez Refinery in Contra Costa County (Facility). The Facility is a petroleum refinery that produces a broad range of petroleum products. The Facility's wastewater treatment plant treats process wastewater, non-process wastewater, sanitary wastewater, and stormwater runoff from refinery process and non-process areas. The treated wastewater is discharged to the Carquinez Strait via Discharge Point 001 pursuant to NPDES Permit CA0005789 (Permit), as set forth most recently in San Francisco Bay Regional Water Quality Control Board (Regional Water Board) Orders R2-2017-0039 and R2-2022-0034.¹ The Prosecution Team alleges the Discharger violated the Permit by exceeding its effluent limitations 25 times and discharging without authorization three times (October 27, 2022, January 4, 2023, and June 7, 2023). The Prosecution Team also alleges the Discharger violated its January 8, 2021, Water Code Section 13383 Order Requiring Submittal of Information on Climate Change Adaptation (13383 Order) by failing to provide the requested information.

The Discharger represents that many of the alleged Permit limit exceedances were due to extreme, back-to-back storm events that occurred in December 2022-January 2023 and caused an influx of millions of gallons of storm water into the Facility's wastewater treatment system and forcing the discharge of partially treated water to avoid severe property damage and threats to employee safety that would have been resulted from flooding of refinery process areas.

¹ Order R2-2022-0034 became effective January 1, 2023, and superseded Order R2-2017-0039.

The final liabilities are summarized below:

- Effluent Limitation Violations \$209,000
- Unauthorized Discharge: October 27, 2022 \$619,000
- Unauthorized Discharge: January 4, 2023 \$2,751,000
- Unauthorized Discharge: June 7, 2023 \$628,000
- 13383 Climate Change Adaptation: Failure to Comply \$275,000

The total proposed final liability for the alleged violations described below is \$4,482,000.

Alleged Effluent Limitation Violations

As shown in the table below, from January 1, 2023, through March 5, 2023; from April 1 through April 30, 2023; and on May 14 and July 25, 2023, the Discharger discharged a combined total of approximately 477 million gallons of wastewater via Discharge Point 001 that violated the Permit's effluent limitations for *Enterococcus*, total suspended solids, nickel, acute toxicity, and pH.

Date	Violation	Period	Unit	Limit	Result
01/01/23	Enterococcus (geometric mean)	6-week	CFU/100mL	93	250
01/01/23	Total Suspended Solids	Daily	lbs/day	2300	2700
01/08/23	Enterococcus (geometric mean)	6-week	CFU/100mL	93	270
01/09/23	Total Suspended Solids	Daily	lbs/day	2300	6400
01/10/23	Total Suspended Solids	Daily	lbs/day	2300	8200
01/11/23	Nickel	Daily	ug/L	72	76
01/12/23	Nickel	Daily	ug/L	72	78
01/14/23	Nickel	Daily	ug/L	72	83
01/15/23	Enterococcus (geometric mean)	6-week	CFU/100mL	93	120
01/15/23	Nickel	Daily	ug/L	72	80
01/22/23	Enterococcus (geometric mean)	6-week	CFU/100mL	93	130
01/23/23	Acute Toxicity (90 th percentile)	11-sample	% survival	70	57
01/29/23	Enterococcus (geometric mean)	6-week	CFU/100mL	93	150
01/31/23	<i>Enterococcus</i> (<10% of samples)	Month	% of samples	<10	18
02/05/23	Enterococcus (geometric mean)	6-week	CFU/100mL	93	190
02/12/23	Enterococcus (geometric mean)	6-week	CFU/100mL	93	140
02/19/23	Enterococcus (geometric mean)	6-week	CFU/100mL	93	150
02/26/23	Enterococcus (geometric mean)	6-week	CFU/100mL	93	180
02/27/23	pH (minimum)	Daily	standard units	6.5	6.4
02/28/23	<i>Enterococcus</i> (<10% of samples)	Month	% of samples	<10	18
03/05/23	Enterococcus (geometric mean)	6-week	CFU/100mL	93	140
04/14/23	Nickel	Daily	ug/L	72	88
04/30/23	Nickel	Month	ug/L	43	46
05/14/23	Nickel	Daily	ug/L	72	83
07/25/23	Total Suspended Solids	Daily	lbs/day	2300	3700

The allowable six-week rolling geometric mean for *Enterococcus* bacteria is 93 colony forming units per 100 milliliters (CFU/100mL).² For a given sample, compliance with this effluent limitation is based on all the samples collected over the previous six weeks. Because the Permit became effective January 1, the days out of compliance began on January 1. The violations continued as samples were collected on January 8, 15, 22, and 29; February 5, 12, 19, and 26; and March 5, 2023. In February 2023, the Discharger also violated the effluent limitation that no more than 10 percent of all *Enterococcus* bacteria samples collected in a calendar month may exceed 890

² Order R2 2022-0034, section 4.1.1, Table 4.

