CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

In the matter of:)
)
PHILLIPS 66 COMPANY, SAN) SETTLEMENT AGREEMENT AND
FRANCISCO REFINERY,) STIPULATION FOR ENTRY OF
RODEO, CONTRA COSTA) ADMINISTRATIVE CIVIL LIABILITY
COUNTY	ORDER
February 14, 2019, NPDES Permit	ORDER NO. R2-2020-1027
effluent limit violation)

Section I: INTRODUCTION

This Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order (Stipulated Order) is entered into by and between the California Regional Water Quality Control Board, San Francisco Bay Region, Prosecution Team (Prosecution Team) and Phillips 66 Company (Discharger) (collectively Parties), and is presented to the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board), or its delegate, for adoption as an Order by settlement pursuant to California Water Code (Water Code) section 13323 and Government Code section 11415.60. This Stipulated Order resolves the violation alleged herein by the imposition of administrative civil liability against the Discharger in the amount of \$285,000.

Section II: RECITALS

- 1. The Discharger owns and operates the San Francisco Refinery at Rodeo in Contra Costa County (Facility), which processes an average crude oil throughput of approximately 84,000 barrels per day. The Facility produces gasoline, diesel fuel, jet fuel, fuel oil, and other petroleum products and by-products. The Facility discharges to San Pablo Bay via three outfalls (Discharge Point Nos. 002, 003, and 004). Following treatment at the wastewater treatment plant, Discharge Point No. 002 discharges process wastewater, boiler blowdown, cooling tower blowdown, sanitary wastewater, sour water stripper bottoms, stormwater runoff from refinery process areas, and remediation water. Discharge Point No. 003 discharges once-through non-contact cooling water, neutralized demineralizer water, and stormwater runoff. Discharge Point No. 004 discharges stormwater runoff.
- 2. The Discharger is required to operate and maintain the Facility in compliance with National Pollutant Discharge Elimination System (NPDES) Permit No. CA0005053 (Permit), an NPDES permit for point source discharges to surface waters of the United States issued pursuant to Clean Water Act section 402 and Water Code Chapter 5.5, Division 7 (commencing with section 13370). The Permit was most recently reissued on November 9, 2016, through Order No. R2-2016-0044, which became effective on January 1, 2017. The Permit contains waste discharge requirements for the Facility.
- 3. The Prosecution Team alleges that on February 14, 2019, the Discharger discharged approximately 8.45 million gallons of partially-treated wastewater to San Pablo Bay at

Discharge Point No. 002. As explained in Attachment A, incorporated by reference herein, the discharge violated the maximum daily effluent limit for total suspended solids (TSS) specified in Permit section IV.A.1 as adjusted in accordance with Permit section IV.A.1.a, which accounts for the volume of contaminated stormwater runoff flowing to the wastewater treatment plant. The Discharger discharged a TSS load of 7,200 pounds per day (lbs/day), which was 4,600 lbs/day over the limit of 2,600 lbs/day. The discharge exceeding the TSS maximum daily effluent limit is estimated to be 5.39 million gallons.

- 4. Pursuant to Water Code section 13385, subdivision (a)(2), a person that violates a waste discharge requirement is subject to administrative civil liability under Water Code section 13385, subdivision (c):
 - ...in an amount not to exceed the sum of both of the following: (1) Ten thousand dollars (\$10,000) 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 ten dollars (\$10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.
- 5. To resolve the alleged violation in section II, paragraph 3, by consent and without further administrative proceedings, the Parties agree to the imposition of an administrative civil liability of \$285,000 against the Discharger.
- 6. The Parties engaged in settlement negotiations and agreed to settle this matter without administrative or civil litigation, and to present this Stipulated Order to the Regional Water Board or its delegate for adoption as an Order by settlement pursuant to Water Code section 13323 and Government Code section 11415.60.
- 7. For the violation alleged in section II, paragraph 3, the settlement amount (\$285,000) is less than the liability the Prosecution Team calculated using Steps 1 through 10 of the State Water Resources Control Board's Water Quality Enforcement Policy (April 2017) (Enforcement Policy) as shown in Attachment A. Pursuant to Enforcement Policy section VI.B (Settlement Considerations), the Prosecution Team agreed during settlement negotiations to reduce the administrative civil liability amount contained in Attachment A in consideration of hearing and/or litigation risks.
- 8. The Prosecution Team contends that the resolution of the alleged violation is fair and reasonable, and fulfills all of its enforcement objectives; that no further action is warranted concerning the violation, except as provided in this Stipulated Order; and that this Stipulated Order is in the public's best interest.

