



## EXECUTIVE OFFICER'S REPORT: *October 2014*

A Monthly Report to the Board and Public

NEXT MEETING: November 12, 2014 WEBSITE: <http://www.waterboards.ca.gov/sanfranciscobay/>

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### **Former Naval Air Station Implements New Cleanup Remedy (Elizabeth Wells)**

On September 26, I signed an amendment to the Record of Decision (ROD) for cleanup of chlorinated solvents in shallow groundwater at a portion of the former Moffett Field Naval Air Station in Mountain View. The area, known as Site 26, is located on the east side of the runways at Moffett Field (Figure 1a). The groundwater plume at Site 26 contains volatile organic compounds (VOCs), including perchloroethene (PCE), trichloroethene (TCE), and their breakdown products, at concentrations between 50 and 100 parts per billion. These concentrations are 10-20 times higher than safe drinking water levels. Figure 1b shows the extent of the groundwater VOC plumes for each constituent at Site 26.

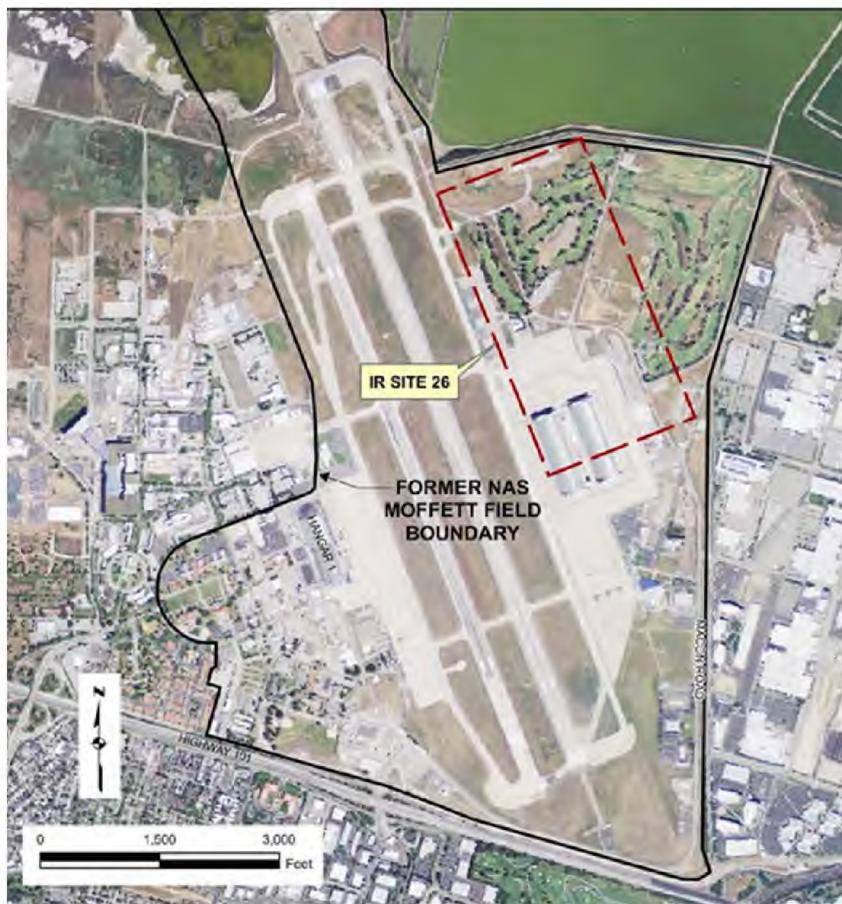
The initial 1996 ROD for the site relied on groundwater pumping and treating as the selected remedy to achieve drinking water standards. The pump and treat system operated from 1999 to 2003. The Navy shut the treatment system off after determining that it was only capturing less than 20 percent of the contaminant mass groundwater and that it would not achieve cleanup in a reasonable time frame. Between 2003 and 2013, the Navy conducted pilot tests of various in-situ technologies, which typically rely on injecting non-toxic compounds into the VOC plume to chemically or biologically treat the contaminants.