CFU/100mL. However, the 28 days of this violation took place during the same period as the four violations of the six-week rolling geometric mean effluent limit. Thus, the total number of days of noncompliance from January 1, 2023, through March 5, 2023, was 64, during which 326 million gallons of wastewater were discharged.

The Discharger violated both the daily and monthly effluent violations for nickel. On January 11, 12, 14, and 15; April 14; and May 14, 2023, the Discharger violated the maximum daily effluent limit, 72 micrograms per liter (ug/L). In April 2023, the Discharger also violated the monthly average effluent limit for nickel, 43 ug/L.³ The January nickel violations overlapped the January *Enterococcus* violations and thus do not represent additional days of noncompliance or additional discharge volumes. The April and May nickel violations add 31 days of noncompliance, during which 146 million gallons of wastewater were discharged.

On January 1, 9, and 10, and July 25, 2023, the Discharger violated the maximum daily effluent limit for total suspended solids (TSS), 2,300 pounds per day (lbs/day).⁴ The January TSS violations overlapped the January *Enterococcus* violations and thus do not represent additional days of noncompliance or discharge volumes. The July TSS violation adds one day of noncompliance, during which 5.3 million gallons of wastewater were discharged.

On January 23, 2023, the Discharger violated the acute toxicity effluent limitation (the 11-sample 90th percentile may not exhibit less than 70 percent survival).⁵ The Discharger reported an 11-sample 90th percentile of 57 percent survival for the period beginning on November 14, 2022, through January 23, 2023, with acute toxicity test results below 70 percent on December 28, 2022, and January 23, 2023. Because the Permit became effective January 1, 2023, and this violation overlapped the *Enterococcus* violations, this violation does not represent additional days of noncompliance or discharge volumes.

On February 27, 2023, the Discharger violated the pH effluent limitation; the minimum pH is to be above 6.5.⁶ This violation overlapped the *Enterococcus* violations and thus does not represent additional days of noncompliance or discharge volumes.

The Discharger is subject to administrative civil liability for the alleged effluent limitation violations described above pursuant to Water Code section 13385, subdivision (a)(2). The factors considered in determining the liability for the violations, and the Prosecution Team's conclusions with respect to each of these factors, are described below.

³ Order R2 2022-0034, section 4.1.1, Table 4.

⁴ Order R2 2022-0034, section 4.1.1, Table 4.

⁵ Order R2 2022-0034, section 4.1.3.2.

⁶ Order R2 2022-0034, section 4.1.1, Table 4.

Penalty Factor	Score	Discussion
Degree of Toxicity of the Discharge Violations	2	A score of 2 (moderate) is appropriate because the "Discharged material poses a moderate risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material have some level of toxicity or pose a moderate level of threat to potential receptors)." (Enforcement Policy, p. 12.)
		The violations listed above posed a moderate risk or threat to potential receptors because the discharges contained, in various combinations, bacteria at levels exceeding human health standards, nickel exceeding the water quality objective, acute toxicity to aquatic life, and high TSS concentrations that could contain harmful constituents, such as hydrocarbons and other byproducts of refinery operations, which could be absorbed or trapped in fish gills or deposited in sediment.
Harm or Potential Harm to Beneficial Uses for Discharge Violations	2	A score of 2 (below moderate) is appropriate because there was "less than moderate harm or potential harm to beneficial uses. A score of below moderate is typified by observed or reasonably expected potential impacts, but based on the characteristics of the discharge and applicable beneficial uses, harm or potential harm to beneficial uses is measurable in the short term, but not appreciable." (Enforcement Policy, p. 12.)
		The effluent limit violations likely resulted in below moderate harm because, although the characteristics of the discharged material may have posed threats to potential receptors, the discharges received at least 16:1 dilution at the outfall. Therefore, the actual impacts may not have been appreciable over time.
Susceptibility to Cleanup or Abatement	1	A score of 1 is appropriate because the discharges commingled with the receiving waters and were not susceptible to cleanup or abatement. (Enforcement Policy, p. 13.)
Deviation from Requirement	Major	The effluent limit violations represent a major deviation from requirements because they rendered the requirements ineffective in their essential functions (i.e., maintaining water quality standards in the receiving waters). (Enforcement Policy, p. 14.)
Per-Day Factor for Discharge	0.15	The Enforcement Policy states that, generally, effluent limit violations should be addressed on a per-day basis only. (Enforcement Policy, p. 13.)
Violations		Enforcement Policy Table 2 contains per-day factors based on the Potential for Harm score and the Deviation from Requirement. (Enforcement Policy, p. 15.) A Potential for Harm score of 5 and a major Deviation from Requirement results in a per-day factor of 0.15.
Initial Liability	\$144,000	The Discharger violated various effluent limits from January 1 through March 5, 2023, a period of 64 days. The Discharger violated the monthly nickel effluent limit in April 2023, a period of 30 days. The Discharger violated two more daily effluent limit violations on May 14 and July 25, 2023, adding two more days to the total. Therefore, the initial liability calculated on a per-day basis for 96 days of violation is as follows: Initial Liability: \$144,000 = (\$10,000/day x (64+30+2 days) x 0.15)