Section III: STIPULATIONS

The Parties incorporate the foregoing Recitals and stipulate to the following:

1. **Administrative Civil Liability:** The Discharger hereby agrees to the imposition of an administrative civil liability of \$285,000 to resolve the alleged violation as set forth in section II as follows:

a. No later than 30 days after the Regional Water Board or its delegate signs this Stipulated Order, the Discharger shall mail a check for \$142,500 (half of the total administrative civil liability of \$285,000) made payable to "State Water Pollution Cleanup and Abatement Account," referencing the Order number on page one of this Stipulated Order, to:

State Water Resources Control Board Accounting Office Attn: ACL Payment P.O. Box 1888 Sacramento, CA 95812-1888

The Discharger shall email a copy of the check to the State Water Resources Control Board, Office of Enforcement (<u>kailyn.ellison@waterboards.ca.gov</u>), and the Regional Water Board (<u>habte.kifle@waterboards.ca.gov</u>).

- b. The Parties agree that the remaining \$142,500 of the administrative liability shall be paid to the Regional Monitoring Program, care of the San Francisco Estuary Institute (SFEI), for implementation of a Supplemental Environmental Project (SEP) named "Sediment Dynamics Assessment and Uncertainty Analysis for San Francisco Bay," as follows:
 - i) \$142,500 (SEP Amount) shall be paid in the manner described in section III, paragraph 1.b.ii, solely for use toward the SEP Fund for the "Sediment Dynamics Assessment and Uncertainty Analysis for San Francisco Bay" project. Funding this project will produce a detailed conceptual model of sediment dynamics for San Francisco Bay. Attachment B, incorporated by reference herein, contains a complete description of this project.
 - ii) No later than 30 days after the Regional Water Board or its delegate signs this Stipulated Order, the Discharger shall mail a check for \$142,500, made payable to "Regional Monitoring Program" and referencing the Order number on page one of this Stipulated Order, to:

Regional Monitoring Program c/o San Francisco Estuary Institute 4911 Center Avenue Richmond, CA 94804

The Discharger shall email a copy of the check to the State Water Resources Control Board, Office of Enforcement (<u>kailyn.ellison@waterboards.ca.gov</u>), and the Regional Water Board (<u>habte.kifle@waterboards.ca.gov</u>).

2. **SEP Description:** The Parties agree that the Discharger's payment of the SEP Amount is a SEP, and that the SEP Amount shall be treated as a permanently suspended administrative civil liability for purposes of this Stipulated Order. The Discharger's SEP obligations shall be satisfactorily completed upon SFEI's written notification to the Regional Water Board and the Discharger. The written notification shall acknowledge that the Regional Monitoring Program received payment of the SEP Amount from the Discharger and that the payment will be spent on the project described in section III, paragraph 1.b.i, and Attachment B in accordance with the terms of this Stipulated Order. SFEI's annual and quarterly financial

reports to the Regional Water Board shall be considered a final post-project accounting of expenditures.

- 3. **SEP Oversight:** SFEI will oversee SEP implementation in lieu of Regional Water Board staff oversight and will report solely to the Regional Water Board. The Discharger shall not have any implementation or oversight role for the SEP; rather, all its obligations with respect to the SEP will be completed upon SFEI's receipt of the SEP Amount and SFEI's written notification described in section III, paragraph 2. SFEI has agreed to voluntarily cover any SEP related oversight costs. Oversight costs are not included in the SEP Amount.
- 4. **Publicity Associated with the SEP:** Whenever the Discharger, or its agents or subcontractors, publicizes one or more SEP elements, it shall state in a <u>prominent manner</u> that the project is undertaken as part of a settlement of a Regional Water Board enforcement action against the Discharger.
- 5. **Regional Water Board Not Liable:** The Regional Water Board and its members, staff, attorneys, and representatives shall not be liable for any injury or damage to persons or property resulting from negligent or intentional acts or omissions by the Discharger or its directors, officers, employees, agents, representatives, or contractors in carrying out activities pursuant to this Stipulated Order. The Regional Water Board, its members, and its staff shall not be held as parties to, or guarantors of, any contract entered into by the Discharger or its directors, officers, employees, agents, representatives, or contractors in carrying out activities pursuant to this Stipulated Order.
- 6. **Compliance with Applicable Laws:** The Discharger understands that payment of administrative civil liability in accordance with the terms of this Stipulated Order and/or compliance with the terms of this Stipulated Order is not a substitute for compliance with applicable laws, and that continuing violations of the type alleged herein may subject it to further enforcement, including additional administrative civil liability.
- 7. Party Contacts for Communications Related to This Stipulated Order:

For the Regional Water Board:

Habte Kifle
San Francisco Bay Regional Water
Quality Control Board
1515 Clay Street, 14th Floor
Oakland, CA 94612
Habte.Kifle@waterboards.ca.gov
(510) 622-2371

For the Discharger:

Eric Bell, Environmental Specialist Phillips 66 Company, San Francisco Refinery 1380 San Pablo Avenue Rodeo, CA 94572 <u>Eric.Bell@p66.com</u> (510) 245-4635

- 8. **Attorneys' Fees and Costs:** Except as otherwise provided herein, each Party shall bear its own attorneys' fees and costs incurred pursuant to this Stipulated Order.
- 9. **Matters Addressed by This Stipulated Order:** Upon the Regional Water Board's or its delegate's adoption, this Stipulated Order represents a final and binding resolution and settlement of the alleged violation contained in section II, paragraph 3, as of the effective date of this Stipulated Order. The provisions of this paragraph are expressly conditioned on

- the full payment of the administrative civil liability by the deadline specified in section III, paragraph 1.
- 10. **Public Notice:** The Discharger understands that this Stipulated Order must be noticed for a 30-day public review and comment period prior to consideration by the Regional Water Board or its delegate. If significant new information is received that reasonably affects the propriety of presenting this Stipulated Order to the Regional Water Board or its delegate for adoption, the Prosecution Team may unilaterally declare this Stipulated Order void and decide not to present it to the Regional Water Board or its delegate. The Discharger agrees that it may not rescind or otherwise withdraw its approval of this Stipulated Order.
- 11. Addressing Objections Raised during Public Comment Period: The Parties agree that the procedure contemplated for public review of this Stipulated Order and the Regional Water Board's or its delegate's adoption of this Stipulated Order is lawful and adequate. The Parties understand that the Regional Water Board or its delegate has the authority to require a public hearing on this Stipulated Order. If procedural objections are raised or the Regional Water Board requires a public hearing prior to the Stipulated Order becoming effective, the Parties agree to meet and confer concerning any such objections, and may agree to revise or adjust the procedure and/or this Stipulated Order as necessary or advisable under the circumstances.
- 12. **Interpretation:** This Stipulated Order shall be construed as if the Parties prepared it jointly. Any uncertainty or ambiguity shall not be interpreted against any one Party. The Parties are represented by counsel in this matter.
- 13. **Modification:** The Parties shall not modify this Stipulated Order by oral representation made before or after its execution. All modifications must be in writing, signed by all Parties, and approved by the Regional Water Board or its delegate.
- 14. If the Stipulated Order Does Not Take Effect: If this Stipulated Order does not take effect because the Regional Water Board or its delegate does not approve it, or because the State Water Resources Control Board (State Water Board) or a court vacates it in whole or in part, the Parties acknowledge that they expect to proceed to a contested evidentiary hearing before the Regional Water Board to determine whether to assess administrative civil liabilities for the underlying alleged violation, unless the Parties agree otherwise. The Parties agree that all oral and written statements and agreements made during the course of settlement discussions will not be admissible as evidence in the hearing or in any other administrative or judicial proceeding. The Parties agree to waive any and all objections based on settlement communications in this matter, including but not limited to objections related to prejudice or bias of any of the Regional Water Board members or their advisors or any other objections that are premised in whole or in part on the fact that the Regional Water Board members or their advisors were exposed to some of the material facts and the Parties' settlement positions as a consequence of reviewing this Stipulated Order and, therefore, may have formed impressions or conclusions prior to any contested evidentiary hearing on the violation alleged herein in this matter. The Parties also agree to waive any and all objections based on laches, delay, or other equitable defenses related to the period for administrative or judicial review to the extent this period has been extended by these settlement proceedings.

