

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

MEETING DATE: March 8, 2017

ITEM: **4**

SUBJECT: **EXECUTIVE OFFICER'S REPORT**

EXECUTIVE OFFICER'S REPORT: *March 2017*

A Monthly Report to the Board and Public

NEXT MEETING: March 8, 2017

WEBSITE: <http://www.waterboards.ca.gov/sanfranciscobay/>

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Petroleum Refineries Rarely, If Ever, Accept Ballast Water (Robert Schlipf)

At the November 2016 Board meeting, concerns were raised regarding ballast water processing at Bay Area refineries and the potential for invasive species to reach San Francisco Bay. The NPDES permits that the Board has issued to the Bay Area's five refineries allow ballast water processing at refinery wastewater treatment plants; however, no Bay Area refinery routinely accepts ballast water, and none has accepted any ballast water for many years. The NPDES permits allow refineries to process ballast water only to accommodate possible emergency conditions. For example, if a ballast water tank were to rupture and ballast water were to mix with petroleum in a cargo tank, the refinery might need to treat the ballast water to recover petroleum. Such emergencies are rare; none has occurred since the 1990s.

The California State Lands Commission (Commission) requires tankers to have an approved ballast water treatment system or to exchange ballast water far from land (i.e., at least 50 miles from land if the tanker is from the West Coast; otherwise at least 200 miles from land). Commission inspectors check ballast water records for each tanker docked at a refinery wharf. In the unlikely event that a tanker needed to process ballast water at a refinery's treatment plant, the Commission would need to approve that doing so would meet current standards.

First Subgrade Sulfate Reactor - Travis AFB (Adriana Constantinescu)

In 2016, the first subgrade sulfate reactor was installed at Travis Air Force Base in Solano County (Travis AFB) to remediate subsurface petroleum contamination. The DOD Strategic

Environmental Research and Development Program and the Environmental Security Technology Certification Program developed this new, innovative, and cost-effective remedial technology. This project makes a contribution to Travis AFB's efforts towards a sustainable environmental cleanup program. They strive to inspire others to choose technologies that reduce greenhouse gases, are cost effective, and are less disruptive to site operations.

The subgrade reactor relies on sulfate-reduction to break down petroleum contaminants into harmless compounds. At this site, the reactor was filled with inexpensive gravel and crushed scrap drywall. Drywall is used because it is made of calcium sulfate dehydrate (gypsum) and is an excellent source of sulfate. Groundwater is pumped from two wells to the top of the reactor to create a recirculation cell that continuously redistributes sulfate throughout the subsurface. As the groundwater moves through the reactor's perforated pipes, it contacts the drywall and is infused with dissolved sulfate that flows out of the reactor and through the petroleum groundwater plume. In addition, the system is solar powered. Another added benefit is that the biological treatment occurs underground, and the ground surface above the treatment system can be put to practical use.

State Board Hearing on Contaminants of Emerging Concern (Naomi Feger)

On February 22, Environmental Program Manager Naomi Feger made a presentation to the State Board on our efforts to address contaminants of emerging concern (CECs) in our Region. Tom Mumley and the other regions' Assistant Executive Officers have been working with State Board staff for the past year on a statewide CECs Initiative. The hearing included presentations from multiple regions, State Board's Division of Water Quality, its Office of Information Management and Analysis, and its Division of Drinking Water.

For more than a decade we have worked collaboratively through the San Francisco Bay Regional Monitoring Program (RMP) to monitor and evaluate various CECs in Bay ambient water, sediment, and biota. We also conduct studies of potential sources of CECs, including wastewater and stormwater. Over the past decade we have seen some CECs, for example, flame retardants, PBDEs, perfluorinated compounds, and PFOS, decline in biota, water, and sediment due to national phase-outs of these chemicals.

Naomi discussed our regional CECs strategy, which includes a tiered risk-based assessment of CECs and associated management action framework and recurring literature reviews to make sure we are not overlooking newly emerging contaminants or new information on effects or effects-based thresholds that could cause us to reexamine a contaminant. This year, through the RMP, we plan on updating our 2013 synthesis of available CECs data ([Pulse 2013](#)) and our monitoring strategy.

