

STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

MEETING DATE: November 9, 2022

**Item: 4**

**Executive Officer's Report**

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### **Oakland Navigation Channel Beneficial Use Pilot Project (Kevin Lunde)**

A pilot project is underway for beneficial use of dredged sediment from the Oakland Navigation Channel. The goal is to use 50 percent of the dredged sediment rather than disposing the material back into the Bay or a deep ocean site.

San Francisco Bay currently holds 90 percent of the tidal wetlands remaining in California. These wetlands, along with the human communities adjacent to these wetlands, are threatened by rising sea levels. This threat is compounded by an order-of-magnitude decrease in sediment sources to the Bay. Accordingly, the Bay Area will need to augment natural sources of sediment with anthropogenic sources to protect these wetlands and adjacent communities from the rising sea levels.

One of the key anthropogenic sources of sediment for adapting to rising sea levels is from navigational dredging in the Bay. The approximately 3 million cubic yards of sediment annually dredged from the San Francisco Bay could provide up to 60 percent of the sediment needed for wetlands and adjacent communities to adapt to the sea levels projected for 2100. Accounting for two-thirds of all dredging in the Bay, the Army Corps of Engineers (Corps) is by far the largest dredger. Further, in recent years, the Corps has dredged between 600 thousand to a million cubic yards from the Oakland Navigation Channel alone. Unfortunately, citing the Federal Standard, which requires dredged disposal alternatives to be the least costly alternative consistent with sound engineering practices and meeting environmental standards, the Corps typically disposes of sediment from the Oakland Navigation Channel into the deep ocean where it is forever lost to the Bay ecosystem.

To overcome this challenge, the SF Bay Water Board recently collaborated with the Corps, U.S. EPA, and the Bay Conservation and Development Commission (BCDC) on a pilot project. The pilot project allowed the Corps to dispose of 50 percent of the dredged material back into the Bay if the Corps beneficially used the other 50 percent. The pilot project met the Federal Standard by offsetting the higher cost of beneficial use with the lower cost of disposing sediment back into the Bay. Before the pilot project could be implemented, however, three additional challenges needed to be overcome.

First, the pilot project could not cause the annual threshold for in-Bay disposal to be exceeded. The annual threshold for in-Bay disposal applies collectively to all dredging projects. The threshold was established in the Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region, which has been incorporated into the Basin Plan and BCDC's Bay Plan. Corps, Water Board, BCDC, and U.S. EPA staff reviewed dredging totals from the last several years to confirm that the pilot project would not result in exceedance of the in-Bay disposal threshold.

Second, the Corps' contracting process could not specify a specific percentage of material going to in-Bay disposal and to beneficial use. Instead, the Corps could specify which reaches of the shipping channel would go to beneficial use. This was potentially problematic for the Water Board, BCDC, and U.S. EPA because depending on how the dredging contractor did the work, more material could end up being disposed in the Bay than beneficially used. This was resolved by all parties agreeing to a memorandum of understanding that the Corps would specify reaches to fulfill the 50/50 split but that the

final amount of material taken to each location may slightly vary from predicted volumes.

The third challenge is whether dredging contractors would be receptive to the project. The Corps held an outreach meeting to explain the project and receive feedback from the contractors directly. With that information, the Corps could create a request for proposal(s) that met their federal bidding requirements, fulfil the 50/50 split, and meet the Federal Standard, which would allow for receipt of competitive bids from the dredging contractors.

This project is still underway, but all indications are that it has been successful. It also had the ancillary benefit of convincing one of the dredging contractors to invest in construction of another offloader for the Bay Area. The lack of sufficient offloaders is a constraint to increasing beneficial use of dredged sediment in the Bay Area.

### **The 2024 303(d) List of Impaired Waters (Richard Looker)**

The SF Bay Water Board staff are working collaboratively with State Water Board staff to prepare the 2024 Clean Water Act section 303(d) List. This list is commonly referred to as the "303(d) List" or the "List of Impaired Waters." Waterbodies placed on the 303(d) List must be addressed either through the development of Total Maximum Daily Loads (TMDLs) or an existing regulatory program that is reasonably expected to result in the attainment of the water quality standard within a specified timeframe.