- 15. **Waiver of Hearing:** The Discharger has been informed of the rights Water Code section 13323, subdivision (b), provides and, if the settlement is adopted by the Regional Water Board or its delegate, hereby waives its right to a hearing before the Regional Water Board prior to the Stipulated Order's adoption. However, if the settlement is not adopted, or if the matter proceeds to the Regional Water Board or the State Water Board for hearing, the Discharger does not waive the right to a hearing before an order is imposed.
- 16. Waiver of Right to Petition or Appeal: Except in the instance where the Stipulated Order is not adopted by the Regional Water Board or its delegate, the Discharger hereby waives its right to petition the Regional Water Board's or its delegate's adoption of the Stipulated Order for review by the State Water Board, and further waives its rights, if any, to appeal the same to a California Superior Court and/or California appellate court. This explicit waiver of rights includes potential future decisions by the Regional Water Board or its delegate directly related to this Stipulated Order, including but not limited to time extensions, SEP completion, and other terms contained in this Stipulated Order.
- 17. Covenant Not to Sue: The Discharger covenants not to sue or pursue any administrative or civil claims against the State of California, any State agency, or its officers, Board members, employees, representatives, agents, or attorneys arising out of or relating to any matter expressly addressed by this Stipulated Order or the SEP, except that this covenant is not intended to bar and does not limit the Discharger's rights to sue over other Regional Water Board orders (e.g., permits or cease and desist orders) or limit the Discharger's rights to defend against any additional enforcement or other actions taken by the Regional Water Board or its employees, representatives, agents, or attorneys. Moreover, this covenant shall not release any claims or complaints against any State agency or the State of California, its officers, Regional Water Board members, employees, representatives, agents, or attorneys to the extent such covenant would be prohibited by California Business and Professions Code section 6090.5 or by any other statute, rule, regulation, or legal principle of similar effect.
- 18. Necessity for Written Approvals: All approvals and decisions of the Regional Water Board or its delegate under the terms of this Stipulated Order shall be communicated to the Discharger in writing. No oral advice, guidance, suggestions, or comments from Regional Water Board employees or officials regarding submissions or notices shall be construed to relieve the Discharger of its obligation to obtain any final written approval this Stipulated Order requires.
- 19. **Authority to Bind:** Each person executing this Stipulated Order in a representative capacity represents and warrants that he or she is authorized to execute this Stipulated Order on behalf of, and to bind, the entity on whose behalf he or she executes the Stipulated Order.
- 20. **No Third Party Beneficiaries:** This Stipulated Order is not intended to confer any rights or obligations on any third party or parties, and no third party or parties shall have any right of action under this Stipulated Order for any cause whatsoever.
- 21. **Severability:** This Stipulated Order is severable; if any provision is found to be invalid, the remainder shall remain in full force and effect.

- 22. Counterpart Signatures and Facsimile and Electronic Signatures: This Stipulated Order may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one document. Further, this Stipulated Order may be executed by facsimile or electronic signature, and any such facsimile or electronic signature by any Party hereto shall be deemed to be an original signature and shall be binding on such Party to the same extent as if such facsimile or electronic signature were an original signature.
- 23. **Effective Date**: This Stipulated Order shall be effective and binding on the Parties upon the date the Regional Water Board or its delegate enters the Order incorporating the terms of this Stipulated Order.

IT IS SO STIPULATED.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION, PROSECUTION TEAM

July 12, 2020 Date:	By:		
	Thomas Mumley		
	Assistant Executive Officer		
Approved as to form:	By: Kailyn Ellison Kailyn Ellison, Attorney		
	State Water Resources Control Board		
	Office of Enforcement		

PHILLIPS 66 COMPANY, SAN FRANCISCO REFINERY

Date: 7/6/2020

By: All Marbison, San Francisco Refinery Manager

Phillips 66 Company

Approved as to form:

By:

James Greene, Senior Counsel

Phillips 66 Company

ORDER OF THE REGIONAL WATER BOARD

- 1. This Stipulated Order incorporates the foregoing sections I through III by this reference as if set forth fully herein.
- 2. In accepting this Stipulated Order, the Regional Water Board or its delegate has considered, where applicable, each of the factors prescribed in Water Code section 13385, subdivision (e), and has applied the State Water Resources Control Board's Enforcement Policy, which is incorporated by reference herein. The consideration of these factors and application of the Enforcement Policy are based on information the Prosecution Team obtained in investigating the allegations set forth in the Stipulated Order or otherwise provided to the Regional Water Board.
- 3. This is an action to enforce the laws and regulations administered by the Regional Water Board. Issuance of this Stipulated Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, § 21000 et seq.) in accordance with section 15321, subdivision (a)(2), title 14, of the California Code of Regulations. Additionally, this Stipulated Order generally accepts the plans proposed for the SEP prior to implementation. Mere submittal of plans is exempt from CEQA because submittal will not cause a direct or indirect physical change in the environment.
- 4. The Executive Officer of the Regional Water Board is authorized to refer this matter directly to the Attorney General for enforcement if the Discharger fails to perform any of its obligations under this Stipulated Order.