Microplastics are an example of a newly emerging CEC in the Bay. A study conducted by the RMP of microplastics found microbeads from beauty products and tiny fibers from clothing and textiles at all of the nine sites included in the study as shown in Figure 1 below. Our observations on the presence of microbeads in the Bay contributed to bans, effective this year, on the use of these products in rinse-off personal care products. The San Francisco Estuary Institute, with support from the RMP, will be following up on the results of this study using a two-year grant it received from the Moore Foundation.



Figure 1. Microplastics monitoring sites in the Bay (shown in orange).

We will continue to participate in the statewide CECs initiative and keep the Board informed of the outcome of that effort.

Prosperity Cleaners Update (Ralph Lambert)

The former Prosperity Cleaners site is located in the Marinwood Plaza shopping center in Marinwood, north of San Rafael in Marin County. Releases of tetrachloroethene (PCE) from past dry cleaning operations have impacted soil, soil vapor, and groundwater. In 2014, the Board adopted a cleanup order for the site; the order sets a schedule for completing site investigation and cleanup.

During the February Board meeting, the Board was briefed on the discharger's onsite soil excavation project and feedback was sought regarding our draft response to the discharger's proposed offsite groundwater cleanup plan. The cleanup plan calls for injections of substrates in several rows to bio-degrade PCE in offsite groundwater, with a pilot test at the start to determine the optimal remedial action design. Our draft response letter would have approved the cleanup plan with two conditions pertaining to the pilot test and require the discharger to meet offsite groundwater cleanup levels within 10 years. On February 15, I signed the final response letter. Based on Board feedback during the Board meeting, the final letter includes new approval conditions requiring two progress reports during the pilot-test period and sets an earlier deadline for completion of the pilot test. The discharger will have the opportunity to argue for more time in the progress reports, if necessary.

Also during the February Board meeting, many commenters raised concerns about the on-going soil excavation under the former dry cleaner building. On February 9, the discharger completed the onsite soil excavation. The 50 final confirmation soil samples collected upon completion of the soil excavation project met the soil cleanup levels in the Board's cleanup order. Contractors excavated approximately 350 cubic yards of soil and added amendments to the clean backfill to treat PCE-contaminated shallow groundwater. The excavated soil remains onsite in a covered, bermed pile awaiting disposal approval from the landfill and a period of several dry days for soil-moving activities. The discharger missed the cleanup order's February 1 deadline for the soil-excitation completion report. On February 22, we denied the discharger's extension request. We expect to receive the completion report later this month. Once we receive this report, we will assess the discharger's non-compliance to see if enforcement is warranted.

We are continuing to keep interested parties – including offsite landowners, Marinwood community members, and the County supervisor's office – informed about site activities and reports. We will update you in the future on this case as circumstances warrant.

Cleanup Orders Amended by Executive Officer (Stephen Hill)

The Board has delegated to the Executive Officer the authority to issue, amend, or rescind site cleanup orders pursuant to Water Code section 13304. The choice between having these orders acted upon by the Board or by the Executive Officer hinges on the degree of controversy and urgency in each case. In general, I issue, amend, or rescind these orders in situations where there is little or no controversy or when there is some urgency (e.g., cleanup action is needed promptly to address a current or imminent threat to human health or the environment). Otherwise, we bring these types of cleanup orders to the Board for its consideration and action in a public hearing.

In early February, I amended the 2014 site cleanup order for the Jones-Hamilton property located at 8400 Enterprise Drive in Newark, Alameda County. This former chemical plant property is one of the sites in the Newark Transit Oriented Development project. The 22-acre property remained vacant for several years. It is now being cleaned up and will be redeveloped for residential use later this year. Last year, the developer removed approximately 140,000 tons of contaminated soil. The developer is now backfilling the site with clean fill. We previously amended this order to update two cleanup levels. The February amendment extends task deadlines – for reporting on cleanup and risk management effectiveness – due to development-related delays and a larger-than-expected volume of contaminated soil. The revised deadlines are reasonable since there is no imminent threat to human health or water quality. A draft of the amended order was circulated for public comment and no comments were received.

