STATE OF CALIFORNIA

REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

MEETING DATE: February 10, 2016

ITEM: **4**

SUBJECT: **EXECUTIVE OFFICER'S REPORT**

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD

EXECUTIVE OFFICER'S REPORT: *February 2016*

A Monthly Report to the Board and Public

NEXT MEETING: February 10, 2016 **WEBSITE:** http://www.waterboards.ca.gov/sanfranciscobay/

Items in this Report (Author[s])

Environmental Screening Levels Update (Nicole Fry)

Board staff recently released an update to the 2013 version of the Board's Environmental Screening Levels (ESLs). ESLs are intended to help expedite the identification and evaluation of potential environmental concerns at sites where soil and/or groundwater contamination has been identified. Data collected at a site can be directly compared to the ESLs, and the need for additional cleanup actions quickly determined. ESLs can help dischargers, regulators, landowners, and prospective purchasers focus attention on the most significant site cleanup issues and minimize the need for costly and time-consuming site-specific assessments.

The Board first developed ESLs in 1999 to fill a gap as no other agencies had screening levels that addressed a full range of concerns at contaminated sites for commonly-encountered contaminants. Today, that remains the case. We view the ESLs as "evergreen"; we update them regularly to incorporate new information and to assure they continue to identify appropriate levels of cleanup protective of human health and the environment.

This latest ESL update makes the following key changes:

- Vapor intrusion: adds *sub-slab* screening levels equal to existing *soil vapor* screening levels; adds trigger levels to address the short-term reproductive toxicity of trichloroethene, a common solvent found at our cleanup sites; and adds features to address the greater likelihood of vapor intrusion when a site's depth to groundwater is less than 10 feet.
- Groundwater ingestion: incorporates dermal exposure into the screening levels to synchronize with U.S. EPA's "tapwater" screening levels.
- Petroleum contaminants: adds language to clarify that polar degradation products should

generally not be removed from samples prior to analysis and adds screening levels for Stoddard solvent, a petroleum-based chemical sometimes found at dry cleaner sites.

The ESLs are more completely described in their supporting User's Guide, *Derivation and Application of Environmental Screening Levels*. The ESLs, including the User's Guide, can be accessed on the Water Board's website at **http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.shtml.**

Proposed Warriors Arena at Mission Bay (Randy Lee)

The Golden State Warriors have proposed constructing a new arena and entertainment center (GSW Arena) near Pier 64 in the City of San Francisco. This area is part of the 300-acre Mission Bay Redevelopment Area. The GSW Arena project is strongly opposed by a local non-profit group, the Mission Bay Alliance (MBA). MBA thinks a sports stadium is not a good fit with the existing development at Mission Bay, especially the nearby UCSF Medical Center. MBA has challenged the City's environmental document for the project and raised other objections. Specifically, MBA has alleged that the Board's historic cleanup standards for sites in the project area are not protective and that the Board has not adequately required responsible parties to implement risk-management measures, such as covering soil stockpiles.

Last month, Board staff provided a written response to MBA's specific objections, concluding that the objections were without merit. Cleanup standards for the Mission Bay area (including the project area) have been based on a *site-specific* risk assessment and each site's underlying toxicity factors have not significantly changed. MBA correctly notes that these cleanup standards are different than *non-site-specific* screening levels, but we conclude that does not make them non-protective. Regarding our oversight of post-cleanup risk management measures at sites in the project area, we can point to regular implementation reports by the sites' responsible parties and multi-agency oversight of that implementation, including site inspections by Board staff. Our letter explains the existing inter-agency regulatory framework and the specific protocols that must be followed for all development projects in the Mission Bay area. If the GSW Arena project goes forward, we are confident that the existing framework and protocols will result in appropriate management of soil and groundwater contaminants and protection of human health and the environment.

The Mission Bay area was historically tidal and submerged lands; its uplands were created by placement of fill material over a 100-year period. This fill material and native soil contain elevated levels of chemicals, some of which may meet the definition of "hazardous materials" under California law. In 1997, the Board was designated by CalEPA's Site Designation Committee as the "Administering Agency" to oversee investigation and cleanup of sites in the Mission Bay area. Other relevant environmental regulatory agencies, including the State Department of Toxic Substances Control (DTSC), the Bay Area Air Quality Management District, and San Francisco's Department of Public Health, were designated as "Support Agencies".

