

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

In the matter of:	)	
	)	
<b>East Bay Municipal Utility District,</b>	)	<b>SETTLEMENT AGREEMENT AND</b>
<b>Alameda County</b>	)	<b>STIPULATION FOR ENTRY OF</b>
	)	<b>ADMINISTRATIVE CIVIL LIABILITY</b>
<b>April 8, 2015, Unauthorized</b>	)	<b>ORDER</b>
<b>Discharge of Cellular Concrete to</b>	)	
<b>the Rockridge Branch Tributary of</b>	)	<b>PROPOSED ORDER</b>
<b>Glen Echo Creek</b>	)	
	)	
	)	

**Section I: INTRODUCTION**

1. 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), the California Department of Fish and Wildlife, Office of Spill Prevention and Response (CDFW-OSPR), and the East Bay Municipal Utility District (EBMUD or Settling Respondent) (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 Government Code section 11415.60. This Stipulated Order resolves the violations alleged herein by the imposition of administrative civil liability against EBMUD in the amount of **\$426,183**.

**Section II: RECITALS**

2. EBMUD is a water purveyor and operates a drinking water system in Alameda County and Contra Costa County. EBMUD historically operated and maintained a potable water main located in the vicinity of the Rockridge Branch tributary of Glen Echo Creek in the City of Oakland. Glen Echo Creek is a water of the State and a water of the United States.

3. On April 8, 2015, EBMUD unintentionally opened, while attempting to close, a valve on an out of service 24-inch water pipe before filling the pipe with cellular concrete to permanently abandon it in place as part of EBMUD's Dingee Pipeline and Claremont Center Aqueducts Replacement construction project. The Prosecution Team has alleged that EBMUD violated the San Francisco Bay Basin Water Quality Control Plan (Basin Plan) Discharge Prohibitions 7 and 9, and Construction General Storm Water Permit,

Order No. 2009-0009-DWQ section III.C by discharging 170 cubic yards (or 34,355 gallons) of cellular concrete into the Rockridge Branch tributary of Glen Echo Creek in Oakland. The discharge of cellular concrete resulted in substantial impacts to beneficial uses of Glen Echo Creek, including wildlife and warm freshwater habitats, and contact and non-water contact recreation. Pursuant to California Water Code (Water Code) section 13350, subdivision (e), EBMUD is subject to administrative civil liabilities not to exceed \$5,000 for each day the violation occurred or up to \$10 for each gallon discharged.

4. California Fish and Game Code section 5650, without regard to intent, prohibits the discharge of deleterious materials to state waters. Cellular concrete is deleterious to fish and wildlife resources.

5. To resolve the alleged violations in Section II, paragraphs 3 and 4 by consent and without further administrative proceedings, the Parties have agreed to the imposition of a total administrative civil liability of **\$426,183**. Settling Respondent shall make payments in the amounts and to the recipients described in Section III, paragraph 8. The administrative civil liability amount imposed for the Water Code violation(s) is the proposed liability amount the Prosecution Team calculated and asserted using Steps 1 through 10 of the State Water Resources Control Board's Water Quality Enforcement Policy (May 2010) (Enforcement Policy) as shown in Attachment A. Payment of \$102,530 to the State Water Pollution Cleanup and Abatement Account is due no later than 30 days following the Regional Water Board executing this Order. The remaining \$100,000 in penalties shall be suspended upon completion of a Supplemental Environmental Project (SEP), including payment of \$5,000 in SEP oversight costs.

6. The Parties have agreed to settle the 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 Government Code section 11415.60.