The ROD amendment summarizes five remedial alternatives the Navy evaluated to meet the objectives of reducing VOC concentrations to below the cleanup goals (drinking water

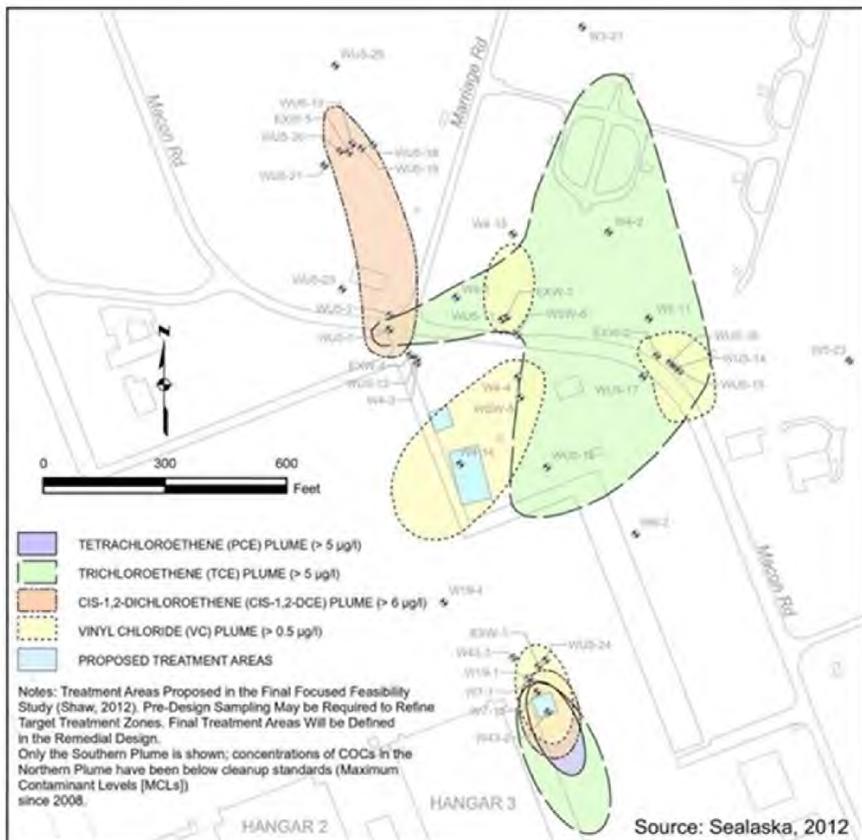
standards) in a shorter time frame. The selected remedy relies on a combination of biological treatment (e.g., biostimulation / bioaugmentation), monitored natural attenuation, and institutional controls (ICs). More specifically, this includes:

- injecting emulsified vegetable oil (or similar) and a dechlorinating bacterial culture into the subsurface source areas;
- monitoring groundwater contaminant concentrations and biogeochemical indicators for evidence of contaminant reduction and supporting trends over time; and
- restricting use and access to groundwater until cleanup goals are met.

The Navy did evaluate an optimized pump and treat system as one of the five alternatives, but the in-situ remedy was selected based on a reduced cleanup time and lower cost for the same end goal. The new remedy will be implemented following a pre-design investigation, which will be initiated in late 2014.



**Figure/Photo 1a.** Site 26 is shown in the red box in the northeastern corner of Moffett Field



**Figure/Photo 1b.**  
*Extent of VOC contamination in groundwater at Site 26 for individual constituents.*

### Napa Sanitation District Treatment System Gets Drunk on Wine (Lila Tang)

On August 24, a magnitude 6.1 earthquake rumbled through Napa. The epicenter was within one mile of the Napa Sanitation District's wastewater treatment plant. The most significant effect was a two-day upset of the biological activated sludge treatment at the plant resulting from spilled wine being discharged from wineries. The District was able to adapt by using a large oxidation pond to give the activated sludge time to recover. At the time of the earthquake, the District was treating wastewater for irrigation reuse; it does not discharge to the Napa River except during the wet season.