Penalty Factor	Score	Discussion		
	Adjustments for Discharger Conduct			
Culpability	1.2	A score of 1.2 (above neutral) is appropriate because a reasonable and prudent discharger would have more quickly identified the causes of the <i>Enterococcus</i> and nickel violations, and limited the duration of noncompliance, instead of allowing the violations to persist for months.		
Cleanup and Cooperation	1.1	A score of 1.1 (above neutral) is appropriate because, while the Discharger was cooperative, its five-day reports lacked detail and failed to identify effective corrective actions, allowing the violations to persist.		
History of Violations	1.1	A score of 1.1 is appropriate because the Discharger has a history of violations, as demonstrated by the following enforcement orders:		
		 Order R2-2021-1007: \$126,000 penalty for March 2020 effluent limit violations. 		
Total Base Liability	\$209,088	The initial liability is multiplied by each factor related to the Discharger's conduct to determine the Total Base Liability as follows: \$209,088 = \$144,000 x 1.2 (culpability) x 1.1 (history of violations) x 1.1 (cleanup and cooperation)		
Ability to Pay and Continue in Business	No adjust- ment	The Enforcement Policy provides that if there is sufficient financial information to assess the violator's ability to pay the total base liability or to assess the effect of the total base liability on the violator's ability to continue in business, then the liability may be adjusted downward if warranted. PBF, the Discharger's parent corporation, is a large energy business with multiple refineries throughout the United States. It did not raise the issue of the ability to pay during negotiations. Therefore, the Prosecution Team concludes that the Discharger can pay the proposed liability without undue financial hardship.		
Economic Benefit	little to none	The Enforcement Policy requires recovery of any economic benefit plus 10 percent derived from failure to implement controls that result in a violation. The Discharger may have received nominal economic benefits by failing to quickly control pollutant concentrations in its effluent, but because the Discharger was able to identify and eventually resolve ongoing treatment problems, it received little to no economic benefit.		
		Other Factors as Justice May Require		
Staff Costs	none	The Prosecution Team chose not to pursue staff costs.		
Maximum Liability		Water Code sections 13385(c)(1) and (2) allow up to \$10,000 for each day in which the violation occurs; and \$10 for each gallon exceeding 1,000 gallons that is discharged and not cleaned up.		
Minimum Liability		The Enforcement Policy and Water Code section 13385(h) and (i) require a \$3,000 mandatory minimum penalty for all serious violations and any non-serious violations that occur in a 180-day span, not counting the first three non-serious violations. Of the 25 violations, 18 met these criteria.		
		The Enforcement Policy also states that the final liability must be at least 10 percent higher than the economic benefit. (Enforcement Policy, p. 21.) The economic benefit derived from the alleged violations was negligible.		

Penalty Factor	Score	Discussion
Final Liability	\$209,000 (rounded)	The final liability is the total base liability after adjusting for ability to pay, economic benefit, other factors, and maximum and minimum liabilities.

Alleged Unauthorized Discharge to Marsh (October 27, 2022)

On October 27, 2022, the Discharger allegedly discharged 72,645 gallons of partially treated wastewater to a marsh, a water of the State and United States adjacent to its facility, in violation of Clean Water Act section 301, discharging pollutants to waters of the United States without authorization. This is also a violation of Order R2-2022-0034 discharge prohibition 3.1.

Water Code section 13385 and the Enforcement Policy allow the Regional Water Board to choose whether to pursue enforcement based on the number of days of violation or the volume discharged or both. The proposed penalty is based on the volume of the discharge. The Prosecution Team has considered each factor listed in the Enforcement Policy as presented below.

Penalty Factor	Score	Discussion
Degree of Toxicity of the Discharge Violations	3	A score of 3 (above-moderate) is appropriate because 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 or there is substantial threat to potential receptors)." (Enforcement Policy, p. 12.)
		The unauthorized discharge posed an above-moderate risk or threat to potential receptors because, although the discharge was partially-treated, it did not go through the selenium processing unit or granular activated carbon treatment, thus the wastewater was likely toxic to aquatic life. The discharge contained elevated levels of copper (17 ug/L), chemical oxygen demand (270 mg/L), cyanide (15 ug/L), nickel (22 ug/L), and selenium (300 ug/L).
Harm or Potential Harm to Beneficial Uses for Discharge Violations	4	A score of 4 (above moderate) is appropriate because there was "more than moderate harm or potential harm to beneficial uses. A score of above moderate is typified by observed or reasonably expected potential significant impacts, and involves potential for actual partial or temporary restrictions on, or impairment of, beneficial uses." (Enforcement Policy, p. 13.) The discharge likely caused above-moderate harm because it exceeded the water quality objectives for copper (2.5 ug/L), cyanide (2.9 ug/L), nickel (8.2 ug/L), and selenium (5.0 ug/L) developed to protect beneficial uses. The impacts could have persisted for some time because the undiluted discharge affected an area of the marsh that is not regularly subject to tidal flushing.
Susceptibility to Cleanup or Abatement	1	A score of 1 is appropriate because the discharge commingled with the receiving waters and the Discharger did not clean up 50 percent or more of the discharge. (Enforcement Policy, p. 13.)

