

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

MEETING DATE: December 13, 2017

ITEM: **4**

SUBJECT: **EXECUTIVE OFFICER'S REPORT**

EXECUTIVE OFFICER'S REPORT: *December 2017*

A Monthly Report to the Board and Public

NEXT MEETING: December 13, 2017 WEBSITE: <http://www.waterboards.ca.gov/sanfranciscobay/>

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Fairfield Dry Cleaners Joint Cleanup (Bill Cook)

In late September, we made significant progress toward the cleanup of a trio of dry cleaner sites in downtown Fairfield. Disagreements among the dischargers delayed initial cleanup work at the sites, but a settlement agreement recently proposed by the dischargers and approved by Water Board staff should ensure that a unified cleanup approach is followed going forward.

The three dry cleaner sites are (1) One Hour Cleaners at 712 Madison Street, (2) Fairfield Cleaners at 625 Jackson Street, and (3) Gillespie Cleaners. Investigations began at these sites in the early 2000s under Solano County Health oversight. The Water Board began oversight in 2011, and in December 2012, we issued section 13267 orders to dischargers at each of the three sites to require them to complete site investigations. Site investigations found contaminant releases at all three sites, including tetrachloroethene, trichlorethene, and Stoddard solvent. These releases produced groundwater contamination plumes that have commingled (see Figure 1). The same solvents may also have been released from City of Fairfield sanitary sewers serving the three sites.

For several years, dischargers at the three sites disagreed about their relative contributions to the commingled groundwater plume and an appropriate cleanup strategy. Several of the dischargers had old insurance policies that potentially covered the releases, and discussions with the insurers complicated matters. Water Board staff encouraged a collaborative approach but without initial success.



Figure 1. Map of solvent plume in groundwater and locations of overlying drycleaner sites

Earlier this year, the dischargers, the City of Fairfield, and their respective insurers drafted a global settlement agreement. The draft agreement calls for a “fixed price” contract with a consultant, E2C Remediation. The consultant would implement a proposed cleanup plan that would address the full extent of the three sites’ contamination. The plan proposes a combination of potassium permanganate injections (for rapid oxidation of contaminants) and dual phase extraction (for physical removal of contaminants). The plan requires cleanup to continue until appropriate cleanup standards are met, including drinking water standards in groundwater. The plan includes an implementation schedule which estimates that cleanup standards would be met within eight years, by 2025. The total cost of cleanup is expected to cost 4.5 million dollars.

The parties requested Water Board approval of the cleanup plan and assurances that the Water Board would not enforce against the parties if they faithfully implement the cleanup plan (“no enforcement” statement). On August 22, we commented on the proposed cleanup plan, finding it to be acceptable provided certain changes were made. We also

indicated our willingness to provide a “no enforcement” statement. On August 31, the parties submitted an updated cleanup plan that addressed our comments. We conclude that the proposed cleanup methods are appropriate for the three sites’ contamination and the proposed cleanup standards and cleanup schedule are appropriate.

In a September 29, 2017, letter to dischargers the Water Board approved the cleanup plan, rescinded the 2012 orders, and included the “no enforcement” statement requested by the parties. We understand that the parties are in the process of signing the global settlement agreement, after which implementation will begin. We will monitor the implementation of the approved cleanup plan and will update you if there are any significant developments in this trio of sites.

Cleanup of PCBs in Stormwater Drainage Channels at the SLAC National Accelerator Laboratory (Nathan King and Maggie Beth)

Cleanup of poly-chlorinated biphenyls (PCBs) in contaminated sediment within two stormwater drainage channels at the SLAC laboratory has been proposed. The SLAC laboratory, which conducts high-energy particle physics, is operated by the US Department of Energy on land owned by Stanford University in Palo Alto.