For the 2024 303(d) List, we have completed evaluation of all readily available water quality data from surface waters in the Region and organized these data into about 22,000 individual lines of evidence (LOEs), which are data summaries for each unique combination of a waterbody, pollutant, matrix (e.g., tissue, water, sediment), fraction (e.g., dissolved or total), beneficial use, and evaluation threshold (e.g., a water quality objective). In preparing the LOEs, the SF Bay Water Board also worked closely with water quality assessment staff at other regional water boards to ensure that systematic and consistent data assessment procedures were employed statewide. The LOEs constitute the evidentiary basis for over 4,800 unique decisions (e.g., listing, delisting) for waterbody-pollutant combinations in our Region.

Now that data assessment and decision making are complete, we will assist State Water Board staff to implement the State Water Board's public process for the 2024 303(d) List. This process has changed from previous 303(d) Lists in that the SF Bay Water Board will no longer conduct a separate comment process and hearing. The current public process consists of: preparation of a statewide draft Staff Report that includes water body "fact sheets" (listing/delisting decisions and associated LOEs); a public comment period managed at the State Water Board; a State Water Board hearing; preparation of a revised staff report and responses to public comments; a State Water Board adoption hearing; and, finally, submission of the 2024 303(d) List to U.S. EPA. The SF Bay Water Board staff will keep interested Bay Area parties informed via Listservs about the updated public process and when draft documentation is available for review and comment.

Work on the draft staff report has just begun, and we anticipate public release of this report in February 2023 and contemporaneous initiation of a 30-day public review and comment period for the report. The first State Water Board hearing will be held at the end of the public comment period. The State Water Board adoption hearing will be held near the end of 2023. The 2024 303(d) List must be submitted to U.S. EPA before April 1, 2024.

### **Crockett Wastewater Treatment Plant Causes Odors (Robert Schlipf and Will Burrell)**

C&H Sugar operates and maintains a wastewater treatment plant that treats wastewater from the C&H Sugar refinery and the town of Crockett. From approximately early September to mid-October, the town of Crockett experienced odors from the treatment plant, which now appear to be resolved.

During the heatwave in early September, the treatment plant's three blowers that supply oxygen to its aeration basins became stressed and operated at significantly reduced capacity. This resulted in low dissolved oxygen levels in the treatment plant's aeration basins and triggered some odor complaints from the community. To improve the aeration, C&H Sugar installed an additional portable blower, but community members report that this did not fully resolve the odors.

In early October, the treatment plant lost onsite power, and backup power from Pacific Gas & Electric failed due to a power surge. C&H Sugar secured a backup generator, but it took about a day to arrive. By that time, there was no oxygen in the treatment plant's aeration basins, the microbes that treat the wastewater had died, and odors permeated the community. The SF Bay Water Board received multiple odor complaints on October 5 and 6. On October 7, the California Office of Emergency Services notified the SF Bay Water Board that the treatment plant had released reportable quantities of hydrogen sulfide, a gas known for its "rotten egg" smell.

SF Bay Water Board staff inspected the facility on October 11. During the inspection, a strong hydrogen sulfide smell was noted, and staff observed poor treatment within the aeration basins. SF Bay Water Board staff also noted that treated wastewater appeared cloudier than normal. Analytical results from October 12 and 13 indicated noncompliance with effluent limits for biochemical oxygen demand, total suspended solids, and total coliform bacteria. On October 13, SF Bay Water Board staff attended a community meeting to hear directly from the affected community and to explain our response to the incident.

C&H Sugar reestablished stable operating conditions by (1) cleaning the aeration basins to remove solids from diffusers that were impeding oxygen transfer, (2) replacing failed electrical circuits and restoring power, and (3) reseeded the aeration basins with microbes from the City of Pinole's wastewater treatment plant. By October 17, the Bay Area Air Quality Management District no longer detected hydrogen sulfide at any of its monitoring sites in Crockett.