Penalty Factor	Score	Discussion
Deviation from Requirement	Major	The discharge was a major deviation from requirement because it was not authorized by any State or federal permit. The Clean Water Act and Water Code require dischargers to apply for and obtain permits prior to discharge. These requirements were rendered ineffective in their essential functions. (Enforcement Policy, p. 14.)
Per-Gallon Factor for Discharge Violations	0.6	Enforcement Policy Table 2 contains per-day factors based on the Potential for Harm score and the Deviation from Requirement. (Enforcement Policy, p. 15.) A Potential for Harm score of 8 and a major Deviation from Requirement results in a per-gallon factor of 0.6.
Initial Liability	\$429,870	The initial liability, calculated using the per-gallon factor, \$10 per gallon, and the discharge volume minus 1,000 gallons, is as follows: Initial Liability: \$429,870 = \$10/gal x (72,645 gallons – 1,000 gallons) x 0.6
		Adjustments for Discharger Conduct
Culpability	1.2	A score of 1.2 (above neutral) is appropriate because a reasonable and prudent discharger would have prevented the discharge either by maintaining the splitter box or controlling the spilled material while it was pooling near the selenium processing unit, instead of allowing thousands of gallons to pond before discharging to an adjacent marsh.
Cleanup and Cooperation	1.2	A score of 1.2 (above neutral) is appropriate because, while the Discharger was cooperative, its five-day reports lacked detail and failed to identify corrective actions for spill response or cleanup, making similar discharges likely to occur in the future.
History of Violations	1.0	A score of 1.0 is appropriate because the Discharger does not have a history of enforcement against unauthorized discharges since acquiring the facility in 2020.
Total Base Liability	\$619,013	The initial liability is multiplied by each factor related to the Discharger's conduct to determine the Total Base Liability as follows: \$619,013 = \$429,870 x 1.2 (culpability) x 1.0 (history of violations) x 1.2 (cleanup and cooperation)
Ability to Pay and Continue in Business	No adjust- ment	The Enforcement Policy provides that if there is sufficient financial information to assess the violator's ability to pay the total base liability or to assess the effect of the total base liability on the violator's ability to continue in business, then the liability may be adjusted downward if warranted. PBF, the Discharger's parent corporation, is a large energy business with multiple refineries throughout the United States. It did not raise the issue of the ability to pay during negotiations. Therefore, the Prosecution Team concludes that the Discharger can pay the proposed liability without undue financial hardship.
Economic Benefit	\$11,000	The Enforcement Policy requires recovery of any economic benefit plus 10 percent derived from failure to implement controls that result in a violation. The blockage that caused the spill from the pipeline could have been avoided by more frequently cleaning out vegetation from Pond 5D. Assuming that cleaning out the vegetation from Pond 5D could cost roughly \$5,000 to 10,000, the maximum economic benefit would be roughly \$10,000. Adding 10 percent would result in \$11,000.

Penalty Factor	Score	Discussion
		Other Factors as Justice May Require
Staff Costs	none	The Prosecution Team chose not to pursue staff costs.
		Water Code sections 13385(c)(1) and (2) allow up to \$10,000 for each day in which the violation occurs; and \$10 for each gallon exceeding 1,000 gallons that is discharged and not cleaned up.
		The Enforcement Policy and Water Code section 13385(h) and (i) require a \$3,000 mandatory minimum penalty for all serious violations and any non-serious violations that occur in a 180-day span, not counting the first three non-serious violations. Of the 25 violations, 18 met these criteria.
		The Enforcement Policy also states that the final liability must be at least 10 percent higher than the economic benefit. (Enforcement Policy, p. 21.) The economic benefit derived from the alleged violations was negligible.
Final Liability	\$619,000 (rounded)	The final liability amount is the total base liability after adjusting for ability to pay, economic benefit, other factors, and maximum and minimum liabilities.

Alleged Unauthorized Discharge to Marsh (January 4, 2023)

On January 4, 2023, the Discharger allegedly discharged 11.2 million gallons of partially primary-treated process wastewater and stormwater at an unpermitted location to a marsh, a water of the State and United States, adjacent to its facility, in violation of Clean Water Act section 301, discharging pollutants to waters of the United States without authorization. Of this discharge, 3,126,000 gallons were process wastewater. This is also a violation of Order R2-2022-0034 discharge prohibition 3.1.

