

# EXECUTIVE OFFICER'S REPORT: *May 2012*

A Monthly Report to the Board and Public

**NEXT MEETING:** May 9, 2012

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

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## **Cleanup of Clipper Cove Skeet Range - Treasure Island (Myriam Zech)**

Last month, I signed a record of decision (ROD) documenting the selected cleanup remedy for the Clipper Cove Skeet Range at the former Treasure Island Naval Station. The Clipper Cove Skeet Range, also known as Site 27, is an approximately 19 acre area located offshore between Treasure Island and Yerba Buena Island (Figures 1a and 1b). The Treasure Island Marina currently occupies a small portion of the former skeet range and is the intended future use for Clipper Cove.



Figure 1a. Yerba Buena Island Location Map with Site 27 in red.



Figure 1b. Projected Shot Fall Zone at Site 27.

Up until 1989, naval personnel fired lead shot at clay pigeon targets launched over the water in this area. As a result, lead shot exists in shallow sediments where it presents a potential hazard to diving ducks via incidental ingestion. The lead shot is located within a swath extending several hundred feet from the shoreline, and is accessible to diving ducks in the upper two feet of bottom sediments. This high risk zone encompasses about 75 feet of the shoreline. Beyond that distance, the lead shot appears to be buried deeper than 2 feet due to sediment accretion in the Cove. Nonetheless, buried lead shot could become accessible to ducks due to activities such as marina dredging or boat propeller wash.

The selected cleanup remedy consists of the following actions:

- Focused dredging and placement of clean backfill in the area within 75 feet of the shoreline;
- Offsite reuse of suitable dredged sediment at the Montezuma Wetlands in Suisun Marsh;
- Institutional controls (ICs) such as restrictions on vessel speed, protocols for future dredging, and long-term monitoring of the backfill, to minimize sediment-disturbing activities that could expose any residual lead shot; and
- Sediment monitoring to ensure the effectiveness of ICs and the integrity of the backfill material.

Specifics of the remedy, such as dredging depths and cover material type, will be presented in the remedial design plan, which the Navy intends to submit later this year. This is the fourth ROD I've signed for cleanup at different areas on Treasure Island since 2009. The ROD will help pave the way for eventual transfer of former Navy properties to the City of San Francisco, promoting redevelopment in a manner that protects human health and water quality.

#### **Thermal Remediation at the Presidio (Agnes Farres)**

From August 2011 through February 2012, the Presidio Trust successfully implemented electrical resistive heating (ERH) technology to remediate contaminated soil and groundwater at the Building 207/231 Area at the Presidio of San Francisco. The contaminant of concern was Stoddard solvent (used by the Army as a dry cleaning fluid) that had leaked from three underground storage tanks (USTs). The ERH technology was chosen, rather than soil excavation, to preserve a historic retaining wall and building (Figure 2).

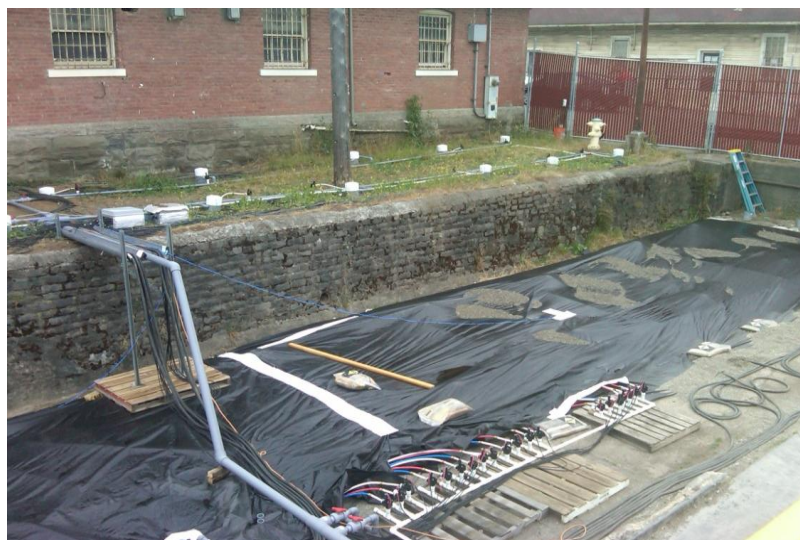


Figure 2. *Electrodes for thermal remediation installed adjacent to a historic retaining wall at the Presidio of San Francisco.*

Prior to ERH treatment, Stoddard solvent was detected at concentrations up to 34,000 milligrams per kilogram (mg/kg) in soils and at depths ranging up to 14 feet. Furthermore, petroleum sheen was observed on the groundwater surface at several locations within the contaminated area. The Board's 2003 cleanup order established a cleanup level of 100 mg/kg in soil to protect drinking water and ecological receptors.

