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

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Item: 4

Executive Officer's Report

Executive Officer's Report November 3, 2021

Items in this Report (Author[s])

Table of Contents

Oakland Shoreline Leadership Academy (Samantha Harper) 3

Planned Development of the Brisbane Baylands (Vic Pal) 4

Community Engagement for Vapor Sampling, Former McKesson Chemical Plant, Union City (Cherie McCaulou) 6

Bomb Cyclone and Atmospheric River Caused Sewage Spills throughout Region (Bill Johnson and Cleet Carlton) 9

In-house Training (Carrie Austin) 12

November 2021 Enforcement Actions (Brian Thompson and Jessica Watkins) ... 14

401 Water Quality Certification Applications Received (Abigail Smith) 15

Oakland Shoreline Leadership Academy (Samantha Harper)

The Oakland Shoreline Leadership Academy (OSLA) is a project led by the West Oakland Environmental Indicators Project and funded by the San Francisco Bay Restoration Authority. The purpose of OSLA is to train 18 Oakland residents that live on or near the shoreline to be advocates for their community (OSLA website). Over the course of six months, OSLA students will learn about shoreline risks associated with the climate crisis, potential solutions to address these shoreline risks, and communication strategies for engaging with agencies. Samantha Harper co-instructed the education module covering shoreline toxics and water quality along with staff from East Bay Municipal Utility District and the Department of Toxic Substances Control. She covered all of the Water Board's programs, provided information on ways to engage with us, and asked whether we there were additional ways we should be engaging.

Planned Development of the Brisbane Baylands (Vic Pal)

The Brisbane Baylands is a 140-acre site that occupies the southern portion of the former Southern Pacific Transportation Brisbane Railyard, which was used as a railroad switching yard from 1914 to 1982. Baylands Development, Inc. (BDI), a subsidiary of Universal Paragon Corporation, purchased the Site in 1989 along with the northern portion of the Southern Pacific Transportation Brisbane Railyard and the Brisbane Landfill to the east. The Water Board provides regulatory oversight for the investigation and closure of the adjacent 400-acre Brisbane Landfill in addition to the southern end of Brisbane Baylands (known as OU-2, 110-acres) while the California Department of Toxic Substances Control (DTSC) oversees the environmental investigation and remediation of the northern portion of the Brisbane Baylands [OU-SM (also known as OU-1)]. See Figure 1.

Since 1982, numerous environmental investigations have been conducted at the Site to characterize the presence, nature, and extent of the pollutants at the Baylands OU-2 Site. Pollutants of concern in soil include metals (primarily arsenic and lead), which are found across the Site. There is also a localized area with Bunker C and an area with elevated levels of volatile organic compounds (VOCs).

In November 2018, the voters of the City of Brisbane approved Measure JJ, which amended the General Plan to rezone the Baylands OU-2 Site and surrounding properties for mixed residential, commercial, and public uses. Details on the development are not finalized.

A draft FS/RAP was developed for OU-2 that describes the proposed remediation alternatives, evaluates these alternatives and proposes a preferred remedy that will be protective of the health of the public, and the environment. The proposed remedy includes:

- Capping of contaminated soil with a durable cover of a minimum of five feet of clean soil or installation of hardscape (e.g., roads, building foundations) to break the pathway between impacted soil and future site users across the entire Site;
- Excavating impacted soil where a durable cover cannot be placed and either consolidating the impacted, excavated soil in a new location at the Site under protective cover or safely disposing of it off-Site;
- Excavating VOC- impacted soil and disposing of it off-Site;
- Treating groundwater and soil to breakdown VOC and petroleum-related contaminants;
- Testing soil vapor (gas) prior to building construction and installation of vapor mitigation systems where needed;

- Enacting enforceable land-use restrictions and ongoing monitoring and maintenance of the protective covers, groundwater, and any vapor mitigation systems installed.