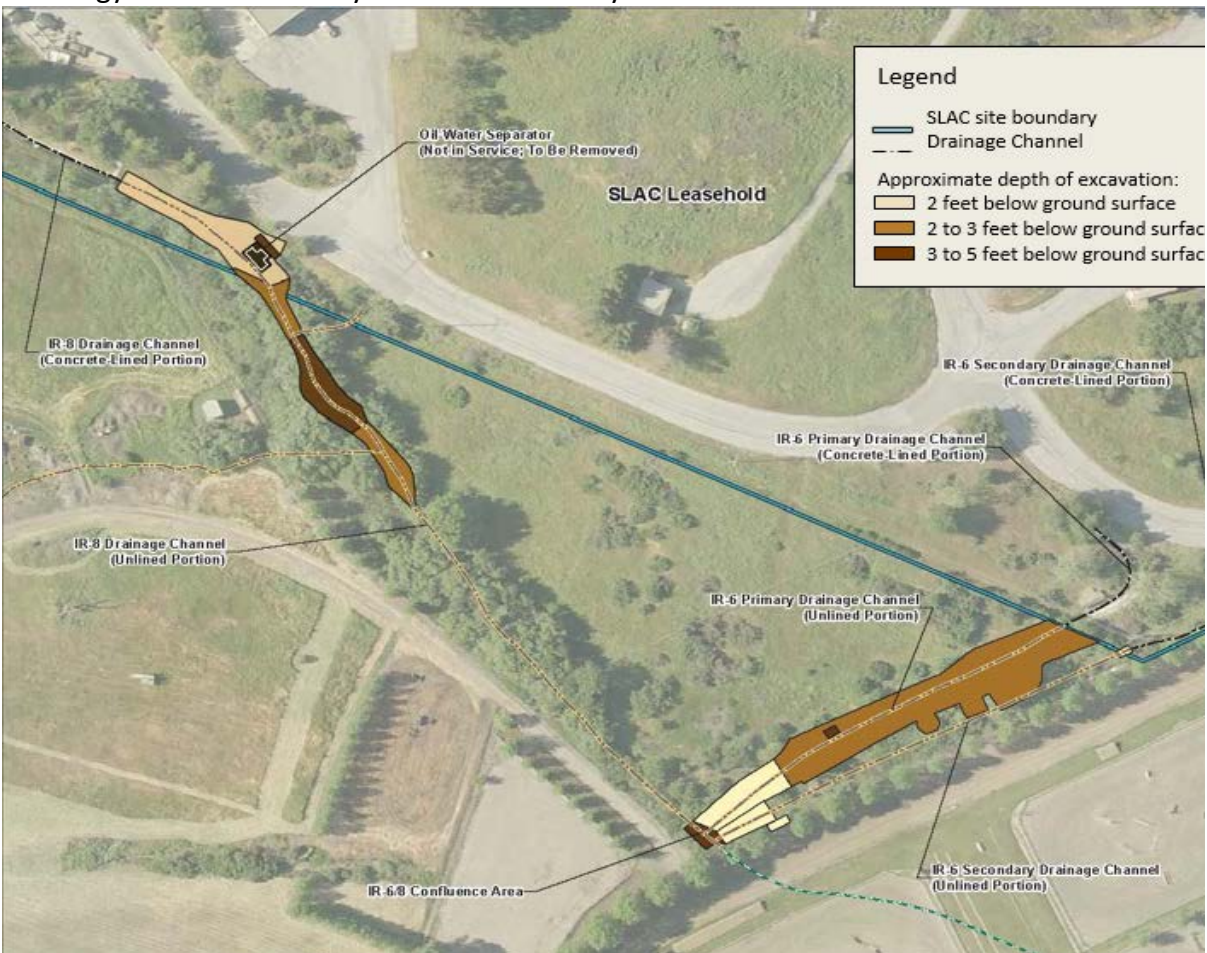


Figure 2. Project area showing planned excavation of IR-6 and IR-8 channels to remove PCB-contaminated sediment

The purpose of the cleanup project is to prevent the re-accumulation of PCB-contaminated sediment in the earthen and concrete channels that convey stormwater runoff to San Francisquito Creek. The PCBs are legacy contaminants from electrical transformers and some building materials. After reviewing the project, we determined that modifications were needed to protect wildlife habitat and special status species from potential significant negative impacts associated with sediment removal. Last June, I certified and adopted an Initial Study and Mitigated Negative Declaration for the project in compliance with the California Environmental Quality Act. I also determined that the project will not violate State water quality standards, and our Watershed Division accordingly issued conditional a Clean Water Act section 401 water quality certification.

The 3.91-acre project site (shown in Figure 2) includes two channels (IR-8 and IR-6) that convey stormwater and sediment runoff from the SLAC campus to San Francisquito Creek via two culverts. IR-8 is perennially fed by groundwater from the underdrain system beneath the linear particle accelerator tunnel. IR-6 is intermittent and consists of two channels (IR-6 primary and IR-6 secondary) separated by an earthen berm vegetated with grasses, plants, and trees. Riparian woodlands occur on both sides of IR-8 and a perennial freshwater marsh occurs near the IR-6/8 confluence.



Figure 3. Excavation of IR-8 Drainage Channel



Figure 4. Completed Drainage Channel with erosion control matting

In accordance with the plan, excavation, backfilling, and initial restoration with grass seed and erosion control was completed in August and September (see Figures 3 and 4). Best Management Practices (BMPs) were used to minimize contaminated sediment conveyance to, and deposition in, the channels. Avoidance and other measures were followed to minimize potential effects to the San Francisco Dusky-footed woodrat and California red-legged frog, (as shown in Figure 5). Final restoration includes planting cattails and willows in wetland and riparian areas during the winter season and is scheduled for January or February 2018.



