

Executive Officer's Report April 17, 2020

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Staff Presentations and Publications

On March 2, Bill Johnson attended the kick-off meeting for the Transforming Shorelines Collaborative, which is comprised of practitioners and experts on habitat restoration, treatment wetlands, and shoreline resilience. The collaborative is supported by the Transforming Shorelines Project, which is funded by U.S. EPA to support collaborative engagement to build regional capacity for nature-based solutions and to advance a suite of nature-based projects through design, permitting, and implementation. Bill participated on a panel and facilitated a brief discussion of regulation and permitting using the proposed Palo Alto Horizontal Levee Pilot Project as a case study.

Adaptation Atlas Addendum (Christina Toms and Xavier Fernandez)

The Water Board recently funded the second phase of the Adaptation Atlas. The Adaptation Atlas is a science-based framework to identify effective strategies for adapting to rising sea levels, which are appropriate for particular settings and take advantage of natural processes. In 2019, San Francisco Estuary Institute (SFEI) and its partners completed the first phase by publishing the Adaptation Atlas. In the second phase, SFEI will produce an addendum to the Adaptation Atlas that focuses on case studies that emphasize the following: (1) integration of wastewater infrastructure with nature-based adaptation measures; (2) use of newly available data sets to assess species dynamics/dispersal across previously mapped marsh restoration opportunities, and (3) analysis of new sediment supply and demand data to both inform placement of sediment and identify where watershed sediment sources may be utilized for nature based adaptation.

Wetland Regional Monitoring Program (Christina Toms and Xavier Fernandez)

The Wetland Regional Monitoring Program (WRMP) Plan for the San Francisco Estuary was just recently published. Over the past two years, Water Board staff staff (Christina Toms, Xavier Fernandez, and Naomi Feger [retired]) worked with the San Francisco Estuary Institute, San Francisco Bay National Estuary Research Reserve, San Francisco Estuary Partnership, and U.S. Environmental Protection Agency to develop a regional monitoring program plan for wetlands in the Bay Area.

The WRMP will improve wetland restoration project success by putting in place regional-scale monitoring increasing the impact, utility and application of permit-driven monitoring to inform science-based decision-making. Once in place, the WRMP will be a robust, science-driven, collaborative regional monitoring program that includes: a) Monitoring site network; b) Open data sharing platform; c) Comprehensive science framework. More information is available www.wrmp.org.

No Further Action for Napa Pipe (Alyx Karpowicz)

After decades of investigation and cleanup, redevelopment plans for the former Napa Pipe Facility can finally proceed after we issued two No Further Action (NFA) letters in 2019.

The approximately 150-acre site is located about three miles south of the city of Napa along the east bank of the Napa River. Industrial uses began at the site in the 1930s, including shipbuilding and steel manufacturing, which ended when Napa Pipe Corporation ceased pipe fabrication in 2005. In late 2005, Napa Pipe Corporation sold the property to Napa Redevelopment Partners who plan to redevelop the facility for mixed residential, commercial and open space uses.

Chemicals of concern at the site included diesel and motor-oil range hydrocarbons, volatile organic compounds (VOCs), and metals. Napa Pipe Corporation was issued a Site Cleanup Requirement (SCR) Order No. R2-1990-0147, which required contaminated soil and groundwater to be contained, treated, and/or disposed.

A Remedial Action Plan, prepared and approved in 2007, proposed cleanup of soil and groundwater to both residential and commercial standards based on proposed redevelopment plans. This Regional Board's Environmental Screening Levels (ESLs) were selected as the cleanup standards for soil and groundwater. To treat soils, Napa Redevelopment Partners proposed excavation to varying depths where contamination was present, segregation of clean soil, landfarming to treat diesel impacted soil and off-hauling metals and motor oil impacted soils to a licensed facility. Dewatering where needed, treatment through the onsite wastewater treatment system, and discharge to the sanitary sewer were the proposed methods to treat groundwater.

Implementation began at the site in July 2017 and was completed in February 2018. During that time, a total of 156,645 cubic yards of soil were excavated, segregated, and stockpiled for landfarming and/or characterization.



View of the site excavation in 2018, looking west.

A total of 2,545,000 gallons of groundwater were removed and treated by the onsite system. Post-remediation testing confirmed that all contaminants in soil and soil vapor

were at concentrations below their respective cleanup goals at the time the work was completed (October 2018).