Water Board staff received comments from the community to the draft OU-2 FS/RAP and intends to respond to comments in the coming weeks.

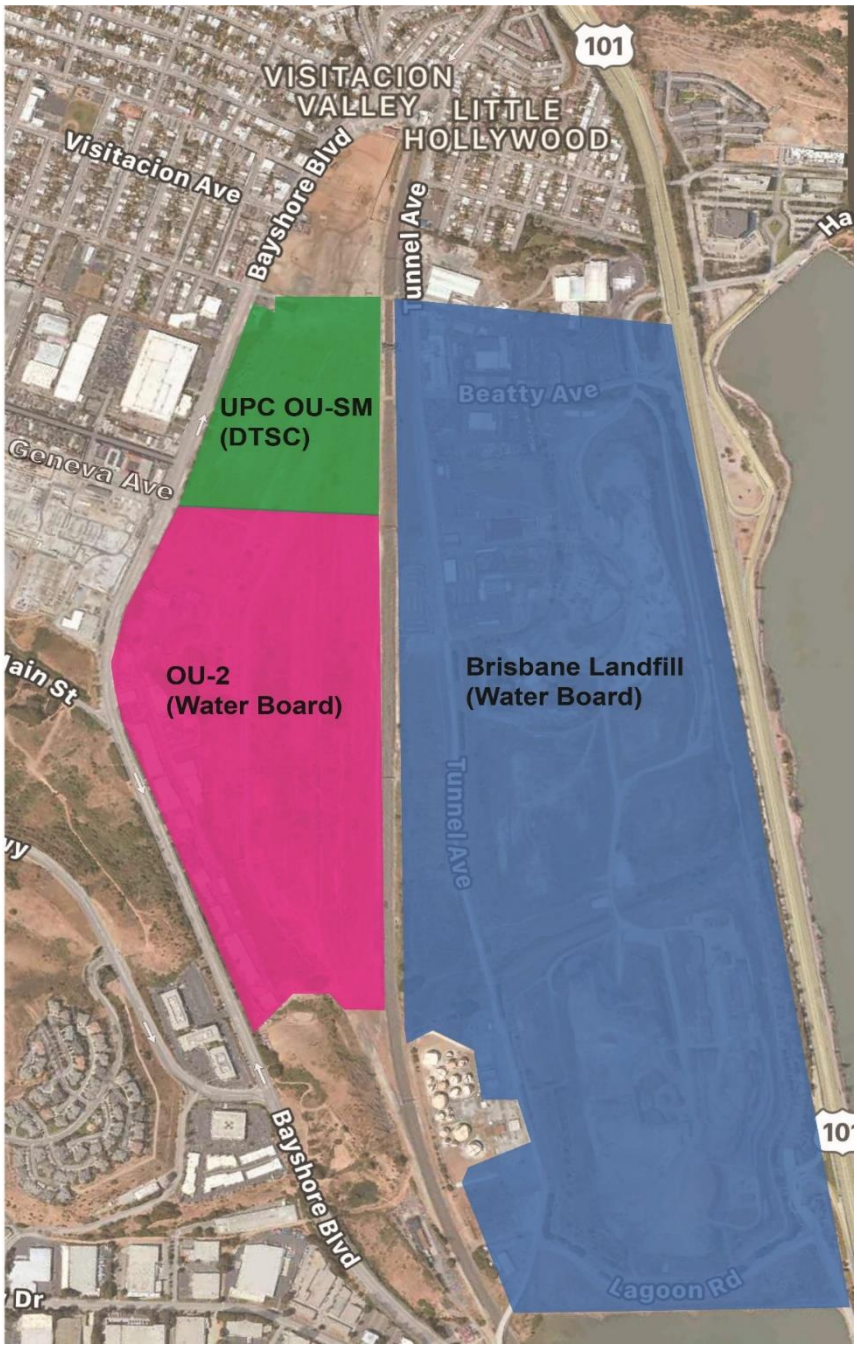


Figure 1: Map showing Brisbane Landfill and surrounding areas

Community Engagement for Vapor Sampling, Former McKesson Chemical Plant, Union City (Cherie McCaulou)