Since 1997, the Board has required a mix of cleanup and risk management to address site contamination in the Mission Bay area. Cleanup actions have focused on sites where past bulk-fuel operations resulted in significant petroleum contamination. Pursuant to Board cleanup orders, responsible parties have removed petroleum-saturated soils over an 8-acre area, including much of what is now the GSW Arena project area. In 1998, the Board required

responsible parties to develop a Mission Bay risk management plan (RMP) to address the presence of residual chemicals in soil and groundwater. RMP development was a multi-agency effort and included key stakeholders and interested parties. For example, DTSC reviewed and concurred with the proposed site-specific cleanup standards in the RMP. The Board subsequently approved the RMP and required its implementation.

The Mission Bay RMP contains restrictions on future land uses and lists risk management measures that must be followed prior, during, and after development to manage the risks associated with the environmental conditions. These management measures include fencing, dust control, stormwater control, management of stockpiled soils, worker health and safety plans, contingency and dewatering protocols, and periodic monitoring and reporting.

Site development activities for the proposed GSW Arena have not yet started. Board staff conducted a pre-development site inspection in December 2015. Due to a recent lawsuit filed by MBA, the anticipated project start date for the GSW Arena has been postponed. If and when the proposed GSW Arena project begins, our role will be to make sure that the project is carried out in compliance with the RMP.

Cleanup Remedy for Treasure Island Navy Drycleaner (Myriam Zech)

Last month, I signed a Record of Decision (ROD) documenting the remedy selected for Treasure Island's Site 24, a 20-acre parcel (Figure 1) where the Navy conducted dry cleaning operations from 1942 to 1977. Contaminants in groundwater include volatile organic compounds (VOCs) such as tetrachloroethene, trichloroethene, *cis*-1,2-dichloroethene, and vinyl chloride.