Water Code section 13385 and the Enforcement Policy allow the Regional Water Board to choose whether to pursue enforcement based on the number of days of violation or the volume discharged or both. The proposed penalty is based on the volume of the process wastewater in the discharge. Generally, any stormwater that comes in contact with process wastewater is considered process wastewater. The Prosecution Team chose to focus on the process wastewater prior to mixing with the stormwater due to the severity of the storm and the resulting large amount of stormwater. The process wastewater was likely much more toxic than the stormwater and thus of higher concern. The Prosecution Team has considered each factor listed in the Enforcement Policy as presented below.

Penalty Factor	Score	Discussion
Degree of Toxicity of the	4	A score of 4 (significant) is appropriate because the "Discharged material poses a significant risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material far

Penalty Factor	Score	Discussion
Discharge Violations		exceed risk factors and pose a significant threat to potential receptor uses)." (Enforcement Policy, p. 12.)
		The unauthorized discharge posed a significant threat to potential receptors because the discharge contained 3.1 million gallons of highly toxic, partially primary-treated refinery wastewater. At the time of sampling, the discharge had an acute toxicity test survival rate of zero percent.
Harm or Potential Harm to Beneficial Uses for Discharge	4	A score of 4 (above moderate) is appropriate because there was "more than moderate harm or potential harm to beneficial uses. A score of above moderate is typified by observed or reasonably expected potential significant impacts, and involves potential for actual partial or temporary restrictions on, or impairment of, beneficial uses." (Enforcement Policy, p. 13.)
Violations		The discharge likely caused above-moderate harm because it exceeded water quality objectives developed to protect beneficial uses. The impacts could have persisted for some time because the undiluted discharge affected an area of the marsh that is not regularly subject to tidal flushing.
Susceptibility to Cleanup or Abatement	1	A score of 1 is appropriate because the discharge commingled with the receiving water and was not susceptible to at least 50 percent cleanup or abatement. (Enforcement Policy, p. 13.)
Deviation from Requirement	Major	The discharge was a major deviation from requirement because it was not authorized by any State or federal permit. The Clean Water Act and Water Code require dischargers to apply for and obtain permits prior to discharge. These requirements were rendered ineffective in their essential functions. (Enforcement Policy, p. 14.)
Per-Day Factor for Discharge Violations	0.8	Enforcement Policy Table 2 contains per-day factors based on the Potential for Harm score and the Deviation from Requirement. (Enforcement Policy, p. 15.) A Potential for Harm score of 9 and a major Deviation from Requirement results in a per-day factor of 0.8.
Initial Liability	\$2.50 million	The maximum allowable per-gallon liability is \$10 per gallon. Because this was a high-volume discharge, the initial liability calculation uses \$1 per gallon, which is allowable under the Enforcement Policy (p. 14) for discharges in excess of two million gallons. The initial liability, calculated using the per-gallon factor, \$1 per gallon, and the discharge volume minus 1,000 gallons, is as follows: Initial Liability: \$2,500,000 = \$1/gal x (3,126,000 gallons – 1,000 gallons) x 0.8
		Adjustments for Discharger Conduct
Culpability	1.0	A score of 1.0 (neutral) is appropriate because, while a reasonable and prudent discharger would have isolated process wastewater from the stormwater ponds during the periods of intense rain, the Discharger attempted to maximize storage onsite prior to the storm.
Cleanup and Cooperation	1.1	A score of 1.1 (above neutral) is appropriate because the Discharger was unable to identify the amount of process water in the discharge for two weeks and delayed responses to Regional Water Board staff follow up questions for five or more days.

Penalty Factor	Score	Discussion
History of Violations	1.0	A score of 1.0 is appropriate because the Discharger does not have a history of enforcement against unauthorized discharges since acquiring the facility in 2020.
Total Base Liability	\$2.75 million	The initial liability is multiplied by each factor related to the Discharger's conduct to determine the Total Base Liability as follows: \$2,750,000 = \$2,500,000 x 1.0 (culpability) x 1.0 (history of violations) x 1.1 (cleanup and cooperation)
Ability to Pay and Continue in Business	No adjust- ment	The Enforcement Policy provides that if there is sufficient financial information to assess the violator's ability to pay the total base liability or to assess the effect of the total base liability on the violator's ability to continue in business, then the liability may be adjusted downward if warranted. PBF, the Discharger's parent corporation, is a large energy business with multiple refineries throughout the United States. It did not raise the issue of the ability to pay during negotiations. Therefore, the Prosecution Team concludes that the Discharger can pay the proposed liability without undue financial hardship.
Economic Benefit	\$569,000	The Enforcement Policy requires recovery of any economic benefit plus 10 percent derived from failure to implement controls that result in a violation. One way to estimate the economic benefit for this discharge is to calculate the minimum costs to store 3.1 million gallons in 21,000-gallon Baker tanks. To store that volume for one week, 149 tanks could be used to hold the discharge volume for a week. Assuming a cost of \$2,800 per tank, the economic benefit would be about \$417,200. Assuming the stored waste could be processed onsite and that associated labor and miscellaneous costs would be \$100,000 or less, the economic benefit would be around \$517,200. Therefore, the economic benefit plus 10 percent is approximately \$569,000.
		Other Factors as Justice May Require
Staff Costs	none	The Prosecution Team chose not to pursue staff costs.
		Water Code sections 13385(c)(1) and (2) allow up to \$10,000 for each day in which the violation occurs; and \$10 for each gallon exceeding 1,000 gallons that is discharged and not cleaned up.
		The Enforcement Policy and Water Code section 13385(h) and (i) require a \$3,000 mandatory minimum penalty for all serious violations and any non-serious violations that occur in a 180-day span, not counting the first three non-serious violations.
		The Enforcement Policy also states that the final liability must be at least 10 percent higher than the economic benefit. (Enforcement Policy, p. 21.) The economic benefit derived from the alleged violations was negligible.