7. The Prosecution Team believes that the resolution of the alleged violations is fair and reasonable and fulfills all of its enforcement objectives, that no further action is warranted concerning the violations 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:

8. **Administrative Civil Liability:** The Settling Respondent hereby agrees to the imposition of an administrative civil liability totaling **\$426,183** to resolve the alleged violations as follows:

- a. **For the Regional Water Board:** No later than 30 days after the Regional Water Board, or its delegate, signs this Stipulated Order, the Settling Respondent shall submit a check for **\$102,530** made payable to the “State Water Pollution Cleanup and Abatement Account,” reference the Order number on page one of this Stipulated Order, and mailed to:

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

The Settling Respondent shall provide a copy of the check via e-mail to the State Water Resources Control Board, Office of Enforcement ([paul.ciccarelli@waterboards.ca.gov](mailto:paul.ciccarelli@waterboards.ca.gov)) and the Regional Water Board ([benjamin.martin@waterboards.ca.gov](mailto:benjamin.martin@waterboards.ca.gov)).

- b. **For the Regional Water Board:** The Settling Respondent agrees that **\$105,000** shall be paid to the Regional Monitoring Program care of the San Francisco Estuary Institute for implementation of a Supplemental Environmental Project (SEP) as follows:
- i. **\$100,000** (SEP Amount) shall be paid solely for use towards Phase 2 of the San Leandro Bay Priority Margin Unit Study (Study). Funding the Study will assemble and collect polychlorinated biphenyl (PCB) related information on water quality in San Leandro Bay, an area on the Bay margin that is a high priority for water quality management. The Study will conduct field studies as allowed by the SEP Amount to address critical information needs related to conceptual model development. A complete description of the Study, which documents compliance with the State Water Resources Control Board’s Policy on Supplemental Environmental Projects, is provided in Attachment B, incorporated herein by reference.
  - ii. **\$5,000** shall be paid for administration and oversight costs associated with the Study.
  - iii. Payment shall be made no later than 30 days after the Regional Water Board, or its delegate, signs this Stipulated Order. All payments associated with the SEP shall be sent in the form of a single check payable to the “Regional Monitoring Program,” reference the Order number on page one of this Stipulated Order, and mailed to: Regional Monitoring Program c/o San Francisco Estuary Institute, 4911 Central Avenue, Richmond, CA 94804. A copy of the check shall be sent to the Office of Enforcement and the Regional Water Board at the e-mail addresses set forth above.

- c. **For CDFW-OSPR:** The Settling Respondent agrees that **\$218,653** shall be paid to the Party Contact for CDFW-OSPR as referenced below and as follows:
  - i. The Settling Respondent shall pay **\$20,000** to the Fish and Wildlife Pollution Account to address civil liability associated with California Fish and Game Code section 5650.1.
  - ii. The Settling Respondent shall pay **\$37,085** to the Fish and Wildlife Pollution Account for costs associated with CDFW-OSPR's investigation and natural resource damage assessment.
  - iii. The Settling Respondent shall pay **\$161, 568** to the National Fish and Wildlife Foundation, Environmental Fund for Habitat and Incident-Specific Restoration projects, to be used for restoration projects benefitting aquatic resources and watersheds in Alameda County.
9. **Supplemental Environmental Project:** The Parties agree that the payment(s) of the SEP Amount and oversight costs is a SEP, and that the SEP Amount will be treated as a suspended administrative civil liability for purposes of this Stipulated Order. The Settling Respondent's SEP obligations will be satisfactorily completed upon the San Francisco Estuary Institute's written notification to Regional Water Board staff and Settling Respondent. The written notification shall acknowledge that the Regional Monitoring Program received payment(s) of the SEP Amount and oversight costs from the Settling Respondent and the payment(s) will be spent on the project described in Section III, paragraph 8(b)(i) in accordance with the terms of this Stipulated Order. The San Francisco Estuary Institute's annual and/or quarterly financial reports to the Regional Water Board shall be considered a final post-project accounting of expenditures.
10. **Publicity Associated with the SEP:** Whenever Settling Respondent or its agents or subcontractors publicize one or more elements of the SEP, they shall state in a **prominent manner** that the project is undertaken as part of a settlement to a Regional Water Board enforcement action against the Settling Respondent.
11. **Regional Water Board is not Liable:** Neither the Regional Water Board, its members or staff shall be held as parties to or guarantors of any contract entered into by Settling Respondent, its directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Stipulated Order.
12. **Compliance with Applicable Laws:** Settling Respondent 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.