The ERH process utilizes an electrical current to heat and volatilize contaminants. The resulting steam is captured by vapor recovery wells, attached to vacuum pumps, where it is condensed and treated using granular activated carbon or a thermal oxidizer.

In all, 41 electrodes were installed throughout the 27-foot by 100-foot thermal remediation area in the vicinity of the former USTs. Confirmation sampling results indicate that contaminant concentrations were reduced throughout most of the treatment area by more than 99 percent to values well below the 100 mg/kg cleanup level. An estimated 9,000 pounds of Stoddard solvent were removed. Unfortunately, the presence of plastic sheeting buried in the backfill of the former UST excavation reduced the effectiveness of vapor recovery in a small area. That area will need to be cleaned up by excavation.

#### **Sunnyvale Town Center Cleanup Plan Approved (Nathan King)**

I recently approved the cleanup plan for the Sunnyvale Town Center, a redevelopment project in Sunnyvale. This approval will result in the completion of all necessary cleanup work. It will also result in the long-awaited redevelopment of this central-Sunnyvale shopping center.

Three dry cleaners operated on the site prior to 1978. Site investigations revealed that soil, soil gas, and groundwater beneath the site were polluted with the chlorinated solvent tetrachloroethene (PCE). Elevated concentrations of PCE were detected in onsite soil gas and shallow groundwater, as well as in a plume extending about 3,000 feet to the north. The dry cleaners, which used PCE as a cleaning fluid, appear to be the source of the PCE pollution.

The cleanup plan proposes to clean up soil gas using two previously-installed soil vapor extraction systems. These systems have already removed over 400 pounds of PCE vapors; concentrations of PCE in soil vapor decreased significantly during the period these systems were active. Vapor mitigation systems will be installed beneath buildings to further clean up soil gas, if needed.

The cleanup plan also proposes to clean up polluted groundwater using a process called dechlorination, which involves injecting zero valent iron (ZVI), consisting of iron filings, into the ground using specialized drilling equipment. ZVI breaks down PCE by progressively removing chlorine atoms, leaving harmless end products. Vegetable oil with naturally occurring bacteria that break down PCE is also injected into the groundwater. Vegetable oil provides a food source for the bacteria. These bacteria clean up remaining chemicals not cleaned up by the ZVI, completing the dechlorination process.

A private developer intends to develop the Town Center, in cooperation with the City of Sunnyvale, for various commercial, retail, and residential buildings, parking, and associated amenities. Recently, the City announced that Apple and Nokia will occupy two large office

buildings at the site. Apple and Nokia are expected to bring in approximately 900 employees, providing a boost to the City's economy. The City is expecting to gain \$2,000,000/year in sales tax revenue.

This site is eligible for liability relief under the "Polanco" process. This process, created in 1992 by State legislation, is often referred to by the name of its legislative author, former State assemblyman Richard Polanco. The Polanco process is intended to encourage redevelopment of Brownfield properties by local redevelopment agencies. It provides them (and future landowners) with immunity from cleanup liability, provided that they prepare and implement cleanup plans approved by the regulatory agency. At this site, the City of Sunnyvale is the successor agency to the Sunnyvale Redevelopment Agency. My early-May cleanup plan approval triggered partial immunity; the City will obtain final immunity once the cleanup plan is fully implemented.

#### **Successful Cleanup in San Carlos (Nancy Katyl)**

On April 12, I issued a case-closure letter for the 301 Industrial Road site in San Carlos. This action is the culmination of a multi-year cleanup effort and will allow for development of a new hospital complex.

This 18-acre site is located near Highway 101 and Holly Street in San Carlos, across the freeway from the San Carlos Airport. It was used for electronic component manufacturing from the mid-1950s until 2006, when the property was sold to 301 Industrial LLC. Site investigations found that pollution was localized in soil and shallow groundwater; pollutants included metals, petroleum hydrocarbons, and degreasing solvents. As of 2006, the site had been cleaned up to a level suitable for commercial or industrial use. However, further cleanup to "unrestricted use" standards was needed after the Palo Alto Medical Foundation (PAMF) proposed to build a medical center and hospital.