View of the site in 2019, post-excavation, looking west/northwest.

In July 2019, the Water Board updated ESLs for many of the contaminants of concern at the site. Concentrations of some VOCs in soil gas that were previously below residential screening levels now exceed the new, more stringent numbers. Therefore, to ensure protection of public health and the environment, a vapor barrier was required to be installed overlying any locations where soil vapor and/or groundwater exceeded the ESLs and use of shallow groundwater is restricted..

In March 2020 the deed restriction for the site was filed with Napa County providing the basis for our upcoming rescission of the SCR Order. This culminates the decades-long cleanup work at the Napa Pipe facility and allows the redevelopment and reuse to proceed.

Marathon Martinez Refinery – Bio-Oxidation Pond Cut Off Wall (Vic Pal)

Marathon Petroleum Corporation successfully completed installation of a Bio-Oxidation Pond Cut Off Wall (Cut Off Wall Project) on December 12th, 2019. The Cut Off Wall Project was required to ensure consistency with Title 27 standards to protect groundwater from potential hydraulic connection with the Bio-Oxidation Pond.

Marathon Petroleum Corporation acquired Tesoro Refining and Marketing Company in October 2018. This acquisition included the former Avon or Golden Eagle Martinez Refinery (Refinery), which is located east of Interstate 680 and south of the Carquinez Strait. The Board adopted Waste Discharge Requirements (WDRs) for the Refinery in 2004, which required investigation of the existing active Class II refinery wastewater impoundments, including the 108-acre Bio-Oxidation Pond (Pond). The Pond was built on reclaimed marsh land and operation of the Pond began in 1966. The Pond is an integral part of the Refinery's wastewater treatment system and its operation is jointly regulated through a National Pollutant Discharge Elimination System (NPDES) permit and California Code of Regulations Title 27. The Pond perimeter berms were constructed out of imported fill and native materials, and the Pond bottom was built into native Bay Mud. Investigation of the Pond indicates that the hydraulic conductivity of the native Bay Mud floor meets the Title 27 prescriptive standard. However, the hydraulic conductivity of the berm materials did not consistently meet the prescriptive standard. Although monitoring of surface water and groundwater data in and around the Pond does not indicate a consequential hydraulic connection to groundwater, installation of a slurry cutoff wall according to Title 27 requirements was proposed to ensure that there is no connection to groundwater and also improve the stability of the Pond berm.



Bio-Oxidation Pond



Horizontal Axis Rotary Tool



Injection of Grout Slurry

The Cut Off Wall Project included installation of a three-foot wide cutoff wall along the entire two-mile perimeter of the Pond to depths between 15 and 20 feet below grade

with a minimum key-in depth of 5 feet into Bay Mud. In order to complete the work, Marathon hired a soil-mass mixing specialty contractor to inject and mix a grout slurry into the existing soil in the trench using a horizontal axis rotary mixing tool mounted on the end of an excavator arm. As the rotating soil mixing tool was lowered into the ground, grout slurry was injected through a feed pipe. The mixing tool blended the grout into the existing soil, creating a strong low permeability barrier wall. The work was completed over three months (October through December 2019) using two large rigs. A

permit for the project was obtained from the San Francisco Bay Conservation and Development Commission (BCDC) as a portion of the Pond berm is located within the BCDC shoreline band. The project was successfully completed on December 12th, 2019 under an expedited schedule with oversight from both the Water Board and Bay Area Air Quality Management District (BAAQMD).

Continued Response to Fire at Shore Terminals Selby Facility (Elizabeth Wells)

Shore Terminals, LLC, continues to conduct efforts in its environmental response to the fire that occurred at its Crockett, California, aboveground storage tank terminal (Terminal) on October 15, 2019. The Terminal, owned by NuStar Energy, LP, is located between San Pablo Avenue and Highway 80 (Figure 1). Two ethanol tanks were involved in the fire (Figure 2) and a combination of water and firefighting foam, which contained per- and polyfluoroalkyl substances (PFAS), was used to extinguish the fire. Shore Terminals collected, sampled, and disposed of the waste firefighting liquid at the US Ecology facility in Nevada.