**13. Party Contacts for Communications related to this Stipulation and Order:**

**For the Regional Water Board:**

Benjamin Martin  
San Francisco Bay Regional Water  
Quality Control Board  
1515 Clay Street, 14th Floor  
Oakland, CA 94612  
[benjamin.martin@waterboards.ca.gov](mailto:benjamin.martin@waterboards.ca.gov)  
(510) 622-2436

**For Settling Respondent:**

Chandra Johannesson  
Manager of Environmental Compliance  
EBMUD  
375 11th Street, M.S. 704  
Oakland, CA 94607  
[chandra.johannesson@ebmud.com](mailto:chandra.johannesson@ebmud.com)  
(510) 287-0412

**For CDFW-OSPR:**

Wendy Johnson  
California Department of Fish and Wildlife  
Office of Spill Prevention and Response  
1700 K Street, Suite 250  
Sacramento, CA 95811  
[wendy.johnson@wildlife.ca.gov](mailto:wendy.johnson@wildlife.ca.gov)  
(916) 324-5660

14. **Attorney's Fees and Costs:** Except as otherwise provided herein, each Party shall bear all attorneys' fees and costs arising from the Party's own counsel in connection with the matters set forth herein.

15. **Matters Addressed by this Stipulation:** 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(s) 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 deadlines specified in Section III, paragraph 8, and full satisfaction of the obligations described in Paragraph 9.

16. **Public Notice:** The Settling Respondent 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 Settling Respondent agrees that it may not rescind or otherwise withdraw its approval of this proposed Stipulated Order.

17. **Addressing Objections Raised During Public Comment Period:** The Parties agree that the procedure contemplated for the Regional Water Board's or its delegate's adoption of the Order, and public review of this Stipulated Order is lawful and adequate. The Parties understand that the Regional Water Board, or its delegate, have the authority to require a public hearing on this Stipulated Order. In the event procedural objections are raised or the Regional Water Board requires a public hearing prior to the 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.

18. **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.

19. **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.

20. **If the Order Does Not Take Effect:** In the event that the Order does not take effect because the Regional Water Board or its delegate does not approve it, or 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(s), 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. The Parties agree to waive any and all objections based on settlement communications in this matter, including, but not limited to the following:

- a. Objections related to prejudice or bias of any of the Regional Water Board members or their advisors and 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 the Stipulation and/or the Order, and therefore may have formed impressions or conclusions prior to any contested evidentiary hearing on the violation alleged herein in this matter; or
- b. Laches or delay or other equitable defenses based on the time period for administrative or judicial review to the extent this period has been extended by these settlement proceedings.

21. **Waiver of Hearing:** Settling Respondent has been informed of the rights Water Code section 13323, subdivision (b) provides, and hereby waives its right to a hearing before the Regional Water Board prior to the Order's adoption.

22. **Waiver of Right to Petition or Appeal:** Settling Respondent hereby waives its right to petition the Regional Water Board's adoption of the 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 any California appellate level 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.

23. **Covenant Not to Sue:** Settling Respondent covenants not to sue or pursue any administrative or civil claim(s) against any State agency or the State of California, their 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.

24. **Necessity for Written Approvals:** All approvals and decisions of the Regional Water Board under the terms of this Stipulated Order shall be communicated to the Settling Respondent 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 Settling Respondent of its obligation to obtain any final written approval this Stipulated Order requires.

25. **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.

26. **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.

27. **Severability:** This Stipulated Order is severable; should any provision be found invalid, the remainder shall remain in full force and effect.

28. **Counterpart Signatures; Facsimile and Electronic Signature:** 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.

29. **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.

