

EXECUTIVE OFFICER'S REPORT: *March 2013*

A Monthly Report to the Board and Public

NEXT MEETING: March 13, 2013

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

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Oakland Airport Runway Safety Area Project (Brian Wines)

Last month I issued Clean Water Act Section 401 water quality certification to the Port of Oakland (Port) for the Oakland International Airport (OAK) Runway Safety Area Improvement Project (Project). Runway safety areas are level, structurally sound, unobstructed areas surrounding runways that reduce the risk of aircraft damage in the event of an undershoot, overshoot, or excursion from the runway. They are typically 500 feet wide and extend 1,000 feet beyond a runway end. The Federal Aviation Administration (FAA) adopted requirements for runway safety areas in the late 1980s in response to several incidents that resulted in injuries and fatalities. Airports are required to comply with these requirements by 2015.

The Project will result in permanent fill of 12.25 acres of wetlands and 2.31 acres of open waters in areas surrounding OAK's runways. Only offsite mitigation opportunities for this fill were feasible, because the FAA prohibits the creation of new wetlands and open waters at airports. The FAA is concerned that increasing the abundance of wetlands or open waters would attract birds and may increase the risk of bird strike incidents.

To identify offsite mitigation opportunities in the San Francisco Bay Area, the Port took the novel approach of issuing a request for proposals. Although several parties responded to the request, none of the mitigation projects proposed were close enough to being shovel ready to meet the Port's timeline for the Project. The Port was able to meet its mitigation requirements by purchasing about 15 acres of mitigation bank credits from the San Francisco Bay Wetland Mitigation Bank in Redwood City. Through this process it became clear that wetland mitigation opportunities in the Bay Area are becoming harder to find and will be a challenge for future project applicants.

Hayward Air National Guard Station (Myriam Zech)

On December 18, 2012, I signed a Record of Decision (ROD) for the Hayward Air National Guard Station (Station). The ROD identifies and memorializes the corrective actions that will be implemented by the Air Force to address contaminants in soil and groundwater beneath the Station. The Station is located in Hayward, adjacent to the Hayward Executive Airport, one mile west of Interstate 880. Prior to 1939, the area consisted of farms and orchards. In 1942, the U.S. Army acquired 727 acres in Hayward and built the Hayward Army Airfield, which was used as a fighter base and auxiliary field for fighters and bombers during World War II. The City of Hayward acquired the 690-acre site in 1947 and leased 27 acres to the California Air National Guard for use as the Station.

Until 2004, operations at the Station included aircraft, vehicle, and aerospace ground equipment maintenance, and inspection testing. The Station currently houses several buildings with offices, vehicles, and equipment and is surrounded by paved parking lots, including an aircraft parking apron.

The constituents of concern (COCs) in soil are total petroleum hydrocarbons (TPH), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and lead. The COCs in groundwater are TPH-d (diesel) and TPH-g (gasoline). Among the ten investigation areas at the Station, four are contaminated with TPH, two with PAHs, three with lead, and one with PCBs.

The remedy identified in the ROD for soil is excavation in areas where contaminants could leach to groundwater. The remedy for TPH in groundwater is injection of chemical oxidants in hot-spot areas to reduce residual sorbed concentrations and injection of oxygen releasing compounds over a broader area to enhance aerobic biodegradation. Due to the Station's low permeability soils and slow rates of diffusion, long-term performance monitoring may be necessary to demonstrate declining concentration trends and compliance with our low-threat closure requirements.

This ROD is significant because, even though the current and expected land uses are commercial/industrial, the Air Force has established an end goal of site conditions suitable for *unlimited use and unrestricted exposure*, which includes residential use. If future assessment (through long-term monitoring) does not support such unrestricted use, a covenant to restrict site use (i.e., deed restriction) will be imposed.

Former Vessel Waste Oil Recovery Area at Treasure Island (Myriam Zech)

Last week, I signed a Record of Decision (ROD) documenting the remedy selected for Site 21, Treasure Island's former Vessel Waste Oil Recovery Area. Site 21 is a small, asphalt-covered 2.2 acre site located along the southeastern shoreline of the Island (Image 2a).

Until 1995, the main operation at Site 21 was the transfer and recycling of waste oil from ships using an oil-water separator recovery system that consisted of five aboveground storage tanks (Image 2b). A dip tank located behind Building 3 was used to clean aircraft parts and motors and is the likely source of the chlorinated volatile organic compounds (VOCs) in groundwater,

which are the main contaminants at Site 21.

The Navy evaluated the potential risk to aquatic receptors in San Francisco Bay and concluded, and we agreed, that the residual VOCs in groundwater do not pose a significant risk to benthic invertebrates or other aquatic biota because the plume is stable and not migrating or discharging. Therefore, the only exposure pathways would be 1) indoor air intrusion of VOCs that could volatilize from groundwater should an enclosed building be constructed above the plume, or 2) direct contact by construction workers that might come into contact with the groundwater plume during excavation.



Image 2a. Site 21, aerial.



Image 2b. Site 21, aerial close-up.

To mitigate these potential exposures, the selected remedy identified in the ROD consists of the following components:

- A deed notice notifying the public and future owners/occupants, about potential groundwater contamination and exposure risks;
- A deed restriction requiring the property owner to notify the State Department of Toxics Substances Control (DTSC) of construction of any enclosed structures;
- Prohibition of groundwater use except for dewatering purposes;
- Engineering controls such as vapor barriers for all new residential buildings or if the use of existing buildings changes; and
- Long-term soil gas and groundwater monitoring and five-year remedy reviews.