Penalty Factor	Score	Discussion
Final Liability	\$2.75 million	The final liability amount is the total base liability after adjusting for ability to pay, economic benefit, other factors, and maximum and minimum liabilities.

Alleged Unauthorized Discharge to Water Retention Area (June 7, 2023)

On June 7, 2023, the Discharger allegedly discharged 471,100 gallons of partially primarytreated process wastewater to a water retention area hydrologically connected to McNabney Marsh, a water of the State and United States, in violation of Clean Water Act section 301, discharging pollutants to waters of the United States without authorization. This is also a violation of Order R2-2022-0034 discharge prohibition 3.1. The discharge occurred as a result of a break in a cement-encased pipeline that was not discovered until water was observed spilling from the section of the pipeline where the break occurred. The Discharger was unable to clean up 328,314 gallons of the unauthorized discharge.

Water Code section 13385 and the Enforcement Policy allow the Regional Water Board to choose whether to pursue enforcement based on the number of days of violation or the volume discharged or both. The proposed penalty is based on the volume of the discharge. The Prosecution Team has considered each factor listed in the Enforcement Policy as presented below.

Penalty Factor	Score	Discussion
Degree of Toxicity of the Discharge Violations	4	A score of 4 (significant) is appropriate because the "Discharged material poses a significant risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material far exceed risk factors and pose a significant threat to potential receptor uses)." (Enforcement Policy, p. 12.)
		The unauthorized discharge described above posed a significant threat to potential receptors because the discharge contained 328,314 gallons of highly toxic, partially primary-treated refinery wastewater. Similarly treated effluent sampled at the same time as the discharge contained elevated levels of biochemical oxygen demand (241 mg/L), copper (22 ug/L), chemical oxygen demand (1,070 mg/L), cyanide (265 ug/L), oil and grease (61 mg/L), and selenium (137 ug/L), and had a pH of 11.
Harm or Potential Harm to Beneficial Uses for Discharge	4	A score of 4 (above moderate) is appropriate because there was "more than moderate harm or potential harm to beneficial uses. A score of above moderate is typified by observed or reasonably expected potential significant impacts, and involves potential for actual partial or temporary restrictions on, or impairment of, beneficial uses." (Enforcement Policy, p. 13.)
Violations		The discharge likely caused above-moderate harm because it exceeded the water quality objectives for copper (2.5 ug/L), cyanide (2.9 ug/L), nickel (8.2 ug/L), and selenium (5.0 ug/L) developed to protect beneficial uses. The impacts could have persisted for some time because the undiluted discharge affected a shallow area connected to McNabney Marsh that is not regularly subject to tidal flushing.

Penalty Factor	Score	Discussion
Susceptibility to Cleanup or Abatement	1	A score of 1 is appropriate because the Discharger used vacuum trucks to clean up less than 50 percent of the discharge. (Enforcement Policy, p. 13.)
Deviation from Requirement	Major	The discharge was a major deviation from requirement because it was not authorized by any State or federal permit. The Clean Water Act and Water Code require dischargers to apply for and obtain permits prior to discharge. These requirements were rendered ineffective in their essential functions. (Enforcement Policy, p. 14.)
Per-Day Factor for Discharge Violations	0.8	Enforcement Policy Table 2 contains per-day factors based on the Potential for Harm score and the Deviation from Requirement. (Enforcement Policy, p. 15.) A Potential for Harm score of 9 and a major Deviation from Requirement results in a per-day factor of 0.8.
Initial Liability	\$523,702	The maximum allowable per-gallon liability is \$10 per gallon. Because this was a high-volume discharge, the initial liability calculation uses \$2 per gallon, which is allowable under the Enforcement Policy (p. 14) for discharges between 100,000 and two million gallons. The initial liability, calculated using the per-gallon factor, \$2 per gallon, and the discharge volume minus 1,000 gallons, is as follows: Initial Liability: \$523,702 = \$2/gal x (328,314 gallons – 1,000 gallons) x 0.8
		Adjustments for Discharger Conduct
Culpability	1.2	A score of 1.2 (above neutral) is appropriate because a reasonable and prudent discharger would have prevented the spill from reaching surface waters. The spilled wastewater flowed down a slope during dry weather, pooled in a parking lot, entered a drain to another parking lot, and then entered a stormwater drain from which it discharged to the water retention area. In its Spill Prevention and Countermeasures Control Plan, the Discharger lists the area as uncontained, meaning it knew the area would not be contained during a spill and yet did not have a spill control plan.
Cleanup and Cooperation	1.0	A score of 1.0 (neutral) is appropriate because the Discharger cleaned up some of the spill on the day of the discharge.
History of Violations	1.0	A score of 1.0 is appropriate because the Discharger does not have a history of enforcement against unauthorized discharges since acquiring the facility in 2020.
Total Base Liability	\$628,443	The initial liability is multiplied by each factor related to the Discharger's conduct to determine the Total Base Liability as follows: \$628,443 = \$523,702 x 1.2 (culpability) x 1.0 (history of violations) x 1.0 (cleanup and cooperation)
Ability to Pay and Continue in Business	No adjust- ment	The Enforcement Policy provides that if there is sufficient financial information to assess the violator's ability to pay the total base liability or to assess the effect of the total base liability on the violator's ability to continue in business, then the liability may be adjusted downward if warranted. PBF Energy Inc., the Discharger's parent corporation, is a large energy business with multiple refineries throughout the United States. It did not raise the issue of the ability to pay during negotiations.