The District reported finding no significant damage from visual inspections of assets and infrastructure aside from non-structural cracks. District staff inspected pump stations, siphons at creek crossings, and other structures including its recycled water pipelines. District staff also supplemented its own resources with mutual aid from the Contra Costa County Sanitary District to video inspect parts of the collection system in areas of the city hardest hit by the earthquake. The District is following up with the wineries to evaluate options for minimizing future upsets.

### SF Bay Beaches Bacteria TMDL Project Initiated (Jan O'Hara)

Board staff has begun preparation of a San Francisco Bay Beaches Bacteria TMDL to address impairments at China Camp, McNears Beach, Crissy Field, Aquatic Park, three Candlestick Point beaches, and two beaches along San Mateo's Marina Lagoon (Figure 2). On September 29, Board staff hosted a workshop and CEQA Scoping Meeting at the San Francisco Public Utilities Commission's (SFPUC) offices. Meeting attendees included representatives from SFPUC, the National Park Service, Marin County Parks, San Mateo County Health, City of San Mateo, and a

private citizen.

Board staff presented the TMDL's scope and approach and solicited input on the potential environmental impacts of possible implementation actions. The group had an interesting discussion of various aspects of the TMDL, including appropriate numeric targets, and approaches taken to date to determine or reduce sources of bacteria at these beaches. We anticipate bringing the TMDL before the Board in the fall 2015.



**Figure/Photo 2.** Map of San Francisco Bay beaches.

### Point Molate Groundbreaking Ceremony (David Elias)

On September 29, the City of Richmond sponsored a groundbreaking ceremony to celebrate the beginning of a large remediation project at the Point Molate Former Naval Fuel Depot. The project will entail removing 93,000 cubic yards of contaminated soil near the Bay's shoreline with the end result of creating 11 acres of land suitable for residential development. Our DOD-Section Leader David Elias spoke at the ceremony along with City of Richmond Mayor Gayle McLaughlin, Contra Costa County Supervisor John Gioia, and City of Richmond Development Department project manager Craig Murray. David took the opportunity to acknowledge the significant contributions of Water Board Engineering Geologist and lead regulator George Leyva, who has been working steadily on this project for over 8 years, and Engineering Geologist

Adriana Constantinescu who worked on the project the 6 years prior to George. The ceremony included the use of gold groundbreaking shovels (Photo 3).



**Figure/Photo 3.** (left to right) David Elias, Terry Seward, George Leyva, and Adriana Constantinescu at the Pt. Molate groundbreaking ceremony.

### **Update on Plans to Develop the Santa Clara Landfill (Devender Narala)**

The City of Santa Clara is continuing to move forward with plans to change land use of its closed "All-Purpose" landfill to allow for residential housing. As reported previously, the City has teamed with Related Development Company to build a major multi-use commercial and residential development called "City Place" adjacent to the 49ers' new Levi's Stadium. The development team met with Water Board staff and staff from the Santa Clara County Department of Environmental Health and CalRecycle on September 15 to present a project update and discuss the current status of the City's Post-Closure Land Use Plan.

While the overall vision for the landfill redevelopment has not changed significantly, certain details have become more clearly defined. Complete build-out of the City Place development is expected to take 10-15 years and would occur in phases. Phase 1 of the development will include construction of a city center commercial and entertainment complex on the southernmost portion of the landfill (known as Parcel 4), which is closest to the stadium. The development team now envisions building a 40-acre platform on support piles over and separated from the surface of the former landfill in Parcel 4. A significant amount of earth work would be involved to reconfigure the present land surface, but all development within Parcel 4 would be on this concrete platform and not directly on the landfill surface. Utilities would generally be hung from the underside of the platform. The existing landfill gas collection system would have to be redesigned and rebuilt prior to development. The developer envisions multiple levels of risk mitigation to address landfill gas issues, including a soil vapor barrier, a robust gas collection and gas monitoring system, and parking on the bottom level of the platform structure. Board staff will be actively involved in evaluating all development plans at the landfill.