In response to Water Board staff concerns, Shore Terminals prevented rainwater and firefighting foam contained within the tank farm berms from discharging to the Bay. A portion of the collected rainwater has been disposed of offsite at the US Ecology facility in Nevada. Shore Terminals continues to collect rainwater and is planning to conduct onsite treatment of the water to remove PFAS and petroleum hydrocarbons. The treated water will be sampled to confirm removal and/or destruction of PFAS and petroleum hydrocarbons prior to discharge into the storm drain under a site-specific Stormwater Pollution Prevention Plan in accordance with the Stormwater Construction General Permit.

Water Board staff conducted two additional site visits in 2019. During the November 26 site visit, Water Board staff were accompanied by Shore Terminals personnel and observed the tank farm berms where firefighting waste liquid was held, the burned tanks, waste material storage tanks, and accessible portions of the on- and offsite storm drain system. During the December 5, 2019, site visit of the offsite storm drain system, Water Board staff observed the presence of pneumatic plugs in the offsite storm drain, which were intended to prevent the discharge of firefighting materials and stormwater to the Bay. No evidence of discharge of firefighting waste liquid was observed during the site visits.

Shore Terminals conducted preliminary soil and groundwater sampling at the Terminal. The results of the sampling indicated the use of PFAS-containing firefighting materials resulted in a release of PFAS to soil and groundwater at the Terminal. On February 19, 2020, Water Board staff issued a Water Code Section 13267 Technical Report Requirement Order to Shore Terminals requiring submittal of a soil and groundwater investigation work plan to assess the extent of PFAS and petroleum hydrocarbons in the subsurface.

Based on work conducted by Shore Terminals to date, Water Board staff are satisfied with the actions taken to protect human health and the environment and continue to find no evidence that any PFAS-laden firefighting water or petroleum products were discharged to San Pablo Bay. The soil and groundwater investigation is anticipated to be conducted in summer 2020.

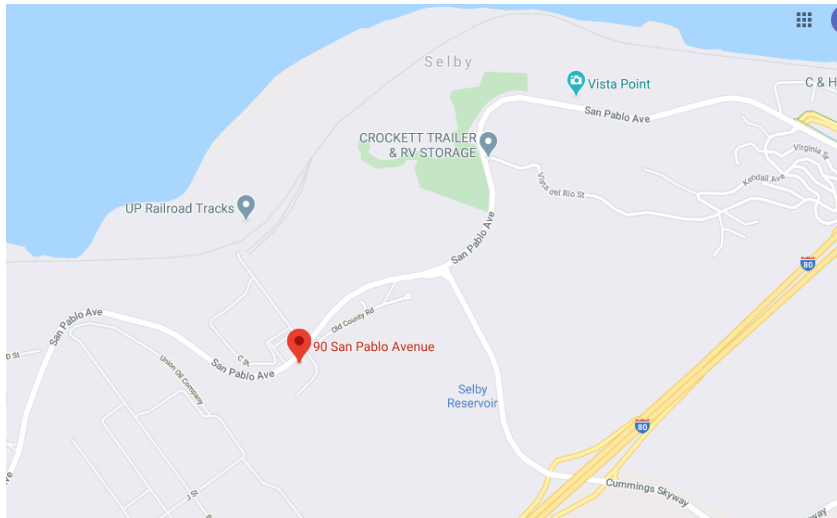


Figure 1: Location of Shore Terminals Selby Facility



Figure 2: Location of aboveground storage tanks involved in fire at Shore Terminals Facility

Investigation of Groundwater and Soil Vapor Pollution near West Oakland High School (Alec Naugle, Laurent Meillier, Phyllis Flack)

Earlier this year low-level concentrations of the carcinogenic industrial solvent trichloroethylene (TCE) were reported in shallow groundwater samples beneath the McClymonds High School campus in West Oakland. The samples were collected as part of a routine heating oil underground storage tank investigation lead by Alameda County Environmental Health (ACEH). In response, the Oakland Unified School District (OUSD) closed the school in February. The main concern was the possible off gassing of TCE vapors from groundwater that could potentially accumulate inside school buildings and classrooms. Groundwater in this area is not used for drinking or other purposes.

In response, the Department of Toxic Substances Control (DTSC) oversaw the subsequent sampling of indoor air, groundwater, and soil vapor at the school property. On March 19, DTSC issued a statement that said the DTSC has verified the results and determined that there is no significant risk from TCE to students and staff on the premises. The school remains closed due to the COVID-19 emergency.