Figure 5. Dusky-footed Wood Rat trapped for relocation prior to excavation

We will monitor restoration through review of the Project's Implementation Report (describing mitigation and restoration measures implemented during construction) and review annual reports describing restoration monitoring and maintenance. These activities are part of our continual support of the cleanup activities at SLAC.

East Bay Municipal Utility District Commissions Project to Divert Urban Runoff for Treatment (Jessica Watkins)

The East Bay Municipal Utility District (EBMUD) commissioned the Urban Runoff Diversion Project on October 13, 2017, to treat about 0.5 million gallons per day of dry weather storm system flows from Alameda County's Ettie Street pump station. In doing so, EBMUD will treat a substantial volume of urban runoff that would otherwise be discharged to San Francisco Bay without treatment. The pump station is located adjacent to EBMUD's main wastewater treatment plant in Oakland. EBMUD completed construction in February 2017 and performed startup testing for about seven months. So far, the Project has prevented about 88 million gallons of untreated flows from being discharged directly to the Bay.

This Project is a requirement of a 2014 Consent Decree between EBMUD, this Water Board, the State Water Board, and U.S. EPA for discharges from EBMUD's three Wet Weather Facilities. During extreme wet weather, when inflows exceed the treatment capacity of EBMUD's main treatment plant, these Wet Weather Facilities provide primary level treatment through physical removal of solids and chemical disinfection prior to discharge. The 2014 Consent Decree requires cessation of EBMUD's Wet Weather Facility discharges starting in 2027 at the smallest Wet Weather Facility and then by 2035 at the last Wet Weather Facility. This Project mitigates for Wet Weather Facility discharges until those discharges cease.

Foster City Levee Project, Attendance at the Sept. 29, 2017 City Council Special Meeting (Christina Toms and Naomi Feger)

On September 29, 2017, Water Board staff attended a City Council Special Meeting in Foster City which served to provide an opportunity to update the City Council and the public on the Foster City Levee Protection Planning and Improvements Project. The meeting was attended by multiple local politicians, including Representative Jackie Speier, and included the Water Board as well as other regulatory and resource agencies. The meeting included a presentation by Foster City Public Works Director Jeff Moneda and consultants Schaaf and Wheeler.

Background: In 2014 and 2015, the Federal Emergency Management Agency (FEMA) upgraded the Federal Insurance Rate Maps (FIRMs) for the Foster City area. This mapping work indicated that most of Foster City's 8-mile-long perimeter levee system was not high enough to protect Foster City from flooding associated with levee overtopping from extreme high tides (stillwater or storm surges) and/or wave runup. In order to maintain FEMA accreditation, the levees would have to be upgraded. Foster City then embarked on an effort to plan for upgrading the perimeter levees so they would maintain protection in accordance with updated FEMA guidelines, be adapted to address future sea level rise (SLR), and provide continued public access to the San Francisco Bay Trail which runs along the levee system.

In November 2016, Foster City released a draft environmental impact report (DEIR) that considered five different levee alternatives and described a Proposed Project. The Proposed Project utilizes a combination of sheet pile floodwalls, earthen levees, and conventional floodwalls to provide flood protection. Foster City considered SLR scenarios for 2050 and 2100 in their analysis; the proposed project was going to be constructed to protect for the 2050 scenario with anticipated additional build-up in the future to address SLR in 2100. Water Board staff met with Foster City and their consultants on multiple occasions to encourage the project team to consider green infrastructure design approaches that enhanced habitats as well as flood protection. Staff also commented on the DEIR, stating in part, that the City should consider alternatives to shoreline hardening, such as the construction of coarse sediment (sand, gravel, or oyster shell) beaches that could attenuate wave energy, reduce wave runup, and provide habitat for resident and migratory shorebirds and advised the City to consider conducting a pilot study of such an alternative. These features are already present at Foster City (Segment 4, portions of Segment 3 in Figure 1) and similar sites such as Outer Bair Island.



Figure 6. Map of Levee Segments

Outcome of September 2017 City Council Special Meeting: During the September City Council Special Meeting there was a presentation by Foster City's consultant regarding the feasibility of building to the 2050 or 2100 SLR scenarios. Although the Proposed Project is being planned to address 2050 SLR elevations, Foster City conducted additional geotechnical analysis to evaluate the use of sheet pile floodwalls to achieve 2100 SLR design elevations. The additional analysis showed that this wouldn't be feasible; the depth to which they would have to be constructed in Bay Mud would result in

unacceptable structural instabilities. To reduce wave runup such that the 2050 SLR elevations would continue to provide adequate flood protection in the 2100 SLR scenario, Foster City stated that outboard structures such as coarse sediment beaches, oyster reefs, and similar "living shorelines" would be necessary. This came as a pleasant surprise to Water Board staff and is in line with what we have been recommending. Foster City's consultants stated that they would set up a meeting with us in the near future to discuss the project design prior to submittal of their 401 WQC application.