While the problems with the treatment plant appear to be resolved, we plan to work with C&H Sugar to prevent a reoccurrence by requiring better contingency planning (e.g.,

more reliable backup power), increasing the resiliency of the treatment units during high temperature stress, and improving treatment process control.

### **Cleanup Status at Mission Clay Site, Niles Cone (Kevin Brown)**

In August 2018, the SF Bay Water Board issued a Cleanup and Abatement Order to BBK KRG Inc, the responsible party (discharger) for pollutant discharges from the Mission Clay Site. The Order required them to cease, investigate, and cleanup discharge of petroleum to Alameda Creek. The Order also required the implementation of a Cleanup Action Plan.

The Mission Clay Site is in the Niles Canyon district of Fremont. Alameda Creek is located 250 feet northwest of Mission Clay. Between 1907 and 1992, companies manufactured bricks and sewer pipes at the site, using clay from an onsite open pit mine. Petroleum products were stored and used in the manufacturing process. In the late 1980s, several fuel underground storage tanks were removed. In 2000, brick-lined fuel vaults were removed, and petroleum-impacted soils were excavated. Significant petroleum impacts to soil and groundwater were discovered during investigations conducted between 2006 and 2019. Groundwater contamination was found to extend several hundred feet to the north and northwest of the source area, crossing beneath the nearby railroad and extending to an interstitial channel running parallel to Alameda Creek. About a mile and half downstream, Alameda Creek recharges the Niles Cone Groundwater Basin, which is a significant source of municipal drinking water for the cities of Fremont, Union City, and Newark.

### ***Remedial Action Plan Implementation to Stop Petroleum Discharge to Interstitial Channel for Alameda Creek***

With the endorsement and support of the US Army Corps of Engineers and the California Department of Fish and Wildlife, the SF Bay Water Board issued a *Clean Water Act Section 401 General Water Quality Certification for Regional General Permit 5 for Repair and Protection Activities in Emergency Situations*, effective September 28, 2022. This permit was necessary for implementation of the activities in the Cleanup Action Plan to halt the discharge of heavy petroleum contamination to an interstitial channel of Alameda Creek. The discharger started excavation of a remediation trench parallel to the channel on October 12. Excavation has been difficult because it was hard to get access to the heavily vegetated riparian corridor and a small excavator encountered hard boulders while trenching. Most of the trench will be backfilled with an organoclay and sand mixture, with a minor cap of engineered fill. Contaminated soil will be transported to a flatter portion of the Mission Clay property where it will be treated via in-situ bioremediation of petroleum-impacted soils (i.e., landfarming or bio-farming). Chemical oxidizers will also be applied into shallow wells to treat groundwater. Following the completion of all this work, scheduled for the end of October 2022, the responsible party will submit a Cleanup and Abatement Plan Implementation Report and monthly progress reports focused on the efficacy of the remediation.

### ***Remediation Status in the Upland Area Soil Stockpile***

Active bio-farming is conducted to treat petroleum contaminated soil excavated and stockpiled from the former Mission Clay main source areas. Mission Clay has imported

a significant quantity of soil to comply with grading requirements. This was necessary because contaminated soils were exported from the site during historic mining activities and to implement the recent remedial excavations. The main access road, between an active rail line and Alameda Creek, needs to be widened to meet current codes for vehicular access (e.g., fire equipment). Consequently, over 120,000 cubic yards of clean, imported fill will be needed.

SF Bay Water Board staff will conduct regular inspections and ensure compliance with the Order, creek cleanup and safe reuse or disposal of the treated soil.



**Figure 1:** Remediation trench. Interstitial channel and Alameda Creek are to the right of the trench on 10/14/2022.



**Figure 2:** Bio-farming of soil stockpile on 10/10/2022

### Cleanup Order for the Arroyo Viejo Creek, Oakland (Helen Hild)

Last month, the SF Bay Water Board issued a Cleanup and Abatement Order to Union Pacific Railroad (UPRR) and the City of Oakland to cleanup a section of Arroyo Viejo Creek in East Oakland. The cleanup area is a 2,000-foot portion of the creek channel that starts just upstream of the Oakland Coliseum and flows toward San Leandro Bay. Sediments in the creek and its banks contain elevated concentrations of poly-chlorinated biphenyls (PCBs). San Leandro Bay is a PCBs hotspot that was identified in the San Francisco Bay PCBs Total Maximum Daily Load (TMDL) adopted by the Water Board in 2008.