Also in early February, I amended the 2007 site cleanup order for the former Baron Blakeslee chemical storage, distribution, and recycling facility located at 8333 Enterprise Drive in Newark. Facility operations resulted in releases of volatile organic compounds to soil and groundwater. We previously amended this order to provide more specific tasks for soil cleanup. Final soil remediation in 2016 cleared the way for the property to be redeveloped into a public park. The February amendment extends the deadlines for five-year reports on cleanup effectiveness, to allow for the replacement of monitoring wells destroyed for soil cleanup and park development. The revised deadline is reasonable since there is no imminent threat to human health or water quality. A draft of the amended order was circulated for public comment and

no comments were received.

CLRRRA Agreement for Mayhew Center Site (Ralph Lambert)

On January 31, we entered into a California Land Reuse and Revitalization Act (CLRRRA) agreement with GP Vincent, LLC, for the Mayhew Center site at 3301-3341 Vincent Road in Pleasant Hill, Contra Costa County. The site is a source of soil and groundwater pollution that extends offsite. It is subject to the Board's 2013 site cleanup order. However, the named dischargers – Mayhew Center, LLC, and Mr. Dean Dunivan – were unwilling and unable to comply with the order and, in 2014, were barred from the property for being in arrears on loan payments. In early February, immediately following the CLRRRA agreement, GP Vincent, LLC, bought the note from the bank and foreclosed on Mayhew Center, LLC, and Mr. Dunivan.

GP Vincent, LLC, plans significant cleanup work to address site contamination and continue the site's commercial land use. Its cleanup plan proposes sub-slab depressurization under two buildings (to eliminate vapor intrusion), treatment of impacted soil using soil vapor extraction, and groundwater treatment using injections of an appropriate substrate. The groundwater injections are planned around two onsite buildings and at the downgradient edge of the property as well as around a hot spot in the street. Treatment is designed to be protective of human health under the existing commercial land use. The cleanup plan is currently undergoing public comment.

For context, CLRRRA is a State law passed in 2004 and reauthorized in 2010. It provides eligible parties such as potential purchasers certain immunities in order to promote the cleanup and redevelopment of blighted, contaminated properties, often referred to as "Brownfields." A CLRRRA agreement provides an eligible party with liability protection for a site's contamination but requires the eligible party to conduct necessary site investigation and cleanup. Specifically, the law affords protections from claims made by any person for response costs or other damages associated with a release and prohibits an agency (e.g., the Water Board) from requiring an eligible party to take a response action other than the one required in an approved cleanup or response plan, subject to certain exceptions related to endangerment. Failure to comply with the work required in a CLRRRA agreement can result in the loss of immunities.

Our goal when considering a CLRRRA agreement is to obtain significant and aggressive cleanup commitments in return for granting liability protection. We first confirm that the requesting party is eligible. We then determine what additional site assessment and cleanup work is needed and make sure that the agreement will result in that work getting done. I will update you on future CLRRRA agreements as we continue to explore the benefits of using this tool to expedite the cleanup of contaminated sites.

In-house Training

Our January and February in-house trainings were focused on leadership. These trainings are for all staff and are intended to build skills that will allow staff to take leadership roles in their cases and projects, especially those that involve multiple agencies or stakeholders.

On February 2 we had a brownbag that focused on the use of horizontal directional drilling for implementing environmental assessment and remediation systems.