In August 2004, Board staff approved a cleanup plan that would meet unrestricted use standards. The cleanup plan consisted of soil excavation; removal and treatment of contaminated groundwater from the excavation areas; and confirmation soil, soil gas, and groundwater sampling. The cleanup plan used the Board's Environmental Screening Levels as cleanup goals. In October 2004, the Board authorized the Executive Officer to enter into a Prospective Purchaser Agreement with 301 Industrial LLC, to help with the sale and redevelopment of the property. The Agreement requires implementation of the approved cleanup plan; in return, the Board agrees not to hold the LLC (or future landowners) responsible for known site pollution.

The LLC conducted necessary cleanup activities over a four-year period ending last December. Site structures were demolished and over 20,000 cubic yards of soil were excavated and hauled offsite for proper disposal. A post-cleanup risk assessment showed that all cleanup goals have been met and the site is suitable for unrestricted use. Board staff agreed with this finding so that we were able to issue the case closure letter on April 12. The site was transferred to PAMF immediately following receipt of the case closure letter.

PAMF plans to build an outpatient medical center and a 92-bed hospital on the site. The first

phase of construction will be the outpatient center and parking structure, expected to open in 2014. Construction of the hospital has not been scheduled. When complete, the medical center will house 75 physicians, with a future capacity of 120, and provide a range of services, an urgent-care center, an outpatient surgery center, and laboratory and diagnostic imaging departments. A groundbreaking ceremony for the construction of the new facility is scheduled for May 14.

### **In-house Training**

We had no training in April, due to delays in the State's roll-out of MS Outlook, the new email software that all Water Boards will start using shortly. Our May training will comprise small-group field trips to several East Bay locations, with the goal of examining how our various programs interact and how they contribute to water quality protection and restoration. Brownbag seminars included an April 17 session on the linkages between sediment supply and streambed conditions in the Lagunitas Creek watershed.

### **Staff Presentations**

On April 16, Dyan Whyte gave her annual lecture on water quality to UC Berkeley's undergraduate Water Planet class. Her lecture summarized emerging water quality issues and focused on the challenges to achieving fishable waters. After the lecture, a number of students expressed interest in interning at the Water Board. Over the years, we've recruited a number of staff by lecturing in classes such as this one. As an example, I was recruited by former Assistant Executive Officer Larry Kolb when he spoke to my graduate industrial wastewater treatment class at Stanford during spring 1977.

On April 27, I spoke at the California Association of Sanitation Agencies' spring conference in Napa as part of a panel highlighting the extensive progress stakeholders have made in protecting and restoring water quality in the Napa River Watershed over the past 15 years. I highlighted the progress local wastewater agencies have made in expanding recycled water use and fats, oils, and grease collection; the benefits of the Napa River/Napa Creek Flood Protection Project we have spearheaded; and the broad implementation of river restoration projects and vineyard best management practices that are tied to our Napa River sediment and pathogen TMDLs. I emphasized that wastewater agencies needed to show leadership in partnering with other local agencies and stakeholders in developing and implementing similar projects in their watersheds.

### Recent Penalty Enforcement Complaints and Settlements (Lila Tang)

The following tables show recently proposed settlements, and settled actions for assessment of penalties as of last month's report. No new complaints were issued. All active cases are available at: [http://www.waterboards.ca.gov/sanfranciscobay/public\\_notices/pending\\_enforcement.shtml](http://www.waterboards.ca.gov/sanfranciscobay/public_notices/pending_enforcement.shtml)

<b>Proposed Settlements</b>			
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.			
<b>Discharger</b>	<b>Violation</b>	<b>Penalty Proposed</b>	<b>Comment Deadline</b>
Lehigh Hanson West Region, Oakland	Discharge limit exceedances	\$21,000	May 2, 2012
City of Redwood City for facility on Broadway	Discharge limit exceedance	\$3,000	May 17, 2012
Ross Valley Sanitary District, San Rafael	Sewage overflows to Corte Madera Creek and tributaries	\$1,539,100	May 21, 2012

<b>Settled Actions</b>			
On behalf of the Board, the Executive Officer approved the following settlements:			
<b>Discharger</b>	<b>Violation</b>	<b>Penalty</b>	<b>Supplemental Environmental Project</b>
County of Alameda	Failure to implement new and re-development provisions of municipal stormwater permit	\$67,300	Not applicable
Union Oil Company of CA and Atlantic Richfield Company, properties on High Street in Oakland	Failure to timely submit an adequate report for site remediation	\$154,307	Not applicable
Atlantic Richfield Company, San Ramon	Discharge limit exceedances	\$6,000	Not applicable

Also, 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](http://www.waterboards.ca.gov/board_info/eo_rpts.shtml)