UPRR and Oakland are the responsible parties for the cleanup because they own the adjacent upland properties where the PCBs were originally discharged. The UPRR property is a former auto wrecking facility, and the Oakland property is a former electroplating facility with documented chemical mishandling. Both properties are currently vacant.

The portion of the creek that runs adjacent to the UPRR and Oakland properties is concrete lined and transitions to a natural sediment bottom further downstream. Soil samples from the creek banks adjacent to the UPRR and Oakland properties show that soil and sediment contaminated with PCBs has eroded downslope into the creek.

The Order specifies a preliminary cleanup level protective of beneficial uses and a remedial action objective of eliminating further downstream discharge of PCBs in the creek and into San Leandro Bay. The Order requires UPRR and Oakland to evaluate remedial alternatives, propose a remedial action plan, and implement the approved remedy by December 2023. Cleanup of this portion of the creek will help “turn off the tap” of upland discharges of PCBs into San Leandro Bay and San Francisco Bay; thereby implementing the TMDL.

The U.S. Environmental Protection Agency and the California Department of Toxics Substances Control are regulating the cleanup at UPRR's and Oakland's properties, which is needed to ensure that PCBs will not re-contaminate the creek after the Order is implemented.

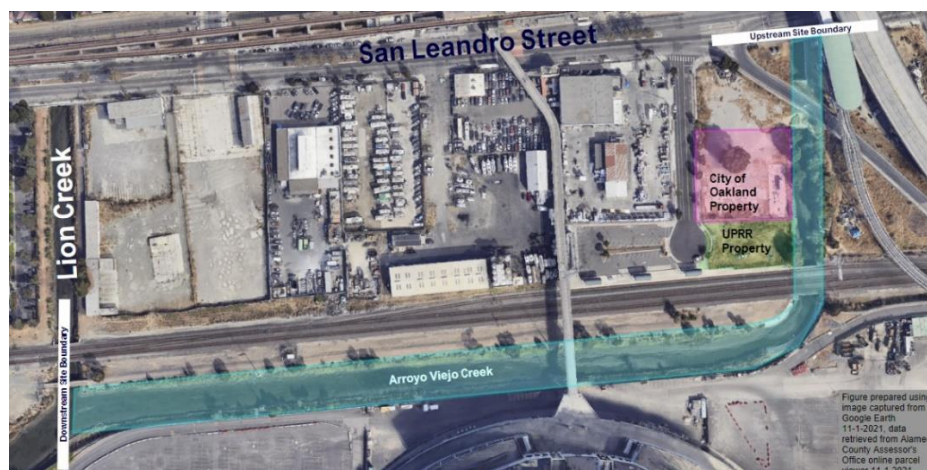


Figure 3: Arroyo Viejo Creek



**Enforcement Actions (Brian Thompson and Bill Johnson)**

The following tables show the proposed and settled enforcement actions since October's report. Because the proposed settlements are pending and could come before the Regional Water Board, *ex parte* communications are not allowed. Please refer to the [Pending Enforcement Liabilities and Penalties](#) webpage for more information on the details of the alleged violations and proposed settlements.

**Proposed Settlements**

The following are noticed for a 30-day public comment period. If no significant comment is received by the deadline, the Executive Officer will sign an order implementing the settlement.

<b>Discharger</b>	<b>Violations</b>	<b>Proposed Penalty</b>	<b>Comment Deadline</b>
Lehigh Southwest Cement Company	Discharge limit violations	\$6,000 <sup>1</sup>	November 14, 2022
Valero Refining Company-California	Discharge limit violations	\$39,000 <sup>2</sup>	November 14, 2022
Hanson Aggregates Mid-Pacific LLC	Discharge limit violations	\$3,000 <sup>3</sup>	November 16, 2022

<sup>1</sup> Includes \$6,000 to supplement Regional Monitoring Program studies.