Penalty Factor	Score	Discussion	
		Therefore, the Prosecution Team concludes that the Discharger can pay the proposed liability without undue financial hardship.	
Economic Benefit	\$11,000	The Enforcement Policy requires recovery of any economic benefit plus 10 percent derived from failure to implement controls that result in a violation. Because the discharge flowed through two storm drains before discharge, the discharge could have been avoided by covering the two storm drain inlets. Assuming a minimum cost of about \$500 each, the economic benefit would be about \$1,000. Other costs to stop the inflow into the storm drain system (e.g., cover, containment, or plug) would be less than \$10,000 total. Adding 10 percent would result in \$11,000.	
Other Factors as Justice May Require			
Staff Costs	none	The Prosecution Team chose not to pursue staff costs.	
		Water Code sections 13385(c)(1) and (2) allow up to \$10,000 for each day in which the violation occurs.	
		The Enforcement Policy and Water Code section 13385(h) and (i) require a \$3,000 mandatory minimum penalty for all serious violations and any non-serious violations that occur in a 180-day span, not counting the first three non-serious violations.	
		The Enforcement Policy also states that the final liability must be at least 10 percent higher than the economic benefit. (Enforcement Policy, p. 21.) The economic benefit derived from the alleged violations was negligible.	
Final Liability	\$628,000 (rounded)	The final liability amount is the total base liability after adjusting for ability to pay, economic benefit, other factors, and maximum and minimum liabilities.	

Alleged Failure to Comply with 13383 Order Requiring Submittal of Information on Climate Change Adaptation

On January 8, 2021 the Regional Water Board Executive Officer issued the Discharger an order issued pursuant to Water Code section 13385 requiring submittal of information on climate change adaptation by February 1, 2022. The required report was to contain a vulnerability assessment on sea level rise, groundwater rise, changing climate, and power outages, with associated adaptation strategies. On January 25, 2022, the Discharger requested an extension on the deadline until June 1, 2022, which the Executive Officer granted on January 27, 2022.

The Discharger failed to meet this extended deadline and failed to request any additional extension of time prior to the June 1, 2022 deadline. On August 5, 2022, the Discharger submitted a preliminary report stating it would finish its groundwater evaluation by October 31, 2022, and submit its final report by December 31, 2022. On November 1, 2022, Regional Water Board staff contacted the Discharger to check on its progress toward its groundwater evaluation. The Discharger assured Regional Water Board staff that it would update its report by December 31, 2022. However, Regional Water Board staff did not receive a report or communication from the Discharger regarding the climate change report by December 31, 2022. On September 5, 2023, Regional Water Board staff requested the final report and was told that the Discharger would look for it. On September 18, 2023, Regional Water Board staff contacted the Discharger again about the final report, and the Discharger failed to respond. Under threat of enforcement, the Discharger submitted its completed report on October 10, 2023, 496 days late. Upon review of its files, the Discharger determined that a draft report had been prepared by a third-party contractor and provided to refinery personnel, but submittal of the report to the Regional Water Board was overlooked due to personnel changes that occurred in the same timeframe.