Settlement Agreement and Stipulated Administrative Civil Liability  
East Bay Municipal Utility District


**IT IS SO STIPULATED.**

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

Date: August 19, 2016

By: \_\_\_\_\_  
Thomas Mumley  
Assistant Executive Officer

Approved as to form:

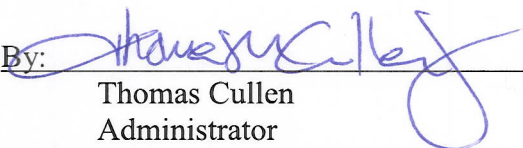
By:  \_\_\_\_\_  
Paul Ciccarelli, Attorney  
State Water Resources Control Board  
Office of Enforcement



Settlement Agreement and Stipulated Administrative Civil Liability  
East Bay Municipal Utility District

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE,  
OFFICE OF SPILL PREVENTION AND RESPONSE**


Date: 8/18/16

By:   
Thomas Cullen  
Administrator  
California Department of Fish and Wildlife  
Office of Spill Prevention and Response

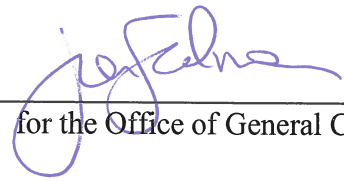
Settlement Agreement and Stipulated Administrative Civil Liability  
East Bay Municipal Utility District

**EAST BAY MUNICIPAL UTILITY DISTRICT**

Date: 8/19/16

By:   
Michael R. Ambrose  
Manager of Regulatory Compliance

Approved as to form:

By:   
for the Office of General Counsel

**ORDER OF THE REGIONAL WATER BOARD**

30. This Order incorporates the foregoing Sections I through III by this reference as if set forth fully herein.

31. In accepting this Stipulation, the Regional Water Board has considered, where applicable, each of the factors prescribed in Water Code section 13327, and has applied the Penalty Calculation Methodology set forth in the State Water Resource Control Board’s Enforcement Policy, which is incorporated herein by this reference. The Regional Water Board’s consideration of these factors and application of the Penalty Calculation Methodology is based upon information obtained by the Prosecution Team in investigating the allegations set forth in the Stipulation, or otherwise provided to the Regional Water Board. In addition to these considerations, this Order recovers staff costs incurred by the Regional Water Board for this matter.

32. This is an action to enforce the laws and regulations administered by the Regional Water Board. The Regional Water Board finds that issuance of this 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 Order generally accepts the plans proposed for the SEP prior to implementation. Mere submittal of plans is exempt from CEQA as submittal will not cause a direct or indirect physical change in the environment.

33. The Executive Officer of the Regional Water Board is authorized to refer this matter directly to the Attorney General for enforcement if Settling Respondent fails to perform any of its obligations under the 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.

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Bruce H. Wolfe  
Executive Officer  
California Regional Water Quality Control Board  
San Francisco Bay Region

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Date

**ATTACHMENT A**

**Factors in Determining  
Administrative Civil Liability**

**EAST BAY MUNICIPAL UTILITY DISTRICT  
UNAUTHORIZED DISCHARGE OF CELLULAR CONCRETE TO  
ROCKRIDGE BRANCH  
DINGEE PIPELINE PROJECT, OAKLAND, ALAMEDA COUNTY**

The State Water Resources Control Board's 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:

[http://www.waterboards.ca.gov/water\\_issues/programs/enforcement/docs/enf\\_policy\\_final111709.pdf](http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final111709.pdf)

**ALLEGED VIOLATION**

On April 8, 2015, the East Bay Municipal Utility District (Discharger) improperly closed a valve before filling an out-of-service 24-inch water pipe with cellular concrete to abandon the pipe in place as part of the Dingee Pipeline and Claremont Center Aqueducts Replacement construction project (Project). The Discharger caused 170 cubic yards (or 34,355 gallons) of cellular concrete to discharge into the Rockridge Branch tributary of Glen Echo Creek (Glen Echo Creek or Creek) in Oakland. This discharge is in violation of the San Francisco Bay Basin Water Quality Control Plan (Basin Plan) Discharge Prohibitions 7 and 9 (section 4.2, Table 4-1), which prohibit discharge of solid wastes or earthen materials to surface waters that cause deleterious bottom deposits, damage to aquatic biota, and impair recreational uses. Additionally, the Discharger is in violation of a Construction General Storm Water Permit, Order No. 2009-0009-DWQ (Permit) discharge prohibition (section III.C), which prohibits an unauthorized non-storm water discharge. The Discharger is subject to administrative liabilities not to exceed \$5,000 for each day the violation occurred or up to \$10 for each gallon discharged pursuant to Water Code section 13350, subdivision (e).