IT IS HEREBY ORDERED pursuant to Water Code section 13323 and Government Code section 11415.60, on behalf of the California Regional Water Quality Control Board, San Francisco Bay Region.

Michael Montgomery	Date	
Executive Officer	Bute	
California Regional Water Quality Control Board		
San Francisco Bay Region		

ATTACHMENT A

Factors in Determining Administrative Civil Liability

Phillips 66 Company, San Francisco Refinery NPDES Permit Effluent Limit Violation Rodeo, Contra Costa County

The State Water Resources Control Board Water Quality Enforcement Policy (Enforcement Policy) establishes a methodology for assessing administrative civil liability. Use of the methodology addresses the factors required by California Water Code sections 13327 and 13385, subdivision (e). Each Enforcement Policy factor 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 available online at:

https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/040417_9_fi nal%20adopted%20policy.pdf

ALLEGED VIOLATION

Phillips 66 Company (Discharger) owns and operates the San Francisco Refinery (Facility) in Rodeo. The Facility processes crude oil and produces gasoline, diesel fuel, jet fuel, fuel oil, and other petroleum products. The Facility's wastewater treatment plant treats process wastewater, boiler blowdown, cooling tower blowdown, sanitary wastewater, sour water stripper bottoms, stormwater runoff from refinery process areas, and remediation water prior to discharge to San Pablo Bay.

On February 14, 2019, the Discharger discharged approximately 8.45 million gallons of partially-treated wastewater with a total suspended solids (TSS) load of 7,200 pounds per day (lbs/day) in violation of NPDES Permit No. CA0005053, Order No. R2-2016-0044 (Permit). This discharge was 4,600 lbs/day over the adjusted maximum daily effluent limit of 2,600 lbs/day and thus violated the Permit. As allowed in Permit section IV.A.1.a, the maximum daily effluent limit specified in Permit section IV.A.1 is adjusted upward based on the volume of contaminated stormwater runoff to the wastewater treatment plant. Thus, the adjusted discharge volume corresponding to the 4,600 lbs/day that is used to assess the liability is estimated at 5.39 million gallons.

The violation occurred because the Discharger bypassed the sand media filter at the wastewater treatment plant, allowing partially-treated wastewater to discharge to San Pablo Bay. The bypass occurred because consecutive intense storms in the first half of February 2019 caused particulate matter to flow through the powdered activated carbon treatment units and clog the sand media filters. On February 12, 13, and 14, 2019, the area received about 5 inches of rain, resulting in 39 million gallons of stormwater runoff. The Discharger diverted wastewater around the clogged sand media filters to maintain flow through the wastewater treatment plant. The high flows

rendered ineffective the backwash system typically used to unclog the filters. The Discharger could have prevented the bypass if it had returned its 9-million-gallon equalization storage tank T-130 to service in a timely manner. The Discharger took storage tank T-130 out of service for maintenance in 2016 and subsequently modified it for dual purpose uses, such as the temporary storage of crude oil. As of January 31, 2020, storage tank T-130 returned to service.

The Discharger is subject to administrative civil liabilities for this violation pursuant to Water Code section 13385, subdivision (a)(2). The factors considered in determining the liability for the violation are described below:

PENALTY FACTOR	SCORE	DISCUSSION
Degree of Toxicity of the Discharge Violation	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 TSS in the discharge exhibited a moderate degree of toxicity. Refinery TSS includes both organic and inorganic fractions. The organic fraction contains toxic constituents, such as hydrocarbons and other byproducts of refinery operations that can harm aquatic life. In San Pablo Bay, the organic fraction has the potential to be toxic to aquatic organisms when TSS particles are trapped in fish gills and harmful constituents are absorbed in fish tissue. Deposition of the organic fraction in bottom sediments can inhibit normal benthic growth and thus interrupt the aquatic food chain. The TSS load of 7,200 lbs/day was nearly three times the adjusted maximum daily effluent limit of 2,600 lbs/day.
		The inorganic fraction of refinery TSS includes metals, sand, silt, and clay. On February 14, 2019, the copper and cyanide concentrations (45 and 14 μ g/L) in Facility effluent exceeded the site-specific water quality objectives of 14 and 9.4 μ g/L for acute (one-hour average) toxic effects to aquatic life (Basin Plan sections 4.5.2 and 7.2.1). These concentrations were about 7.5 and 2.8 times greater than the average concentrations during the rest of the month (6.0 and 5.0 μ g/L).
		The Discharger conducted a 96-hour flow-through bioassay from February 11 through February 15, 2019, with results of 100 percent survival.
Actual Harm or Potential Harm to Beneficial Uses for Discharge Violations	1	A score of 1 (minor) is appropriate because there was "no actual harm and low threat of harm to beneficial uses. A score of minor is typified by a lack of observed impacts, but based on the characteristics of the discharge and applicable beneficial uses; there is potential short term impact to beneficial uses with no appreciable harm." (Enforcement Policy, p. 12.)
		The Basin Plan designates the following beneficial uses in San Pablo Bay: industrial service supply, commercial and sport fishing, fish spawning, shellfish harvesting, wildlife habitat, estuarine habitat, water contact recreation, fish migration, non-contact water recreation, preservation of rare and endangered species, and navigation. The beneficial uses most likely to be affected by the discharge were fish spawning and estuarine habitat.
		The Discharger inspected the receiving waters and observed no adverse impacts to beneficial uses. The Coast Guard and California Department of Fish and Wildlife's Office of Spill Prevention and Response (OSPR) were also onsite on February 14, 2019. OSPR collected vegetation, soil, and water

PENALTY FACTOR	SCORE	DISCUSSION
		samples in San Pablo Bay. These agencies reported no observations of adverse impacts to beneficial uses.
		The circumstances of the violation demonstrate there was a low threat of harm to beneficial uses. The water quality-based effluent limits incorporate conservative estimates of the minimum initial dilution at the Facility outfall ranging from none to 35:1. The actual minimum initial dilution is at least 35:1. Potential impacts to the receiving waters were also mitigated by exceptionally heavy rains that provided additional dilution. On February 12, 13, and 14, 2019, the area received about 5 inches of rain, resulting in 39 million gallons of stormwater runoff.
		Furthermore, the 96-hour flow-through bioassay conducted from February 11 through February 15, 2019, had results of 100 percent survival.
Susceptibility to Cleanup or Abatement	1	A score of 1 is appropriate because the discharge commingled with the receiving waters and was not susceptible to cleanup or abatement. (Enforcement Policy, p. 13.)
Final Total Score	4	The scores for the above three factors are added together to provide a "Potential for Harm" score of 4 $(2+1+1=4)$.
Deviation from Requirement	Moderate	The violation was a moderate deviation from the Permit requirement. The Enforcement Policy defines moderate deviation as "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. 14.) The TSS limit is technology-based; the intent of the requirement is to ensure that the treatment system operates as intended. In this case, some treatment was still taking place, but, due to the bypass, not as much as intended. Thus, the effectiveness of the Permit requirement was partially compromised.
Per-Gallon and Per-Day Factor for Discharge Violations	0.05	Enforcement Policy Tables 1 and 2 contain per-gallon and per-day factors based on the Potential for Harm score and the Deviation from Requirement. (Enforcement Policy, pp. 14–15.) A Potential for Harm score of 4 and a moderate Deviation from Requirement result in per-gallon and per-day factors of 0.05.
Adjustment for High Volume Discharges	\$1/gallon	The Enforcement Policy allows a reduction of the maximum per-gallon amount (\$10/gallon) for high-volume discharges and allows for a maximum of \$1/gallon for discharges in excess of 2 million gallons. "For discharges in excess of 2,000,000 gallons, the Water Boards may elect to use a maximum of \$1.00 per gallon with the above factor to determine the per gallon amount Examples of discharges that could be subject to a reduction include, but are not limited to, wet weather sewage spills, partially-treated sewage spills" (Enforcement Policy, p. 14.) A high-volume adjustment of \$1/gallon is selected for this violation because 5.39 million gallons exceeds 2 million gallons and would result in an appropriate penalty relative to the impact on beneficial uses. The resulting penalty is a suitable deterrent and bears a reasonable relationship to the gravity of the violation and the harm to beneficial uses.
Initial Liability	\$270,000	The Discharger violated the daily maximum effluent limit for TSS on February 14, 2019, discharging approximately 5.39 million gallons of partially-treated wastewater to San Pablo Bay. Thus, the initial liability is calculated as follows ([per-gallon factor x per-gallon amount x volume exceeding