In-house Training

In October, we held an in-house training on public outreach. This topic is often not taught in technical disciplines, but can be key for civil servants. We have many new hires so it was timely for us to review our media relations policy. During the training the State Water Board's Office of Public Participation staff reviewed the information and resources available to us. The Department of Fish and Wildlife, Office of Spill Prevention and Response's staff provided case studies with a few real-world tips on what not to do and lots of pointers for success. Nicole Fry and Melissa Gunter from our office provided case studies on current, labor-intensive, yet effective, public outreach efforts. Our next in-house training topic is effective negotiation in January 2018.

Brownbag seminars included an October 18 seminar on the history, characteristics and analytical methods associated with PCBs.

Staff Presentations

On October 3, Senior Engineering Geologist Ross Steenson, spoke at the Groundwater Resources Association of California Annual Meeting and Conference held in Sacramento. Mr. Steenson's presentation "Evaluating Contaminated Groundwater Discharges to Surface Water" provided an advance warning to interested parties, informing them that we are working on written guidelines for such evaluations to help our staff avoid re-inventing the wheel. Mr. Steenson discussed our previous approach, some of the newer tools used at our sites, refinements to our toxicity testing approach, and recent research on aquatic species exposure to polycyclic aromatic hydrocarbons.

Enforcement Actions (Mary Boyd and Brian Thompson)

The following tables show proposed and settled penalty actions since last month's report. In addition, proposed and settled action are available on our website at:

http://www.waterboards.ca.gov/sanfranciscobay/public_notices/pending_enforcement.shtml

Proposed Settlements

The following have been 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.

Discharger	Violation(s)	Proposed Penalty	Comment Deadline
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Browning Ferris Industries	Violation of effluent limits	\$9,000	Oct 27, 2013
San Bruno Plaza	Effluent limit violation	\$3,000	Nov 18, 2017
Phillips 66	Discharge of partially treated wastewater to San Pablo Bay	\$109,000	Nov 18, 2017

Settled Actions			
On behalf of the Board, the Executive Officer approved the following:			
Discharger	Violation(s)	Imposed Penalty	Supplemental Environmental Project
East Bay Municipal Utility District	Violation of effluent limit	\$3,000	\$1,500
Hibiscus Properties, LLC	Violation of effluent limits	\$3,000	
SMI Holding, LLC	Violation of effluent limits	\$12,000	\$6,000
Hanover R.S. Construction	Violation of effluent limits	\$12,000	
East Bay Municipal Utility District	Discharge of chlorinated potable water resulting in fish kill	\$893,190	\$382,095

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 14 through October 10, 2017. A check mark in the right-hand column indicates a project with work that may be in BCDC jurisdiction.

Project Name	City/Location	County	May have BCDC Jurisdiction
Encinal Beach Restoration	Alameda	Alameda	✓
Flood Control Repairs on Three Channels	Dublin		
Zeiss Graphite Development	Dublin		
Carmen Street Bank Stabilization	Fremont		
Arroyo Del Valle Pedestrian Bridge Replacement	Livermore		
Oakland International Airport Perimeter Dike Improvements	Oakland		✓
5 BHR Stock Pond Rehabilitations	Sunol		
Phase 1 of Interstate 680 Northbound HOV Lane	Sunol		
Pt. Isabel Water Access and Shoreline Improvements	Richmond	Contra Costa	✓
Bel Marin Keys Unit V Levee Maintenance	Novato	Marin	✓

Project Name	City/Location	County	May have BCDC Jurisdiction
McNears Swim Buoy Replacement	San Rafael		✓
American Canyon Routine Creek Maintenance Activities Section B	American Canyon	Napa	✓
American Canyon Routine Creek Maintenance Activities Section C	American Canyon		✓
John F. Kennedy Park Boat Ramp Dredging	Napa		
Nichelini Vineyard Installation of Culverts	Saint Helena		
San Francisco Marina Yacht Harbor Dredging of West Basin	San Francisco	San Francisco	✓
Seymour Ditch Stabilization	Half Moon Bay	San Mateo	
SF Bay Marine Science Institute Pile Repair	Redwood City		✓
Permanent Creek Bank Stabilization	Los Altos	Santa Clara	
Middle Mixer Valley Channel Creation	San Jose		
Austin Creek Flood Protection Maintenance	Vallejo	Solano	✓