PENALTY FACTOR	ASSESSMENT	DISCUSSION
Harm or Potential Harm to Beneficial Uses for Discharge Violations	4	<p><b>Harm or Potential for Harm:</b> Above Moderate</p> <p>The discharge of cellular concrete (a mixture of “Portland” cement and protein-stabilized, surfactant foam) resulted in observed substantial impacts to aquatic life beneficial uses of Glen Echo Creek. The beneficial uses of the Creek and its tributaries include wildlife and warm freshwater habitats, and contact and non-water contact recreation.</p> <ul style="list-style-type: none"> <li>• The discharge smothered and destroyed benthic habitat for approximately one mile. In the upper reach, there was also significant loss of substrate and habitat damage where the Discharger removed hardened concrete. In the lower reach, foam and cement fines filled interstitial spaces of the Creek bed that provides shelter and foraging habitat for aquatic invertebrates. Water Board staff did not observe aquatic invertebrates in these impacted stretches of the Creek, suggesting a total loss of the aquatic invertebrate community. The first sign of aquatic invertebrates was approximately a half mile downstream, just before the Creek flows into the Claremont Golf Course quarry.</li> <li>• The discharge negatively impacted water quality because it raised the pH level in Glen Echo Creek to around 8.9 (based on measurements taken during clean up) on a short term (up to 2 days).</li> <li>• The discharge contained protein stabilized surfactant foam (Elastizell JLE Foam Concentrate) that can increase biochemical oxygen demand which is detrimental to fish and other gill-breathing aquatic life (DFW Biosignificance Report).</li> <li>• The grey and opaque discharge – combined with the high pH – impacted the Creek’s aesthetics, enjoyment, and water contact uses (Ali and Yosipovitch, 2013).</li> </ul>
Physical, Chemical, Biological, or Thermal Characteristics (Degree of Toxicity)	4	<p><b>Degree of Toxicity:</b> Significant</p> <p>The discharge consisted of pure cellular concrete. Cellular concrete poses a significant threat to potential receptors and is detrimental to aquatic life. Lime, a constituent of cement, when dissolved in water can raise pH to above 12, which is caustic, corrosive, and fatal to aquatic life.</p> <ul style="list-style-type: none"> <li>• In general, fish and other gill-breathing organisms subjected to high pH suffer the following: (1) extreme respiratory dysfunction from either direct chemical erosion (similar to burning) of sensitive gill tissue and/or impairment of gas exchange at the gill surface; (2) irreversible chemical burns of optic and olfactory tissues; (3) loss of equilibrium due to respiratory distress and evacuation of the gas bladder, and 4) ultimately death (McKee and Wolf, 1971).</li> <li>• Water Quality Publication 3-A of the California Water Resources Control Board, page 236, discusses how extreme pH levels are lethal to common fish and invertebrate species. Some fish, for example, will die at a pH of only 9.2, but even the most resistant fish species tested cannot survive long at a pH of 10.1 (DFW Biosignificance Report).</li> </ul> <p>In addition, the concrete mixture included a protein stabilized surfactant foam that has moderate toxicity to aquatic species that are dependent on the transport of dissolved oxygen (MSDS).</p> <ul style="list-style-type: none"> <li>• 96hr LC50 = 87 mg/L for fathead minnows</li> </ul>

Settlement Agreement and Stipulated Administrative Civil Liability Attachment A  
 East Bay Municipal Utility District