The development team still plans construction of residential units (condominiums) as an integral part of the City Place community. While no residential units are currently planned for Phase 1, Phase 2 (also to be constructed on the Parcel 4 platform) would include a number of residential units in high-rise buildings.

The City continues to conduct geotechnical and environmental site investigations to assist in project design and risk evaluation. The following reports and workplans have been submitted to Board staff over the past six months:

- Geotechnical Field Investigations – March 2014
- Building Pile/Foundation Evaluation Technical Memorandum – July 11, 2014
- Work Plan for Landfill Gas Characterization – July 29, 2014
- Work Plan for Targeted Site Characterization – September 22, 2014

The geotechnical investigation conducted in March included collection of waste, soil gas, and groundwater samples. This summer, landfill gas collection wells were sampled in accordance with the July work plan. Results of these investigations have demonstrated the presence of petroleum hydrocarbon compounds, such as benzene, and volatile organic compounds (VOCs) including TCE and vinyl chloride in site groundwater, particularly in Parcel 4 (where the Phase 1 development is planned). This month, a workplan was submitted for further, targeted characterization of landfill cover soils, waste, groundwater, and landfill gas. Immediately following completion of site characterization, the development team will prepare and submit an evaluation of risks associated with commercial and residential development over the landfill. We will continue to keep the Board informed as more details of the project come to light.

### **San Jose addresses Waste Problems at Homeless Encampments (Dyan Whyte)**

In compliance with a Water Code section 13267 requirement letter, the City of San Jose submitted a supplemental plan to address concerns regarding the discharge of human waste to Coyote Creek associated with homeless encampments on its property. In addition to its comprehensive strategy to address the societal problem of homelessness in San Jose, the City proposed specific targeted actions to address immediate water quality concerns. Per our approval of its proposal, the City plans to implement by October 15 the following actions: remove the makeshift "outhouse" in use over the creek, deploy three to five portable toilets daily during day light hours, provide portable dry-toilet kits for evening use with appropriate biohazard disposal options, outreach to occupants about appropriate human waste disposal options, and post signs along the creek warning the public about the potential public health threat. These measures are in addition to re-encampment deterrents and enforcement measures. Beginning in mid-December and on-going afterwards, the entire encampment is slated for closure and at that time efforts will be implemented to remove residual bio-waste and trash. We wish to recognize the effort the City put into rapidly responding to our call to action, and we will continue to work with the City to provide feedback as to how it can adaptively manage water quality problems related to homelessness.

### **In-house Training**

Our October in-house training will be on Bay Area salmonid conservation.

## Public Presentations

At the request of the Santa Clara Valley Water District, Board staff A.L. Riley spoke on a panel at the well-attended annual Floodplain Managers Association Conference in Santa Clara on September 4. The panel involved a discussion of the factors that contribute to implementing successful multi-objective flood risk reduction projects, which both lower flood risk and restore the environment. Riley gave a snapshot overview of 60 innovative community projects involving ecosystem restoration and land use changes to restore floodplains. Other panelists discussed how public involvement can produce multi-objective projects such as the Napa River flood control project.

On August 6, Senior Engineering Geologist David Elias co-presented at the Stormcon Conference in Portland, Oregon. His presentation topic, "Copper Source Tracking Using X-Ray Fluorescence and Design of Custom Stormwater BMPs," built on his earlier stormwater enforcement work as part of our oversight of the cleanup of the Suisun Bay Reserve Fleet.

On September 12, A.L. Riley attended an event sponsored by the Governor's office and held in the San Francisco Presidio to celebrate the 20th anniversary of the national service program, AmeriCorps. Governor Brown and several other Californians were instrumental in the ground work and organizing to establish this national program based on the State's California Conservation Corps. The Water Board regularly sponsors two Americorps volunteers who serve an 11-month term and assist Board staff with water quality monitoring, stream restoration project monitoring, and public outreach.