Meanwhile, the DTSC, Water Board, and ACEH are coordinating investigation of possible TCE sources in the vicinity of the school. We've identified nearby cleanup sites that may have historically discharged TCE or other solvents that warrant further attention. These include a nearby former metals fabrication facility, which DTSC is investigating, three closed underground storage tank sites, which ACEH is investigating, and a former dry-cleaning operation that we are investigating. For the dry cleaner, we have reviewed existing records, and last week issued a directive requiring a work plan for groundwater and soil vapor sampling that will be due in early June. We have also offered assistance to the ACEH for investigation of the closed underground storage tank sites. All of these nearby sites are identified in the Water Board's GeoTracker database and/or DTSC's Envirostor database.

In early March we were contacted by the media (a KQED reported) and a representative of Senator Nancy Skinner's office. In both cases we explained our agency's role, DTSC's lead role on the investigation at the school, and coordination with DTSC and ACEH. We will continue with regular coordination calls with those agencies to compare findings. DTSC and ACEH have taken lead roles communicating the agency coordination strategy with OUSD and Community representatives.

March 2020 Enforcement Actions (Brian Thompson and Jessica Watkins)

The following table shows the settled enforcement actions since March's report. In addition, enforcement actions are available on our website at http://www.waterboards.ca.gov/sanfranciscobay/public_notices/pending_enforcement.shtml

Settled Actions

On behalf of the Board, the Executive Officer approved the following:

Discharger	Violation(s)	Imposed Penalty	Supplemental Environmental Project
Stay Cal HMB, Inc.	Failure to submit an annual construction stormwater discharge report for 2017/2018 by September 1, 2018.	\$6,100	None.
Sonoma Valley County Sanitation District	Unauthorized discharge.	\$427,600 ¹	\$213,800
Monterey Mushrooms, Inc.	Unauthorized discharges.	\$911,800 ²	\$440,364

- 1 The imposed penalty includes \$213,800 towards an Enhanced Compliance Action (ECA) to identify and eliminate sources of inflow and infiltration into the District's collection system, thus reducing wet weather sanitary sewer overflows.
- 2 The imposed penalty includes \$440,364 towards a Supplemental Environmental Project (SEP) for the Santa Clara Valley Open Space Authority to restore approximately 3.5 acres of riparian habitat along Fisher Creek in the Coyote Valley Watershed.

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 March 12 through April 9, 2020. 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
Alameda Harbor Bay Ferry Landing Donut Fender Piles	Alameda	Alameda	✓
Shell Pond Solid Waste Mgmt Unit 4.18 Managed Natural Recovery Through Phytoremediation Within the Waste Management Pond	Bay Point	Contra Coasta	✓
Finley Road Culvert Replacement	Clayton	Contra Costa	
Sanders Ranch Falls Streambank Stabilization	Moraga	Contra Costa	
2 Sandhill Road Property Culvert Installation	Orinda	Contra Costa	
Montezuma Pump Station Replacement	Pittsburg	Contra Costa	✓
112 Cypress Drive Sewer Lateral Replacement	Fairfax	Marin	
Hog Island Oyster Company Tomales Bay Shellfish Farm Equipment Upgrade	Marshall	Marin	
Devlin Road and Vine Trail Extension	American Canyon	Napa	
Green Island Road Reconstruction and Widening	American Canyon	Napa	
Pioneer Park Pedestrian Bridge and Fish Passage Enhancement	Calistoga	Napa	
Napa Pipe Redevelopment	Napa	Napa	✓

Project Name	City/Location	County	May have BCDC Jurisdiction
Sulphur Creek Rock Removal at 765 Valley View	St. Helena	Napa	
Guadalupe Channel Erosion Control	Brisbane	San Mateo	✓
Rockaway Quarry Reclamation	Pacifica	San Mateo	
Serra Drive Outfall Repair	Pacifica	San Mateo	
8770 FEMA Alum Rock Mineral Springs Bridge Rock Wall Embankment Repair	San Jose	Santa Clara	
Tasman East Specific Plan Riverfront Park Drainage Swale Culverting	Santa Clara	Santa Clara	✓
Wings Landing Tidal Habitat Restoration	Fairfield	Solano	✓
9457 Willow Avenue Home Construction	Cotati	Sonoma	
Chase Street Bridge Replacement	Sonoma	Sonoma	