<b>PENALTY FACTOR</b>	<b>ASSESS-MENT</b>	<b>DISCUSSION</b>
		<ul style="list-style-type: none"> <li>• 48hr EC50 = 321 mg/L for water fleas</li> </ul>
Susceptibility to Cleanup or Abatement	0	<b>Susceptibility to Cleanup:</b> Yes Greater than 50 percent was susceptible to cleanup. The Discharger removed >50 percent of the cellular concrete from the Creek channel and storm drain system.
Per Gallon Factor for Discharge Violations	0.6	<b>Deviation from Requirement:</b> Major The discharge violated Basin Plan discharge prohibitions (No. 7 and 9) and a Permit discharge prohibition (section III.C.), rendering these requirements ineffective in their essential functions to protect beneficial uses.
<b>Initial Liability</b>	<b>\$200,130</b>	The initial liability is calculated as follows: Per-gallon factor (0.6), multiplied by the per-gallon statutory maximum liability allowed (\$10), multiplied by the number of gallons discharged (33,355).
<b>Adjustments for Discharger Conduct</b>		
Culpability	1.0	Neutral is selected because the discharge resulted despite exercise of reasonable care to check multiple times that all valves were closed prior to grouting of the pipe. The discharge occurred from a valve that was reverse threaded; undocumented, and located on a drained, unpressurized “dead” pipe.
Cleanup and Cooperation	1.0	Neutral is selected because the Discharger responded to the cellular concrete discharge in a reasonable and timely manner. The Discharger cooperated with oversight agencies, representatives of the impacted golf course, and the surrounding community. The Discharger was able to recover 164 cubic yards (or 33,124 gallons) of cellular concrete within 15 days, voluntarily conducted cleanup activities in the following 4 weeks, and continued to monitor the Creek with direction and guidance from oversight agencies. These actions are reasonably expected considering the severe nature of the material discharged.
History of Violations	1.0	Neutral is selected because, although the Discharger has been the subject of prior Water Board enforcement actions for discharges from inadequate best management practices and sanitary sewer discharges, the discharge of cellular concrete during pipe decommissioning is a unique violation.
<b>Total Base Liability</b>	<b>\$200,130</b>	Each applicable factor, relating to the Discharger’s conduct is multiplied by the initial liability amount of <b>\$200,130</b> for the violation to determine the Total Base Liability Amount.
Ability to Pay and Continue in Business	No adjustment	The Discharger has the ability to pay the proposed liability. According to its website, annual operating revenue exceeds \$400 million. The Regional Water Board has no evidence that the Discharger would be unable to pay the final liability shown below or that the liability amount would cause undue financial hardship.
Economic Benefit	\$1,340	The Discharger may have realized some economic benefit by avoiding minor costs associated with reviewing plans, inspecting the pipeline, and possibly staff training. It is estimated that economic benefit would be less than \$1,500 considering the following costs for personnel time for the aforementioned activities: <ul style="list-style-type: none"> <li>• 1 assistant engineer @ \$50/hour for 2-hour full system inspection = \$100</li> <li>• 1 construction superintendent @ \$62.50/hour for 2-hour thorough review = \$120</li> </ul>

PENALTY FACTOR	ASSESS-MENT	DISCUSSION
		<ul style="list-style-type: none"> <li>• 5 field staff @ \$56/hour for 4-hour training = \$1,120</li> </ul>
<b>Other Factors as Justice May Require</b>		
Staff Costs	Increase \$2,400	The Enforcement Policy gives the Regional Water Board discretion to consider staff costs in relation to the Total Base Liability Amount. Regional Water Board prosecution staff (Prosecution Staff) considered staff costs in determining the final proposed liability. Prosecution Staff incurred \$2,400 in staff time to conduct a site visit, investigate this case, coordinate with other agencies, and prepare this analysis and supporting information. This consists of time spent by all members of the Prosecution Staff based on the low end of the salary range for each classification. It is appropriate to increase the Total Base Liability Amount by \$2,400 in consideration of the investigation and enforcement costs incurred in prosecuting this matter. Increasing the Total Base Liability Amount in this manner serves to create a more appropriate deterrent against future violations.
Maximum Liability	\$333,550	Water Code section 13350 allows up to \$5,000 for each day in which the violation occurs; or up to \$10 for each gallon of waste discharged. The maximum liability is based on a discharge volume of 33,355 gallons.
Minimum Liability	\$1,480	The Enforcement Policy establishes the minimum liability to be the economic benefit gained (\$1,340) plus ten percent.
<b>Total Liability</b>	<b>\$202,530</b>	The final liability amount, rounded, is the total base liability after adjusting for ability to pay, economic benefit, other factors, and maximum and minimum liabilities.