Staff Presentations

From February 6 to 9, Engineering Geologist Ron Goloubow, Senior Engineer Cheryl Prowell, and Engineering Geologist Ross Steenson participated in the 19th Annual Certified Unified Program Agencies (CUPA) conference. Under the CUPA program, Cal/EPA has certified 83 local government agencies to implement hazardous waste and hazardous materials management laws in a consistent fashion. The annual CUPA conference allows State and local agencies to share new information. As part of the conference's site cleanup track, these Board staff gave the following presentations:

1. Ross gave a presentation titled *Metabolites in Groundwater at Petroleum Release Sites*. He reviewed the evolution in our understanding of petroleum biodegradation and persistence of groundwater plumes dominated by petroleum metabolites at large release sites. He also discussed the limitations of current laboratory analytical methods, risks to aquatic life, and human health risk considerations. Lastly, he summarized our approach to identifying and managing sites where metabolites pose a potential threat: primarily sites close to receptors.
2. Ross gave a second presentation titled *Environmental Risk Assessment and Risk Management* that was a consolidation of two status reports we presented to the Board in summer 2016. He described our region's approach to risk assessment and risk management in the site cleanup process, how we balance cleanup versus risk management measures, the importance of source control, types and examples of risk management measures, and long-term stewardship aspects.
3. Ron gave a presentation titled *the Regional Water Board's Approach to Vapor Mitigation During a Construction Boom*. The presentation discussed our region's evolving requirements to mitigate and monitor vapor intrusion at new construction sites. The presentation focused on two different scenarios: where redevelopment is taking place at a property that is the source of the contamination and where contamination has migrated to an offsite property.
4. Cheryl gave a presentation titled *Prompt Response to Trichloroethene (TCE) in Indoor Air*. She discussed the 2014 U.S. EPA Region 9 guidance that recommends action within days to address TCE concentrations in indoor air exceeding concentrations that could pose a risk to the developing fetus during the first trimester of pregnancy. She presented a San Leandro case study that highlighted the challenges of providing regulatory oversight in this short timeframe. She suggested that oversight agencies plan ahead for expedited regulatory oversight.

On February 22, Senior Engineering Geologist Brian Thompson presented at an enforcement and compliance forum hosted by the Industrial Association of Contra Costa County with representatives of the Bay Area Air Quality Management District and the Department of Toxic Substances Control. Brian provided an overview of Water Board authority and enforcement and discussed industry regulation through our NPDES wastewater, stormwater, and site cleanup programs. Approximately 60 members of the local community attended the forum, mostly representing refineries and environmental consulting and law firms. Association members asked questions of agency representatives following the presentations. Members were interested in the non-government organizations' role in compliance and enforcement, self-reported versus agency-discovered violations, and compliance with stormwater regulations.

On February 23, I testified before the Little Hoover Commission at a hearing on State agency permitting requirements and how they impact the timeliness and viability of natural resource projects planned by government agencies and special districts at the local and regional level. I described our multi-benefit permitting approach, actions we are taking to address climate change and sea level rise, and provided examples of successful science-based collaborations. Our written testimony along with those of the other speakers can be found [here](#).

The Little Hoover Commission is an independent State oversight agency that was created in 1962. The Commission's mission is to investigate State government operations and, through reports, recommendations, and legislative proposals, promote efficiency, economy and improved service.

401 Water Quality Certification Applications Received (Keith Lichten)

The table below lists those applications received for Clean Water Act section 401 water quality certification from January 21, 2017, through February 23, 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
South Cove small boat dock replacement and new ADA accessible gangway	Berkeley	Alameda	✓
Toroges Creek headwall removal	Fremont	Alameda	
Hayward Shoreline levee repairs – Oro Loma Marsh and Cogswell Marsh	Hayward	Alameda	✓
R649, R700, R707 natural gas pipeline 131 replacement	Livermore	Alameda	
Sausal Creek erosion control restoration	Oakland	Alameda	
Phillips 66 Line 200 repair, site 96	Concord	Contra Costa	
Sanders Ranch Teodora Court culvert cleaning	Moraga	Contra Costa	
EBMUD Briones aqueduct stabilization	Orinda	Contra Costa	
Phillips 66 Line 200 anomaly investigation and repair – dig 108 (crude oil pipeline)	Unincorp.	Contra Costa	
60 Pastori Ave. creek bank repair	Fairfax	Marin	
Caltrans EA 4H870 rumble strip project	Hwy. 1	Marin	
Installation of fallen trees in Redwood Creek at Muir Woods	Muir Woods	Marin	
Burdell emergency levee breach repair	Petaluma	Marin	✓
SMART Larkspur extension	San Rafael	Marin	
Clipper Yacht Co. pile replacement	Sausalito	Marin	✓
PG&E Bay Waters emergency tower repair Ignacio-Alto-Sausalito	Sausalito	Marin	✓
Maintenance dredging of River Park Marina	Napa	Napa	✓