PENALTY FACTOR	SCORE	DISCUSSION
		1,000 gallons discharged but not cleaned up] + [per-day factor x maximum per-day liability x number of days of violations]):
		Initial Liability: $$270,000 = (0.05 \text{ x } 1/\text{gallon x } 5,390,000 \text{ gallons}) + (0.05 \text{ x } 10,000/\text{day x } 1 \text{ day})$
		Adjustments for Discharger Conduct
Culpability	1.2	A score of 1.2 (above neutral) is appropriate because the Discharger did not timely maintain and return to service its 9-million-gallon equalization storage tank, T-130, which had been taken out of service for maintenance in 2016. The Discharger could have prevented the bypass if the tank had been returned to service in a timely manner or if the Discharger had provided an alternative means to handle the same storage capacity while the tank was out of service.
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 No. R2-2019-1017: \$80,000 penalty for eight days of chlorine effluent limit violations; Order No. R2-2017-1036: \$109,000 penalty for five copper and three chlorine effluent limit violations; Order No. R2-2016-1002: \$9,000 penalty for three chlorine effluent limit violations; Order No. R2-2014-1008: \$6,000 penalty for two selenium effluent limit violations; and Order No. R2-2012-0044: \$3,000 penalty for one chlorine effluent limit violation.
		The Enforcement Policy states, "Where the discharger has prior violations within the last five years, the Water Boards should use a multiplier of 1.1." (Enforcement Policy, p. 17.)
Cleanup and Cooperation	1	A score of 1 (neutral) is appropriate because the Discharger's response was reasonable and prudent. The Discharger implemented the following corrective actions to comply with Permit requirements and to prevent similar violations in the future:
		 Replaced the filter media with fresh sand; Repaired and replaced deflector plates to ensure wastewater flows are evenly distributed across the sand media filters; Set up a system to use clean water as backwash water as needed when the use of recirculating backwash water is ineffective; Developed a plan to actively manage sludge levels in the clarifiers during rainstorms to avoid potential deposition of solids; Raised the curb height along the perimeter of the wastewater treatment plant to reduce stormwater run-on and thereby reduce solids loading to the wastewater treatment plant; and Returned storage tank T-130 to service on January 31, 2020.
Total Base Liability	\$356,400	The initial liability is multiplied by each factor related to the Discharger's conduct to determine the Total Base Liability as follows:
		\$356,400 = \$270,000 x 1.2 (culpability) x 1.1 (history) x 1 (cleanup)
Ability to Pay and Continue in Business	No adjustment	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

PENALTY FACTOR	SCORE	DISCUSSION	
		business, then the liability may be adjusted downward if warranted. According to the Discharger's second quarter 2019 earnings report for April through June 2019 (https://investor.phillips66.com/financial-information/default.aspx), it earned \$1.4 billion and held \$58 billion in assets. Therefore, the Discharger can pay the proposed liability without undue financial hardship.	
Economic Benefit	Unspecified amount	The Enforcement Policy requires the economic benefit of noncompliance to be estimated. The Discharger may have received economic benefit by not bringing its 9-million-gallon equalization storage tank into service. Although the value of this economic benefit is uncertain, it is expected to be significantly less than the final proposed liability indicated below.	
	Other Factors as Justice May Require		
Staff Costs	No adjustment	Staff costs are not included in the final proposed liability.	
Maximum Liability	\$53.9 Million	Water Code section 13385 allows up to \$10,000 for each day in which a violation occurs and \$10 for each gallon exceeding 1,000 gallons discharged and not cleaned up. The maximum liability calculated based on 5.39 million gallons and one day of violation is as follows:	
		\$53.9 Million = (5,390,000 gallons – 1,000 gallons) x \$10/gallon + (1day x \$10,000/day)	
Minimum Liability	\$3,000	The Enforcement Policy states that the final liability must be at least 10 percent higher than the economic benefit. (Enforcement Policy, p. 21.) Although the economic benefit is uncertain, the minimum liability is at least \$3,000 because Water Code section 13385 requires a mandatory minimum penalty of \$3,000 for each serious violation. The violation of the TSS maximum daily effluent limit was serious as defined by Water Code section 13385, subdivision (h).	
Final Liability	\$356,400	The final liability of \$356,400 is the total base liability after adjusting for ability to pay, economic benefit, other factors, and maximum and minimum liabilities.	