**References**

Ayers, R.S., and D.W. Wescot, 1985. *Water Quality for Agriculture*. FAO Irrigation and Drainage Paper No. 29, Rev. 1. FAO UN, Rome.

Ali, A.M., and G. Yosipovitch, 2013. *Skin pH: From Basic Science to Basic Skin Care*. Acta Dermato-Venereologica. 93(3), 261-269.

McKee, J.E. and H.W. Wolf, 1971. *Water Quality Criteria*. Resources Agency of California, State Water Resources Control Board. Publication No. 3-A.

Orr, D., 2015. *Biological Effects of Cellular Cement to Fish and Aquatic Life*, (Biosignificance Report). California Department of Fish and Wildlife Water Pollution Control Office, July 9, 2015. Rancho Cordova, CA.

## **ATTACHMENT B**

### **Study Description for Supplemental Environmental Project (SEP) Fund for the San Francisco Bay Regional Monitoring Program**

This is for use in documenting how a specific San Francisco Bay Regional Monitoring Program study by the San Francisco Estuary Institute (SFEI) complies with the State Water Resources Control Board Policy on Supplemental Environmental Projects (SEP) ([http://www.waterboards.ca.gov/water\\_issues/programs/enforcement/#policy](http://www.waterboards.ca.gov/water_issues/programs/enforcement/#policy)).

#### **Basic Information**

Study Name: San Leandro Bay Priority Margin Unit Study, Phase 2

Study Budget, Total: \$100,000

SFEI Contact:

- Technical – Jay Davis, [jay@sfei.org](mailto:jay@sfei.org), cell (510) 304-2308
- Financial – Lawrence Leung, [lawrence@sfei.org](mailto:lawrence@sfei.org), (510) 746-7356

#### **Study Description**

*Provide a concise description of the study, including the goal(s) of the study.*

The goal of the study is to assemble and collect PCB-related information on water quality in San Leandro Bay, which has been identified as an area on the Bay margin that is a high priority for water quality management. The study will conduct field studies as allowed by the study budget to address critical information needs related to conceptual model development. In Phase 1 of the study, PCB related information was assembled into a conceptual model of PCB dynamics and fish and sediment samples were collected at multiple locations; some samples were analyzed. Phase 2 will complete the sediment PCB analyses and collect biota samples.

#### **Compliance with SEP Criteria**

This study complies with the following SEP criteria:

- It is a monitoring program and/or study of surface water quality or quantity and/or the beneficial uses of the water.
- Its nexus to violation(s) is that is located within the same Water Board region in which violation(s) occurred.

This study goes above and beyond the otherwise applicable obligations of the discharger because of the following:

- This project is a study (or studies) and associated product (or projects) above and



beyond what is required in permits or orders issued by the Regional Water Board or what can be accomplished with dischargers' required monetary contributions to the Regional Monitoring Program for Water Quality in San Francisco Bay.

**Study Milestone and Performance Measure**

*Provide a projected date for when the study results will be available, and describe where or how the results will be made available. Public availability of study results will constitute successful completion of the study.*

A final data report on the field studies will be available by December 31, 2017. The report will be made publicly available on the SFEI website ([www.sfei.org](http://www.sfei.org)).

**Study Budget and Reports to Water Board**

Pursuant to the October 2015 Supplemental 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 a portion 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 a discharger for the SEP and the notice will state SFEI's agreement to use the funds received as described herein.

**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.