The Water Board and McKesson Corporation (McKesson) used a comprehensive approach to community engagement to evaluate the potential threat of vapor intrusion from volatile organic compound (VOC) impacts at two housing developments (Wildrose Homes and Citation Homes) located over VOC impacted groundwater and soil vapor plumes in Union City. The purpose of this effort was to obtain access to 79 residences (Study Area, Figure 1) to conduct paired soil vapor and indoor air sampling to evaluate whether there is a risk to the occupants from detected concentrations of tetrachloroethene (PCE); trichloroethene (TCE); 1,1,1-trichloroethane (1,1,1-TCA); 1,1-dichloroethene (1,1-DCE) and other volatile chemicals.

History and Background

McKesson operated a chemical distribution and repackaging facility from 1971 to 1986 at 33950 7th Street in Union City (Source Property). The operations impacted soil and three aquifers (shallow, intermediate, and deep) resulting in contaminant plumes of appropriately 2,500 feet in length. From 1986 to the mid-1990s cleanup was conducted, which included soil excavation and groundwater extraction and treatment (GWET) to capture VOCs in groundwater. The GWET is still operating to contain the VOC groundwater plumes.

In the early 2000s the source property and adjacent area were redeveloped with single family homes, with many overlying the groundwater plume. The homes constructed on the Source Property (i.e., the Wildrose Homes), have vapor barriers, whereas the Citation Homes to the east do not.

Discovery of Potential Vapor Intrusion

In 2019, environmental due diligence investigations for a third redevelopment project located downgradient of the source property – and overlying the groundwater plume – found VOCs in soil vapor. In response, Water Board staff required McKesson to evaluate the potential vapor intrusion risks to <u>all</u> homes overlying any portion of plume, whether or not they had been constructed with vapor barriers.

<u>Step 1 - Soil Vapor Survey</u>

In 2020 and 2021, soil vapor was sampled at twenty locations within public streets. Findings indicated that PCE and TCE concentrations exceeded our screening levels for potential vapor intrusion risk in an area that includes 79 homes. In response to these findings, McKesson proposed soil vapor sampling and indoor air sampling to further evaluate site conditions and the threat to residents in this Study Area, which also includes the Guy Emanuele Jr. Elementary School, located adjacent to the source property.

Step 2 - Community Outreach, Notification, and Participation

Last spring, McKesson retained Craig Communications to assist with community outreach for the proposed soil vapor and indoor air sampling. A fact sheet in English, Chinese, Spanish, and Tagalog was sent to the 79 homes in the Study Area and about 600 other addresses in the vicinity so they would be aware of the activity. Mckesson and Craig Communications, with assistance from Water Board staff, conducted door-to-door outreach and met individually with potentially affected homeowners to provide information and secure access for the needed testing. A Community Open House was also held on August 25 at Guy Emanuele Jr. Elementary School.

The outreach efforts included communication briefings for local and state officials, preparation of a media statement and Frequently Asked Questions. A toll-free number for residents to call with questions or to schedule indoor air sampling was also set up, and a weekly project contact log with caller name, issue, and resolution was provided to the community each week.

Step 3 - Indoor Air Sampling Results and Follow Up Actions

The first round of indoor air sampling at 13 residences is complete. The most urgent concern is if TCE concentrations exceed screening levels developed by the U.S. Environmental Protection Agency for short-term exposure risk. This was not the case at any of the homes tested to date. However, PCE concentrations in six homes exceeded screening levels that are based on long-term (i.e., carcinogenic) exposure risk. The exceedances were within a factor of 10, which correlates with an excess cancer risk of about one in one hundred thousand. McKesson is performing quality checks and completing sampling at seven additional residences.