<sup>2</sup> Includes \$27,000 to supplement Regional Monitoring Program studies.

<sup>3</sup> Includes \$3,000 to supplement Regional Monitoring Program studies.

**Settled Actions**

On behalf of the Board, the Executive Officer approved the following settlements.

<b>Discharger</b>	<b>Violations</b>	<b>Imposed Penalty</b>	<b>Supplemental Environmental Project</b>
City of American Canyon	Discharge limit violations	\$3,000	\$1,500 <sup>1</sup>
City of San Mateo – San Mateo County Event Center	Discharge limit violations	\$24,000	
Vishay Intertechnology, Gould Electronics, Inc., Monsanto Company, and GlaxoSmithKline PLC	Discharge limit violations	\$9,000	
City of San Mateo – WWTP Nutrient Removal and Weather	Discharge limit violations	\$3,000	

<b>Discharger</b>	<b>Violations</b>	<b>Imposed Penalty</b>	<b>Supplemental Environmental Project</b>
Flow Management Upgrade and Expansion Project			
Crockett Cogeneration LLP	Discharge limit violations	\$18,000	
Las Gallinas Valley Sanitary District	Discharge limit violations	\$66,000	\$33,000 <sup>2</sup>
Sewer Authority MidCoastside	Discharge limit violations	\$78,000	\$46,500 <sup>3</sup>

<sup>1</sup> A portion of this penalty, \$1,500, supplements Regional Monitoring Program studies.

<sup>2</sup> A portion of this penalty, \$33,000, supplements Regional Monitoring Program studies.

<sup>3</sup> A portion of this penalty, \$46,500, supplements Regional Monitoring Program studies.

**401 Water Quality Certification Applications Received (Abigail Smith)**

The table below lists those applications received for Clean Water Act section 401 water quality certification from September 21 through October 17, 2022. A check mark in the right-hand column indicates a project with work that may be in BCDC jurisdiction.

<b>Project Name</b>	<b>City/Location</b>	<b>County</b>	<b>May have BCDC Jurisdiction</b>
Emergency Creek Bank Retaining Wall Replacement, 2169 Acton St, Berkeley	Berkeley	Alameda	
Orinda Group 1 Storm Drain Lining Project	Orinda	Contra Costa	
Bay Maritime Corp., Yard Maintenance Project	Richmond	Contra Costa	✓
Marin Water Phase 3 of The Culvert Maintenance and Replacement Project	Kentfield	Marin	
Marshall Petaluma Rd. MP 8.24 Bank Stabilization	Petaluma	Marin	
Emergency Bank Stabilization of AC Water Water Line Rancho De Calistoga	Calistoga	Napa	
Bremer Family Winery, Corrective Action Remediation work and span bridge	St. Helena	Napa	
Dry Creek Road Bridge Replacement Project	Unincorporated	Napa	
Sofar Ocean Technologies Bay Testing Sites	San Francisco	San Francisco	✓
Arrive Fairfield Workforce Housing Project	Fairfield	Solano	
Suisun Marsh Managed Wetlands Operations and Maintenance Projects	Suisun	Solano	
D-1003 Line 210b Mp 6.68 Casing Removal	Suisun City	Solano	

<b>Project Name</b>	<b>City/Location</b>	<b>County</b>	<b>May have BCDC Jurisdiction</b>
Ignacio Mare Island Phase 2 Sonoma Creek Emergency Tower Replacement Project	Unincorporated	Solano	✓
Simmons Island Habitat Restoration Project	Unincorporated	Solano	✓
Pierce Postfire Restoration, 1200 Nuns Canyon Road, Glen Ellen	Glen Ellen	Sonoma	
Culvert Replacements On Spring Hill Road And Guglielmetti Road	Petaluma	Sonoma	
Upper Sonoma Creek Restoration Demonstration Project	Unincorporated	Sonoma	