A DTSC *Covenant to Restrict Use of Property* is planned to enforce these requirements, and Water Board staff will continue to review the groundwater monitoring reports. The notification requirements can be voided if and when the residual soil gas concentrations of VOCs are below

commercial/industrial risk-based standards and there is no longer a threat to future building occupants or construction workers.

Environmental Screening Levels Update (Uta Hellmann-Blumberg)

This update is briefly discussed in the Board's March 2013 "site cleanup programs – status report" and will be discussed in more detail in an April 2013 "ESL status report."

In early February, staff released an update to the May 2008 version of the Board's Environmental Screening Levels (ESLs). This update makes significant changes to the vapor intrusion elements of the ESLs in order to reflect new information about this exposure pathway. The ESLs are more completely described in a supporting user's guide, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, which we expect to update by June 2013. The ESLs can be accessed on the Board's website at http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.shtml.

ESLs are intended to help expedite the identification and evaluation of potential environmental concerns at sites where contamination has been identified. Data collected at a site can be directly compared to the ESLs, and the need for additional actions quickly determined. The ESLs help various parties – dischargers, regulators, landowners, and prospective purchasers – focus attention on a site's most significant environmental issues and avoid the need for costly and time-consuming site-specific assessments, thereby promoting efficient site cleanup and Brownfield restoration.

ESLs address a full range of concerns commonly encountered at contamination sites, as indicated in the table below:

Media	Concern addressed
Groundwater and Surface Water	Drinking water resources
	Aquatic habitats
	Other beneficial uses
	Vapor intrusion into buildings
	Nuisance conditions
Soil and Soil Gas	Human health (direct exposure)
	Terrestrial biota (urban ecotoxicity)
	Leaching and subsequent groundwater degradation
	Vapor intrusion into buildings
	Nuisance conditions

ESLs have been developed for more than 100 commonly detected constituents; they have been selected to be conservative and protective of human health, water resources, and the environment. ESLs are consistent with environmental protection goals of the Board's Basin Plan and with screening levels established elsewhere within Cal/EPA (such as the *California Human Health Screening Levels*). The ESLs do not constitute policy or regulation and their use is optional.

In-house Training

We had no in-house training in February or March. We have a training on emerging contaminants scheduled for April.

Presentations

On February 16, Shin-Roei Lee gave a presentation to members of the Chinese American Environmental Professionals Association on the topic of Watershed Protection and Sustainable Communities. Shin-Roei focused on the importance of stormwater management and wetland and stream protection to help achieve a sustainable community.

On February 21, Dyan Whyte gave a talk titled *Sorting Out Sediment: A Water Quality Perspective* at the Bay Area Flood Protection Agencies Association's annual meeting. Her talk emphasized the Board's approach to permitting flood control maintenance activities, sediment TMDLs in the Region, and the importance of recognizing grain size when regulating sediment discharges.

On February 22, I joined the Mayor of Oakland and other agency heads to speak as part of the City of Oakland's celebration to open the Lake Merritt Channel to boats for the first time in over 140 years and to dedicate the wetlands restored as part of the project. As part of my remarks, I noted that the damming of the channel and subsequent filling of the wetlands adjacent to the channel between 1869 and 1907 had restricted tidal action to the lake, caused flooding, and reduced aquatic habitat. The City's project increases tidal flow to the lake by 50%, increases wetland habitat and flood flow conveyance, and, via the project's associated stormwater and trash control structures, improves water quality and reduces trash.

On February 26, I spoke at the San Jose City Council meeting where the Council voted to pursue a phase-out of the use of expanded polystyrene foam (EPS, more commonly known as Styrofoam) food ware in San Jose. As I have emphasized at other recent local hearings on product bans, the Board expects cities to implement a number of actions geared towards reducing trash to the required level of 100% reduction in stormwater runoff by 2022, product bans are actions that will likely help cities achieve the Board's trash reduction requirements, and the Board expects each city to monitor its trash reduction actions to demonstrate that it is achieving its trash reduction requirements. During the Council meeting, City staff noted that its monitoring indicates EPS comprises approximately 10% of the trash collected in its trash capture devices.

Penalty Enforcement Proposed Actions and Final Settlements (Lila Tang)

The following table shows proposed settlements for assessment of penalties as of last month's report. These active cases are available at:

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

Proposed Settlements The following are noticed for a 30-day public comment period. If no significant comments are received by the comment deadline, the Executive Officer will sign an order implementing the settlement.			
Discharger	Violation	Penalty Proposed	Comment Deadline
Santa Clara Valley Water District, Penitencia Water Treatment Plant, in San Jose	Discharge limit exceedance	\$3,000	March 29, 2013
San Francisco Public Utilities Commission, Sunol Valley Water Treatment Plant, in Sunol	Late 2011/2012 Annual Discharge Report	\$12,000	March 28, 2013
GenOn Delta, LLC, Pittsburg Power Plant, in Pittsburg	Discharge limit exceedances	\$144,000	March 13, 2013

The State Board's Office of Enforcement includes a statewide summary of penalty enforcement in its Executive Director's Report, which can be found on the State Board website:

http://www.waterboards.ca.gov/board_info/eo_rpts.shtml