The homeowners will be informed of the results of the sampling. Over the next few months, McKesson will implement mitigation measures as needed in the individual homes with indoor air exceedances while completing assessments in the remaining homes and the elementary school. McKesson will address the commercial areas located over the plume after the homes and school are completed.

Lessons Learned and Future Oversight of Similar Sites

This robust approach to community engagement is the result of our staff effectively and efficiently collaborating with McKesson and its consultants. We learned that this approach, including hiring a professional communications firm, facilitated addressing community concerns appropriately and efficiently and gaining property access to conduct the sampling needed to minimize risk of exposure and plume migration. We believe this approach will serve the community well and provide a model for our future oversight.

Water Board staff oversee several other large and complex sites with similar vapor intrusion concerns in residential and commercial areas. We received additional staff resources for our cleanup program this year which will help us manage these and other important projects. However, many do not have dischargers with the same ability as McKesson to fund the necessary response actions. These situations present serious challenges. We continue to prioritize our resources to manage the most important sites, help seek funding for eligible sites from programs like the State Board's Site Cleanup Account Program, and are hopeful that this or other funding programs will expand or emerge to address the numerous sites with vapor intrusion concerns, many of which do not have adequate funds to efficiently and thoroughly address concerns.

Figure 1: Study Area

Bomb Cyclone and Atmospheric River Caused Sewage Spills throughout Region (Bill Johnson and Cleet Carlton)

It rained a lot over the weekend of October 23 and 24. Not surprisingly, the record-setting deluge resulted in many wastewater spills. We received reports of about 53 sanitary sewer overflows (SSOs) and treatment plant spills larger than 1,000 gallons from the California Office of Emergency Services. Of these, 13 exceeded 10,000 gallons and 7 exceeded 100,000 gallons. The locations of the largest spills are shown on the figure. There were also many smaller SSOs.

The primary concern with SSOs and untreated sewage spills is the potential human health risk posed by pathogens in the wastewater. Agencies are required to post signs warning the public to stay away from affected areas. Because of the large number of SSOs during this extreme weather, agencies likely had trouble keeping up with the need to post signs. High runoff helps dilute and wash away pathogen-laden waters.

Here is what we know so far about the largest spills:

- The **East Bay Municipal Utility District** (EBMUD) discharged roughly 3 million gallons of fully chlorinated wastewater from its Pt. Isabel Wet Weather Facility. Pursuant to an NPDES permit and a consent decree, EBMUD discharges disinfected wastewater from three wet weather facilities when its collection system and treatment plant cannot keep up with wet weather demands. Over the rainy weekend, flows from the three wet weather facilities and EBMUD's Main Waste Water Treatment Plant peaked at over 500 million gallons per day, ten times the normal treatment plant flow of 50 million gallons per day. The problem at the Pt. Isabel Wet Weather Facility was that EBMUD ran out of sodium bisulfite to neutralize the chlorine it uses for disinfection. The chlorinated water discharged to San Francisco Bay may have been toxic to aquatic life. When EBMUD realized it ran out of sodium bisulfite, it reduced and eventually ceased disinfecting the remainder of the Pt. Isabel facility flows.
- The **South San Francisco/San Bruno** Water Quality Control Plant discharged roughly 4.5 million gallons of secondary-treated and disinfected wastewater to Colma Creek because the North Bayside System Unit pipeline and deep-water outfall reached capacity. Because the dechlorination system serving the pipeline to the creek was offline for about 50 minutes, some of the creek discharge contained chlorine. Colma Creek flows were high, and plant staff observed no adverse effects on fish or wildlife.
- The **Burlingame** Wastewater Treatment Facility discharged roughly 865,000 gallons of fully treated wastewater through an emergency shallow-water outfall to San Francisco Bay. Because this discharge was fully treated, it likely posed little water quality harm. Like South San Francisco/San Bruno, Burlingame was unable to discharge more through the North Bayside System Unit pipeline and