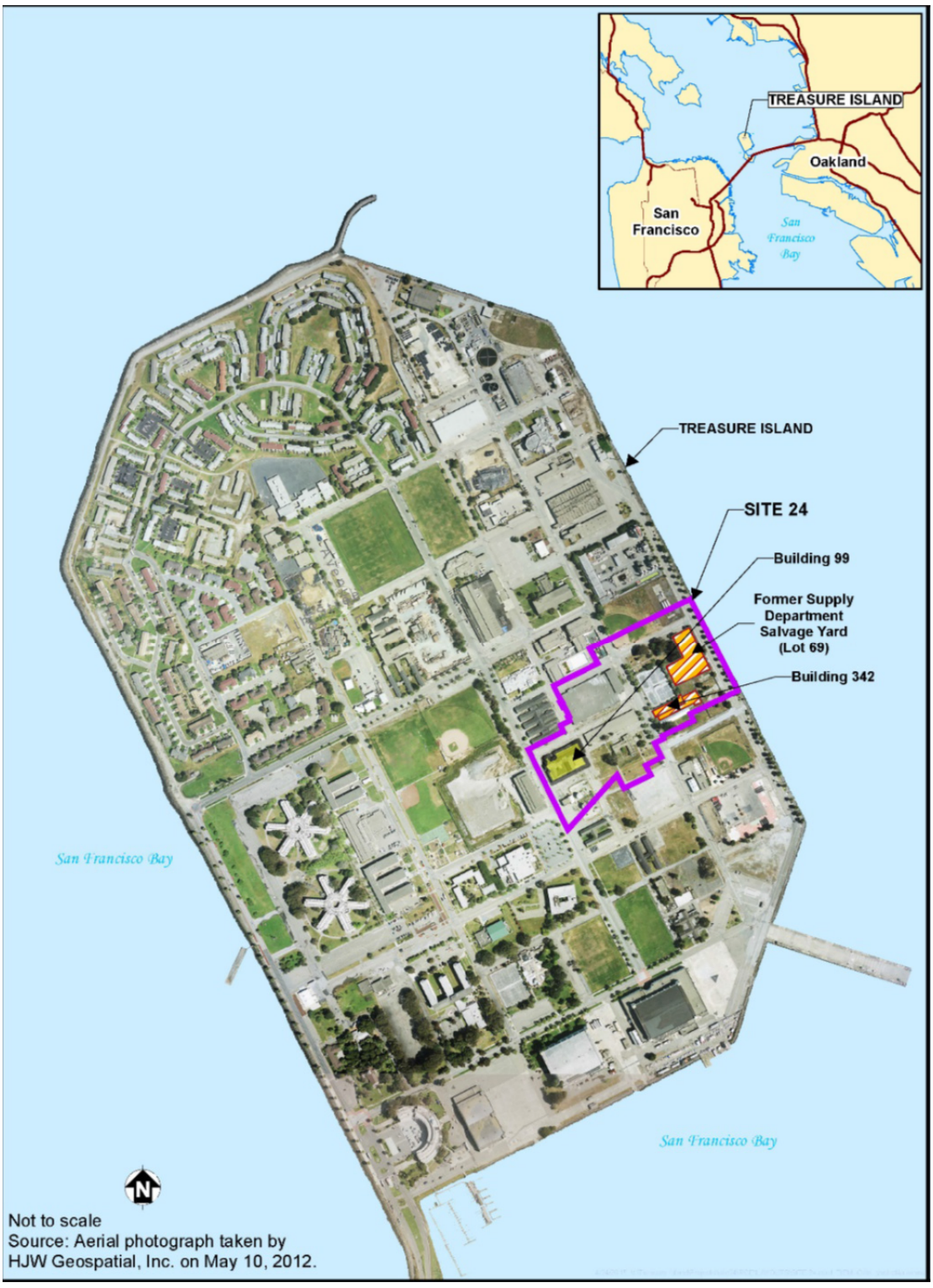

Figure 1. *Site 24 Location at Treasure Island.*

A risk assessment determined that contaminants were below screening levels for direct contact with soil; however, contaminants in groundwater pose a potential risk to indoor air via vapor intrusion. Additionally, an ecological evaluation found that contaminant concentrations were below environmental screening levels for ecological protection of aquatic organisms. To mitigate potential indoor air vapor intrusion, the selected remedy consists of the following components:

- Excavation and disposal of soil contaminants that could volatilize and migrate into indoor air;
- In-situ zero-valent iron (ZVI) and/or in-situ bioremediation (ISB) to treat VOCs in groundwater; and
- Monitoring of groundwater and soil gas to demonstrate remedy effectiveness.

ZVI and ISB are methods used to destroy VOCs in groundwater and have been demonstrated as effective during pilot and field-scale tests. Monitoring will follow remedy implementation and be conducted until results show that VOC levels are safe for the construction and occupation of buildings and other structures in accordance with the City's redevelopment plans.

Treasure Island's 2011 sdevelopment plan shows that Site 24 will be developed for mostly open space/recreation, with a small portion for residences. While the selected remedy is anticipated to meet cleanup standards protective of these uses, approval of the limited residential use will be contingent upon satisfactory soil gas monitoring results after remediation. Should residential standards not be achieved at the time of Treasure Island's transfer from the Navy to the City, which is expected sometime in 2017, the remedy will transition from groundwater treatment to engineering controls. This means that the City would be required to install vapor barriers (or other engineering controls) on any residential structures to mitigate the potential indoor air risk. The City could also choose to scale down residential development so that it remains outside Site 24.

The Navy has also agreed to record a property deed restriction to prohibit all current and future use of groundwater. This is necessary because VOCs in shallow groundwater currently, and in the future are expected to, exceed drinking water standards. At the same time, shallow groundwater beneath Treasure Island is considered brackish and of poor yield and is not suitable as a future source of drinking water. The Navy's prohibition on future groundwater use will help ensure that there will be no risk to future residents and other site occupants.

Newark Cleanup Order Amended (Mark Johnson)

The Board has delegated to the Executive Officer the authority to issue 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 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 January, I amended a 2014 site cleanup order for the property located at 8400 Enterprise Drive in Newark. Jones-Hamilton operated a chemical blending and packaging facility on the

site, resulting in releases of chlorinated solvents and other chemicals to soil and groundwater beneath the site. The Board has regulated this site for over 20 years. Past cleanup actions included removal of contaminated soils in key areas, capping of two surface impoundments, and groundwater extraction and treatment. The 2014 order required additional cleanup work to accommodate a planned change in land use – from industrial to residential – as part of the City of Newark's Dumbarton transit-oriented development plan. The order amendment I signed revises several of the task deadlines to accommodate delays in redevelopment activities.

In-house Training

Our January training was on online map and data tools and how they can support our regulatory work. Brownbag seminars included a January 19 session on passive groundwater sampling techniques including the HydraSleeve and Snap samplers.

Staff Presentations

On January 15, I participated on a panel with Steve Moore of the State Board and Dave Smith of U.S. EPA at the Bay Area Clean Water Agencies' annual meeting. Our panel described the State Board's, U.S. EPA's, and our priorities for the coming year, where those priorities could affect wastewater treatment agencies, and how the agencies could collaborate with us on addressing our priorities. In my comments, I emphasized the need for wastewater treatment agencies to use the drought as an opportunity to review and upgrade their infrastructure and to seek implementation of multi-benefit projects as they undertake their upgrades. I cited the State Board's Stormwater Strategy Initiative, our Municipal Regional Stormwater Permit requirements for local agency development of green infrastructure plans, and the San Francisco Bay Clean Water, Pollution Prevention, and Habitat Restoration Measure to be voted on this June as opportunities for wastewater treatment agency collaboration on multi-benefit projects.