Alpine Road embankment repair	Alpine and Joaquin roads	San Mateo	
Milagra Creek emergency culvert repair	Pacifica	San Mateo	
Milagra Creek sinkhole repair	Pacifica	San Mateo	
199 Seaport Blvd. levee repair	Redwood City	San Mateo	✓
Port of Redwood City Wharves 3 and 4 fender replacement	Redwood City	San Mateo	✓
Costco gas station and parking lot expansion	South San Francisco	San Mateo	
Mare Island Dry Dock – Berth 15/Dry Dock 3 (2017) access dredging	Mare Island, Vallejo	Solano	✓
Montezuma Slough emergency levee repair	Suisun Marsh	Solano	✓
Martens Levee repair	Arnold Drive S. of Sonoma	Sonoma	✓
Brody Ranch subdivision	Petaluma	Sonoma	
Devil Mountain Nursery culvert replacement	Petaluma	Sonoma	
Haire Ranch wetland restoration project subsidence reversal and carbon sequestration	Skaggs Island	Sonoma	✓
2017 PG&E Bay Waters boardwalk maintenance project	Various	Various	✓

Enforcement Actions (Mary Boyd and Brian Thompson)

The following tables show recent enforcement actions. In addition, existing complaints and proposed settlements are available on our website at

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

Current Administrative Civil Liability Case			
The following Tentative Settlement Order has been issued for public comment by the Board's Prosecution Team.			
Discharger	Violation(s)	Penalty Proposed	Comment Deadline
The Wine Group, LLC - Concannon Winery	Discharges in violation of WDRs' nitrogen effluent limits	\$635,000	March 3, 2017

Proposed Settlement—Mandatory Minimum Penalty (NPDES)

The following facility has been noticed for public comment. If no significant comment is received by the deadline, the Executive Officer will sign an order implementing the settlement.

Discharger	Violation(s)	Penalty Proposed	Comment Deadline
MGP IX SAC II Properties, LLC, Mountain View	Late submittal of monitoring report	\$3,000	March 16, 2017

Proposed Settlements—Mandatory Minimum Penalty (stormwater)

The following facilities were issued a conditional offer for early settlement for operating an industrial facility without a stormwater discharge permit. If no significant comment is received by the deadline, the Executive Officer will sign an order implementing the settlement.

Discharger	County	Comment Deadline
Advanced Surface Finishing, Inc.	Santa Clara	February 22, 2017
Precision Technical Coating	Alameda	February 22, 2017
Rutherford Grove Winery	Napa	February 22, 2017
Santay Granite	Santa Clara	February 22, 2017

Final Actions—Mandatory Minimum Penalty (stormwater)

The following facilities have accepted the conditional offers of early settlement and have agreed to pay the associated penalties for operating an industrial facility without a storm water discharge permit.

Discharger	Penalty Imposed	Supplemental Environmental Project
Madison Vineyard Holdings, DBA Jamieson Ranch Vineyards, Napa County	\$5,000	
Pentair Thermal Management, San Mateo County	\$5,000	
Discovery Foods (Ajinomoto Windsor), Alameda County	\$5,000	
PWP Manufacturing LLC, Santa Clara County	\$5,000	\$2,500
California Waste Solutions (Tenth Street, Oakland)	\$5,000	
California Waste Solutions (Wood Street, Oakland)	\$5,000	
California Waste Solutions (Timothy Drive, San Jose)	\$5,000	
California Waste Solutions (Berryessa Road, San Jose)	\$5,000	
California Waste Solutions (Tenth Street, Alameda)	\$5,000	