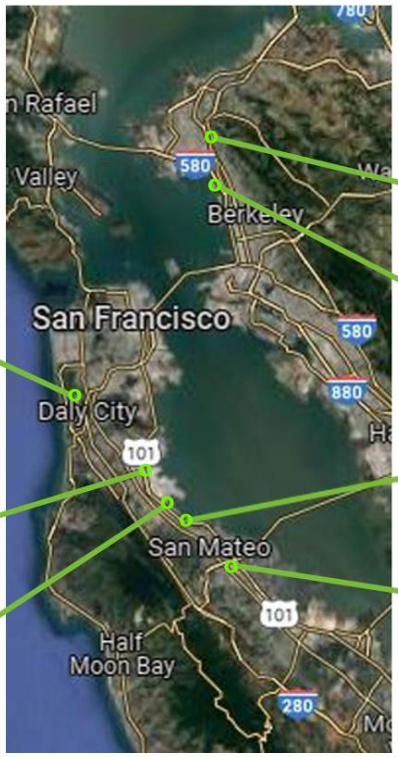
deep-water outfall. This problem may have stemmed from power failures onsite and at its lift station. Burlingame's stormwater pumping systems also failed during the power outages, resulting in stormwater inundating the sanitary sewer collection system.

- The **Millbrae** Water Pollution Control Plant also relies on the North Bayside System Unit pipeline and outfall. When that pipeline backed up, Millbrae discharged untreated wastewater from three locations upstream of the treatment plant to prevent inundating the plant. Together, these three SSOs discharged roughly 284,000 gallons of untreated wastewater to storm drains.
- The **North San Mateo County Sanitation District** discharged 850,000 gallons of primary-treated wastewater and 1.6 million gallons of biologically treated (but not clarified) wastewater to the Pacific Ocean through its deep-water outfall. These discharges, which were not disinfected, were necessary to avoid inundating the treatment plant.
- The **City of San Mateo** reported a 322,000-gallon SSO from three manholes to storm drain leading to Borel Creek.
- The **West County Wastewater District** reported a 111,000-gallon SSO in Richmond to a storm drain leading to Wildcat Creek.

We are compiling and updating information about all the spills as it arrives. We will try to determine which incidents were reasonably unavoidable due to the extraordinary weather, and which could and should have been prevented with better preparation. We will decide our next steps based on what we learn.

The impact of this storm on our wastewater infrastructure validates the importance of our ongoing efforts to ensure that this critical infrastructure is adequately upgraded and maintained to minimize stormwater inflow and infiltration.

SPILL LOCATIONS
OCTOBER 24-25, 2021



West County Wastewater District
Collection System
111,000 Gallons
Untreated Wastewater

EBMUD
Pt. Isabel Facility
3 Million Gallons
Chlorinated Wastewater

Burlingame
Treatment Plant
865,000 Gallons
Fully Treated Wastewater

San Mateo
Collection System
322,000 Gallons
Untreated Wastewater

North San Mateo County
Treatment Plant
850,000 Gallons
Primary-Treated Wastewater
1.6 Million Gallons
Biologically Treated Wastewater

So. San Francisco/San Bruno
Treatment Plant
4.5 Million Gallons
Secondary-Treated Wastewater

Millbrae
Collection System
284,000 Gallons
Untreated Wastewater

In-house Training (Carrie Austin)

In October, our training topic was, "Water Board Division Overviews – Who Does What." This topic is especially useful for new staff, and we have hired quite a few people in the five years since we last covered this topic. Our Division speakers competed to describe why theirs was the best to work in – variety, complexity, negotiations, etc.

Groundwater Protection (David Elias) kicked off the competition by explaining the great variety in our work at Department of Defense sites because they are, essentially, small cities with dry cleaners, gas stations, landfills, residences, commercial spaces, and industrial maintenance. Land Disposal (Keith Roberson) described our work to cleanup mines and to ensure landfills do not pollute water, which is especially challenging for bayfront landfills because of continuing sea level rise.