On January 20, Stephen Hill, Cheryl Prowell, Laurent Meillier, and Nicole Fry presented a regulatory update to the Bay Area branch of the Groundwater Resources Association (GRA). GRA is a non-profit organization that promotes the protection and improvement of groundwater supplies and quality.

Stephen discussed groundwater protection from wastewater discharges to land, methane at petroleum-impacted sites, risks associated with development over closed landfills, and responsible party compliance with GeoTracker upload requirements. Cheryl spoke about the SB445 "site cleanup subaccount" program and how it will allow us to focus more effort on high-threat, under-funded cleanup sites. Laurent gave an update on the underground storage tank program, including implementation of the low-threat closure policy. Lastly, Nicole discussed our pending update to our environmental screening levels (see separate item above).

The audience consisted of about 140 environmental cleanup consultants, environmental attorneys, vendors, and dischargers. Our staff has been making this annual presentation for over 20 years. This meeting continues to be the best attended meeting for this GRA branch and provides a useful forum for staff to interact with the regulated community.

On January 26 and 28, Ron Goloubow was a speaker at a short course offered by the National Ground Water Association – "Combined Remedies: Technology Integration to Expedite Closure." Ron discussed our Board's approach to the topic, noting that we encourage the use of

combined remedies to hasten cleanup; an example would be simultaneously excavating source contamination onsite and injecting substrates to enhance bio-degradation of groundwater contaminants. The audience of about 80 in Irvine and 40 in San Francisco included other regulators, environmental cleanup consultants, vendors, and dischargers. Ron's presentation was well received.

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 December 25, 2015, through January 22, 2016. 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
Veterans Administration outpatient clinic, national cemetery, outreach office, and East Bay Parks/USFWS office project	Alameda	Alameda	✓
Fremont Blvd. widening at Landing Road	Fremont	Alameda	✓
Arrowhead Marsh boardwalk structural repairs	Oakland	Alameda	✓
Clarewood Drive creek gravel addition and vegetation rehabilitation	Oakland	Alameda	
Oakland International Airport perimeter dike improvement	Oakland/Alameda	Alameda	✓
Heron Bay shoreline maintenance riprap repair project	San Leandro	Alameda	✓
Alameda Creek diversion dam access road improvements	Unincorporated County	Alameda	
Canal Road sidewalk and bike lane project	Bay Point	Contra Costa	
Front Street at San Ramon Creek landslide repair project	Danville	Contra Costa	
Pelican/Heron Siphon project	Pittsburg	Contra Costa	✓
Chevron Richmond Long Wharf five-year pile replacement program	Richmond	Contra Costa	✓
2304 Mar East – pier improvements	Tiburon	Marin	✓
Milliken Creek flood reduction and fish passage project	Unincorporated County	Napa	
Colma Creek flood control maintenance project	Colma	San Mateo	✓
Villa Lauriston emergency road repair project	Portola Valley	San Mateo	
941 High Road channel stabilization and erosion control project	Woodside	San Mateo	
Lake Ranch dam rehabilitation	Los Gatos	Santa Clara	

Penalty Enforcement Actions Proposed and Final (Lila Tang)

The following tables show recently proposed and approved settlements. There is also one complaint on which Board staff and the discharger are still in settlement discussions. All complaints and proposed settlements are available at http://www.waterboards.ca.gov/sanfranciscobay/public_notices/pending_enforcement.shtml.

Proposed Settlement

The following is noticed for a 30-day public comment period. Where noted, the proposed settlement includes a supplemental environmental project. If no significant comments are received by the deadline, the Executive Officer will sign an order implementing the settlement.

Discharger	Violation(s)	Penalty Proposed	Comment Deadline
Phillips 66, San Francisco Refinery, in Rodeo	Discharge limit exceedances.	$9,000[1]	February 16, 2016

[1] Includes $4,500 to the SEP Fund to supplement Regional Monitoring Program (RMP) studies.

Settled Actions

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

Discharger	Violation	Penalty Imposed	Supplemental Environmental Project
Browning-Ferris Industries, Ox Mountain Landfill, in Half Moon Bay	Discharge limit exceedances.	$27,000	RMP studies[1]

[1] Includes $21,000 to the SEP Fund to supplement RMP studies.

The State Board's Office of Enforcement includes a statewide summary of penalty enforcement in its Executive Director Report at http://www.waterboards.ca.gov/board_info/eo_rpts.shtml.