The Enforcement Policy (p. 15) states the Water Boards shall calculate initial liability for non-discharge violations considering the potential for harm and the extent of deviation from applicable requirements. The Discharger is subject to administrative civil liability for the alleged failure to comply with the 13383 Order. The factors considered in determining the liability for the violations are described below:

Penalty Factor	Score	Discussion
Potential for Harm	Moderate	A score of moderate is appropriate because the "The characteristics of the violation have substantially impaired the Water Boards' ability to perform their statutory and regulatory functions, present a substantial threat to beneficial uses, and/or the circumstances of the violation indicate a substantial potential for harm. Most non-discharge violations should be considered to present a moderate potential for harm." (Enforcement Policy, p. 16.)
		The Regional Water Board was unable to perform its regulatory functions, such as analyzing the need to impose climate-change-related groundwater regulations on the Discharger, without the submittal of the groundwater evaluation required by the 13383 Order.
Deviation from Requirement	Moderate	A score of moderate is appropriate because, "The intended effectiveness of the requirement was partially compromised (e.g., the requirement was not met, and the effectiveness of the requirement was only partially achieved)." (Enforcement Policy, p. 16.)
		The Enforcement Policy further states, "If a facility has prepared a required plan, or submitted the required monitoring report, but significant elements are omitted or materially deficient, the deviation would be moderate." Since a significant element (i.e., the groundwater

Penalty Factor	Score	Discussion
		rise evaluation) was omitted from the submittal, a score of moderate is warranted.
Per-Day Factor	0.35	Table 3 in the Enforcement Policy allows a per-day factor ranging from 0.3 to 0.4 for moderate potential for harm and moderate deviation from requirement. The Prosecution Team chose the middle of that range.
Initial Liability	\$175,000	The maximum allowable per-day liability is \$10,000 per day of non- compliance. Because the violation did not cause daily detrimental impacts and resulted in no economic benefit, the number of days is calculated using the method suggested in the Enforcement Policy (p. 18): "the liability shall not be less than an amount that is calculated based on an assessment of the initial Total Base Liability Amount for the first 30 days of the violation, plus an assessment for each 5-day period of violation, until the 60th day, plus an assessment for each 30 days of violation thereafter." Therefore, the number of days calculated using this method for 496 days of violation counts days 1-30, 35, 40, 45, 50, 55, 60, 90, 120, 150, 180, 210, 240, 270, 300, 330, 360, 390, 420, 450, and 480, which corresponds to 50 days. The initial liability calculated on a per-day basis, using the per-day factor and \$10,000 per day, is as follows: Initial Liability: \$175,000 = \$10,000/day x 50 days x 0.35
Culpability	1.3	A score of 1.3 (above neutral) is appropriate because a reasonable and prudent discharger would have submitted the report on time or notified the Regional Water Board of any delay. The Discharger continually failed to deliver the final report after an extension of the original deadline and multiple reminders.
Cleanup and Cooperation	1.1	A score of 1.1 (above neutral) is appropriate because the Discharger responded in a timely manner to most requests but failed to follow up to several direct requests.
History of Violations	1.1	 A score of 1.1 is appropriate because the Discharger has a history of violations, as demonstrated by the following enforcement orders: Order R2-2021-1007: \$126,000 penalty for March 2020 effluent limit violations.
Total Base Liability	\$275,275	The initial liability is multiplied by each factor related to the Discharger's conduct to determine the Total Base Liability as follows: \$275,275 = \$175,000 x 1.3 (culpability) x 1.1 (history of violations) x 1.1 (cleanup and cooperation)
Ability to Pay and Continue in Business	No adjust- ment	The Enforcement Policy provides that if there is sufficient financial information to assess the violator's ability to pay the total base liability or to assess the effect of the total base liability on the violator's ability to continue in business, then the liability may be adjusted downward if warranted. PBF, the Discharger's parent corporation, is a large energy business with multiple refineries throughout the United States. It did not raise the issue of the ability to pay during negotiations. Therefore, the Prosecution Team concludes that the Discharger can pay the proposed liability without undue financial hardship.
Economic Benefit	\$6,325	The Enforcement Policy requires recovery of any economic benefit plus 10 percent derived from failure to implement controls that result in a

Penalty Factor	Score	Discussion			
		violation. The report was completed, but delayed; therefore, the economic benefit was the value the Discharger realized by delaying the expenditure. Assuming the cost to produce the report was roughly \$150,000, adjusting for 5.75 percent inflation over the 496 days period of delay from June 2022 to October 2023 results in an economic benefit of roughly \$5,750. Adding 10 percent results in \$6,325.			
	Other Factors as Justice May Require				
Staff Costs	none	The Prosecution Team chose not to pursue staff costs.			
		Water Code sections 13385(c)(1) allows up to \$10,000 for each day in which the violation occurs.			
		The Enforcement Policy and Water Code section 13385(h) and (i) require a \$3,000 mandatory minimum penalty for all serious violations and any non-serious violations that occur in a 180-day span, not counting the first three non-serious violations			
		The Enforcement Policy also states that the final liability must be at least 10 percent higher than the economic benefit. (Enforcement Policy, p. 21.) The economic benefit derived from the alleged violations was negligible.			
Final Liability	\$275,000 (rounded)	The final liability amount is the total base liability after adjusting for ability to pay, economic benefit, other factors, and maximum and minimum liabilities.			