Toxics Cleanup (Ralph Lambert) explained how their work ranges from a focus on specific pollutants (PCBs, PFAS) to sites with multiple pollutants. Cross-divisional teams (Ron Goloubow) include parallel projects with Groundwater Protection, stormwater inspections, enforcement, and more. They reminded us that complex discharges and sites present many challenges across Divisions:

- Threats to human and ecological health
- Discharges into sensitive habitats and other difficult-to-cleanup places
- Recalcitrant pollutants and dischargers
- Legal issues (change of ownership and other difficult human factors)

Both Groundwater Protection and Toxics Cleanup Divisions address groundwater, which is an important drinking water source. Eight Bay Region groundwater basins provide nearly one-third of our drinking water in drought years.

Planning Division (Rebecca Nordenholt, Barbara Baginska, and Graham Brown) reminded us of our governing document, the Basin Plan, and how it, the federal Clean Water Act, and water quality data lead us to develop our list of impaired waters. They also explained that we develop Total Maximum Daily Loads (TMDLs) to address impaired waters and that implementation actions involve all Divisions. In addition, the Division houses our Agricultural Lands Programs which implement pathogen and sediment TMDLs by regulating confined animal facilities and vineyards. It was a good reminder that TMDLs are not self-implementing. Lastly, they described our cannabis program, grants for nonpoint source pollution, and dredging work.

Watershed (Rashid Kaveh and Maggie Monahan) reminded us they address a multitude of stormwater sources (municipal, industrial, construction, and Caltrans). Watershed ensures that our streams and wetlands are protected by not allowing fill if a practical alternative exists and otherwise requires that projects have minimal impacts and mitigate for unavoidable impacts. This Division oversees water recycling and waste disposal to land. They led us in a game modeled off the TV show, To Tell the Truth. The questions had us match staff to their work – a great way for us to get to know what our colleagues do. Resilient State Route 37 (Qi Yan) is a complex project largely motivated by sea level rise. The project aims to enhance the environment with reduced

congestion, flood protection, transit options, maintaining safe access (to surrounding land), wetland preservation, bicycle and pedestrian paths, and recreational opportunities.

NPDES (Gaurav Mittal and Demir Worthington) issues individual and general national pollutant discharge elimination system permits (NPDES) and leads our enforcement work. Of our many traits, NPDES asserts the most important trait for successful work is open to criticism – this is in reference to the many re-writes staff do and this trait is needed in all divisions. NPDES closed out our training with enforcement, which works with all our divisions. Their wide-ranging work includes pursuing administrative civil liabilities for violations, triage complaints, respond to spill reports and wildfires, and serving on cross-agency task forces. Kudos to NPDES staff, Gaurav Mittal, for organizing this virtual training and making it engaging with on-line polls, quizzes, and games.

Our next training will be in February 2022 and will address actions we and our partners are taking for climate change and sea level rise.

November 2021 Enforcement Actions (Brian Thompson and Jessica Watkins)

There were no proposed or settled enforcement actions since October's report.

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 13 through October 5, 2021. 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
PGE I-660 Pipe Replacement	Newark	Alameda	
Mission Valley Rock Sediment Removal	Suisun	Alameda	
Stairway Improvements 220 Evacuation Path Construction	Mill Valley	Marin	
Whole Foods Sinkhole	Mill Valley	Marin	✓
Richardson Bay Marina Dredging	Sausalito	Marin	✓
Sereni Residence Bank Repair and Slope Stabilization	Calistoga	Napa	
Ahmann Ranch Wetland Restoration	Napa	Napa	✓
Midpen Open Space Maintenance and Restoration Program	Woodside	San Mateo	
ADA Boat Access at Vasona Lake County Park	Los Gatos	Santa Clara	
Thompson Creek Bank Restoration	San Jose	Santa Clara	