ATTACHMENT B

Phillips 66 Company (Phillips 66)

Supplemental Environmental Project (SEP) for the San Francisco Bay Regional Monitoring Program

1. Project Name

Sediment Dynamics Assessment and Uncertainty Analysis for San Francisco Bay

2. Project Amount

\$142,500

3. Project Lead

San Francisco Estuary Institute (SFEI)

4. Contacts

- Melissa Foley, SFEI (Technical), melissaf@sfei.org, (510) 746-7345
- Jennifer Hunt, SFEI (Financial), jhunt@sfei.org, (510) 746-7347

5. Project Description

The goal of this project is to produce a detailed conceptual model of sediment dynamics for San Francisco Bay. The model will be linked to key management questions and developed at appropriate spatial and temporal scales, which can be used to inform policy decisions and build frameworks for management, monitoring, and modeling decisions. When coupled with an analysis of the uncertainties for major variables relative to their magnitude within the system, this conceptual model will also be used to prioritize monitoring and modeling studies.

This project will develop an updated and comprehensive conceptual model that describes what is known and unknown for sediment transport within and between subembayments of San Francisco Bay. The conceptual model will capture our understanding based on up-to-date monitoring and modeling results and working hypotheses of sediment dynamics within San Francisco Bay and between subembayments, including suspended and bed transport. Nested models will be produced for subembayments that account for sediment transport between deep water areas, shallow water areas, mudflats, and marshes at different timescales and seasons. The project will incorporate new information on bathymetry, sediment flocculation, sediment flux between subembayments, and sediment dynamics in shallow water. It will also include an uncertainty analysis of key factors and variables that affect sediment fate and transport relative to their magnitude at the subembayment scale for a range of time scales (e.g., tidal, seasonal, annual) for past and future conditions.

The output will be a technical report that describes the analysis methods and findings, and shows nested conceptual models on annotated maps for San Francisco Bay as a whole and for subembayments.

6. Compliance with SEP Criteria

A SEP must directly benefit or study groundwater or surface water quality or quantity and the beneficial uses of the water of the State. This study complies with the SEP criteria and supports development and implementation of a monitoring program, including sediment transport within and between subembayments of San Francisco Bay and its beneficial uses.

7. Above and beyond Settling Respondent's Obligation

This SEP contains only measures that go above and beyond Phillips 66's obligations. The project is not part of Phillips 66's normal business nor is Phillips 66 otherwise required to implement any portion of the project.

8. No Benefit to Water Board Functions, Members, or Staff

This SEP provides no direct fiscal benefit to the San Francisco Bay Regional Water Quality Control Board's (Regional Water Board's) functions, its members, its staff, or any family members of staff.

9. Nexus to Nature or Location of Violation

The SEP has a nexus to the nature and location of the alleged violation. This SEP includes a sediment dynamics assessment and uncertainty analysis for San Francisco Bay. The SEP is located within the same Water Board region as the one in which the alleged violation occurred, and is intended to measure the fate of sediment and pollutants associated with the alleged violation and to evaluate the effectiveness of other Regional Monitoring Program (RMP) study efforts intended to protect waters of the State and United States.

10. Study Milestones and Performance Measures

Data compilation and uncertainty analysis will begin in summer 2020, and a draft conceptual model will be presented to the RMP Sediment Workgroup Meeting in May 2021. A final Technical Report will be produced by December 2021.

11. Study Budget and Reports to Water Board

Pursuant to the October 2015 Supplement to the Memorandum of Understanding (MOU) between SFEI and the Regional Water Board, SFEI is responsible for identifying in each annual work plan and annual budget for the RMP those studies or elements, or portions of a study or element, that are to be funded by SEP funds. SFEI will keep a copy of accounting records of SEP fund contributions and expenditures separately from regular RMP funds. In its annual and quarterly financial reports to the Regional Water Board, SFEI will separately itemize SEP fund contributions and expenditures by each SEP funder. SFEI will provide notice to the Regional Water Board within one month after receiving funds from Phillips 66 for the SEP, and the notice will state SFEI's agreement to use the funds received as described herein.

12. Publicity

Pursuant to the 2015 MOU, SFEI will indicate on its Regional Monitoring Program website, and annual and other reports, that funding for the study is the result of settlement of "San Francisco Bay Water Board" enforcement actions.

¹ State Water Resources Control Board Policy on Supplemental Environmental Projects, May 3, 2018.