On September 17, Planning Division Chief Naomi Feger participated on a panel at the fall meeting of the California Marine Affairs and Navigation Conference, hosted by the Port of San Francisco. The focus of the panel was on TMDLs and dredged material placement. She presented on existing and planned TMDLs, issues with dredged material disposal, and the challenges of beneficial reuse of sediments not meeting our suitability criteria for unrestricted use.

On September 24, Naomi Feger and I attended a conference in Antioch, sponsored by the Association of Bay Area Governments/San Francisco Estuary Partnership, the Delta Counties Coalition, and the Friends of the Estuary, to discuss the role that freshwater plays in the San Francisco Bay-Delta Estuary. The 200 attendees were focused on building collaboration among the 12 Bay Area and Delta counties as a key step in defining shared solutions to freshwater flow issues and impacts. Several cities and seven counties in the Bay-Delta Estuary have adopted resolutions supporting the need for increased freshwater flows into the system. Speakers at the conference included county supervisors, activists, scientists, and farmers and the discussion focused on the importance of freshwater flows, ongoing Delta planning processes, and better regional communication and collaboration between people in the Bay and the Delta. Actions to increase flows into the system were suggested as was the need for more Bay Area public engagement in the State Water Board's process to set water quality standards for Delta outflows. Other ideas were discussed for reducing water demand, including better public education, increased water conservation, reuse, recycling, and improved technology.

### **Penalties Proposed (Lila Tang)**

Last month Assistant Executive Officer Dyan Whyte issued two complaints proposing imposition of penalties. Unless waived by the dischargers, there will be hearings on each of the complaints at the December Board meeting. The complaints 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>New Complaints</b>			
These items are open for public comment			
<b>Discharger</b>	<b>Violation</b>	<b>Penalty Proposed</b>	<b>Comment Deadline</b>
Contra Costa County Flood District	Unauthorized flood control maintenance in creeks including 49 tons of rip rap in Green Valley Creek in Danville	\$10,000	October 23, 2014
North Marin Water District, Wild Horse Storage Tank, in Novato	Waste of potable water by unauthorized discharge to Vineyard Creek resulting from late response to alarm	\$45,500	October 20, 2014

### State Board Policies and Permits under Development

The following is a list of statewide policies and permits under development. This table is an abbreviated version of what is routinely distributed as part of the State Water Board Executive Director's Report. The text in the table is largely unedited except for the deletion of extraneous information. The full report can be found at

[http://www.waterboards.ca.gov/board\\_info/exec\\_dir\\_rpts/2014/edrpt092314.pdf](http://www.waterboards.ca.gov/board_info/exec_dir_rpts/2014/edrpt092314.pdf)

General Permit	Status
Anti-degradation Policy	The State Water Board is considering preparation of an Implementation Plan Appendix to the existing Anti-degradation Policy, or an additional policy, to address application of the Anti-degradation Policy to groundwater. Focused stakeholder meetings were held in October and November 2013. The project web page went live in September 2014. A white paper is expected to be completed for internal review and discussion in October 2014. Additional focused stakeholder group meetings are expected to take place in fall/winter 2014.
Aquatic Animal Invasive Species Permit	Staff is proposing to amend the statewide general NPDES permit for aquatic animal invasive species control applications. Staff posted the draft permit documents in September 2014. The end of the public comment period for this item is October 13, 2014. The State Water Board will consider adoption of this proposed permit amendment at its October 21, 2014 board meeting.
Bacteria Standards for Ocean and Inland Surface Waters	The State Water Board is developing proposed statewide bacteria water quality objectives and a control program to protect human health in waters designated for water contact recreation (REC-1). The bacteria objectives would be adopted as amendments to the Statewide Inland Surface Waters, Enclosed Bays and Estuaries Plan (currently under development) and the California Ocean Plan. Focused stakeholder meetings were held from April through July 2014. Staff is compiling the comments from these meetings. A meeting with subject matter experts was held in September. Public release of draft documents is targeted for spring 2015.
Blue Green Algae Action Levels	The State Water Board has provided funding to OEHHA to develop action levels for Blue Green Algae toxins (Cyanotoxins) in water and fish. A possible next step is to adopt statewide objectives for cyanotoxins, pending management prioritization.
Chlorine Residual Objectives and Implementation	The scientific peer review is complete. The report and policy will be revised as necessary to address peer review comments. This project is pending management prioritization.
Listing Policy Update (Sediment Quality Objectives)	A suite of amendments to the Listing Policy are currently under review. The amendments address the scope and submittal requirements of all readily available information, add language referencing the Water Quality Control Plan for Enclosed Bays and Estuaries - Part 1 Sediment Quality objectives in section 6.1.3, clarify that the State 303(d) List is not required to include assessments from all regions during every listing cycle, and clarify the Regional Water Board and State Water Board 303(d) list approval procedures. These amendments will be presented to the State Water Board for approval in October.

Mercury TMDL (Reservoirs)	Staff from Regions 2 and 5 are developing a TMDL and implementation plan to address fish mercury impairments in 74 reservoirs around the State. Focused stakeholder group meetings are being held in summer 2014. In addition, staff met with the reservoir operators on March 17 and May 16, with plans to meet with them again on September 30 and October 9/10. The purpose of the meetings is to develop ideas for water chemistry and fisheries management studies.
Methylmercury Objectives	In October 2014, staff plan to meet with Regional Water Board representatives and to conduct additional outreach to tribes. The draft staff report and the draft regulatory language are expected to be sent for peer review in September 2015.
Nonpoint Source (NPS) Implementation and Enforcement Policy Amendments	The NPS Implementation and Enforcement Policy (NPS Policy) is being updated to preclude the use of prohibitions of waste discharge for addressing NPS discharges for those land uses (e.g., irrigated lands) already covered under other regulatory mechanisms (e.g., waivers of waste discharge requirements) for which discharger enrollment fees are being assessed. Staff anticipates releasing a Draft of the NPS Policy amendments in late fall 2014.
Ocean Plan Amendment: desalination and brine provisions	State Water Board staff are preparing amendments to the Ocean Plan to address impacts from marine life from desalination facilities and brine discharges. Staff released a Draft Staff report including the Substitute Environmental Documentation for public comment on July 3, 2014. A Board workshop was held on August 6, 2014 and a Public Hearing on August 19, 2014.
Phase II Small Municipal Separate Storm Sewer System (MS4) Permit Amendment	State Water Board staff is meeting with Small MS4 permittees to discuss the proposed amendment of Attachment G (titled Region-specific Total Maximum Daily Loads (TMDLs) Implementation Requirements) in the existing Phase II Small MS4 Permit. This proposed revision will undergo the public process beginning early fall 2014 and the revisions will be incorporated through a State Water Board action to amend the permit.
Statewide NPDES Permit Package for Discharges from Drinking Water Systems	To appropriately consider all public comments, the previously scheduled September 23, 2014 State Water Board consideration of adoption of the resolution and draft permit has been changed to the November 4, 2014 Board meeting. The final draft resolution and statewide permit were provided to the public on October 1, 2014.
Trash WQC Plan Amendments	A Board workshop took place on July 16, 2014, and the Public Hearing was held on August 5, 2014. Currently, we are in the response to comment process. We expect to complete the response to comments by the end of fall 2014.
Wetland Area Protection and Dredge and Fill Permitting Policy – Phase I	Selected stakeholder meetings were held in April 2013 to receive comments on specific issues related to the Preliminary Draft Wetland Policy posted online January 28, 2013. Separate meetings were held with representatives of the business, utilities, environmental advocacy, and Central Valley Joint Venture stakeholder groups. State Water Board staff will consider these comments in preparing the draft Wetland Policy, which is scheduled for public release by fall 2014.