California Regional Water Quality Control Board San Francisco Bay Region EXECUTIVE OFFICER'S REPORT

A Monthly Report to the Board and Public

November 2010

The next regular scheduled Board meeting is November 10, 2010. See H<u>http://www.waterboards.ca.gov/sanfranciscobayH/</u> for latest details and

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Congressional Recognition - Napa River Project (Michael Napolitano) The Rutherford Dust Society has sent the Board a Congressional Certificate of Recognition from Congressman Mike Thompson for our technical assistance, support with project permitting, and grant funding, which helped to realize the construction of the first mile of the proposed 4.6 mile-long Napa River Rutherford Reach Restoration Project. The grant funding comes from U.S. EPA non-point source funding administered by the State and Regional Water Boards and was proposed by the Rutherford Dust Society. (See also Item 7, Correspondence.)

The Napa River Rutherford Reach Restoration Project involves a suite of actions to enhance stream and riparian habitat conditions including: a) levee setbacks; b)

floodplain construction; c) engineered log dams; d) riparian planting; and e) biotechnical bank stabilization. The restoration project is recognized as an essential action within the Napa River Sediment TMDL Implementation Plan. The project is expected to enhance habitat for several native species including fall-run Chinook salmon, which have returned to the river in large numbers in recent years.

The Rutherford Dust Society, formed to promote wines within the Rutherford area, takes its name from a statement made by the late vintner Andre' Tchelistcheff, "It takes Rutherford dust to grow great Cabernet."

Superfund Site Five-Year Reviews (Roger Papler)

In September, staff completed five-year reviews for two federal Superfund sites and determined that the protectiveness of the cleanup actions needs to be further evaluated for potential vapor intrusion. Vapor intrusion is the migration of solvents and other volatile organic compounds (VOCs) from polluted soil and groundwater into buildings. The cleanup status of each site is briefly summarized below.

Intersil/Siemens, Cupertino: Intersil and Siemens used VOCs in their operations and discharged them through acid neutralization systems that leaked. Soil vapor extraction was conducted at the former Siemens property from 1983 to 2004 and at the former Intersil property from 1988 to 1993. Groundwater extraction and treatment began in 1987 at both properties and still operates today. During the most recent five-year period, Intersil's successor, GE, and Siemens conducted investigations to identify remaining higher-concentration areas and to further optimize their cleanup plans. Siemens pilot tested enhanced bioremediation and GE expanded its groundwater extraction system by adding one focused extraction well. GE and Siemens will jointly update their conceptual site model, and will further define the groundwater plume to evaluate vapor intrusion potential.

Hewlett-Packard – 640 Page Mill Road, Palo Alto: HP used VOCs in its operation and stored them in an underground storage tank that leaked. Soil excavation between 1987 and 1992 removed almost 11,000 cubic yards of solvent-contaminated soil. Groundwater extraction began in 1982 and still operates today. Soil vapor extraction operated from 1994 to 1997. During the most recent five-year period, HP conducted a investigation to identify remaining higher-concentration areas and to further optimize its cleanup plan. HP implemented chemical oxidation and will evaluate expanding its groundwater and soil vapor extraction systems.

Toxics Cleanup Division Field Trip (Cherie McCaulou)

On October 19, Toxics Cleanup Division staff visited a cluster of five cleanup sites in Newark where VOCs and other contaminants have impacted soil and groundwater. These Bay-margin sites present challenging conditions for cleanup due to tight soils and shallow and brackish groundwater, since most cleanup technologies are ineffective or very slow under these conditions. The dischargers at these sites have tried several cleanup methods, including various extraction methods; excavation appears to have been the most successful method thus far.

The five cleanup sites are located within the City of Newark's planned Dumbarton Transit Oriented Development project area, which includes a new commuter rail station. The project area encompasses 233 acres of land where various industrial, manufacturing, chemical processing and salt production facilities have operated since the early twentieth century. Much of the land is currently vacant. The transit-oriented development project presents an opportunity to create a vibrant new community in Newark that will provide housing and commercial development while generating significant ridership for the Dumbarton Rail Corridor. Implementation of cost effective cleanup technologies combined with appropriate risk management measures will be essential to the success of the planned redevelopment.

One discharger is successfully using a sophisticated in-situ technology called "electrical resistivity heating" for onsite soil and groundwater contamination. In this process, subsurface soil and groundwater are heated to nearly 100°C. The heat causes the underground contaminants and water to evaporate, creating steam and vapor that are extracted and brought to the surface for treatment. The system has removed over 3,000 pounds of contaminant mass since startup in March 2010. The costs, while high in the short-term, compare favorably with other technologies that take much longer and require disposal of extracted groundwater or excavated soil. The discharger will also use in-situ chemical oxidation to address off-site shallow groundwater contamination.



Photo of the site in Newark where electrical resistivity heating is being implemented. Brown insulation foam and white plastic cover the treatment field to help retain the heat in the shallow subsurface. The site is immediately adjacent to residences.

Stormwater Pollution Prevention at DoD/DoE Facilities (Agnes Farres) In preparation for the rainy season, staff in the Departments of Defense (DoD) and Energy (DoE) cleanup program sent letters to over 20 DoD and DoE facilities reminding them about stormwater management requirements. All construction, development, and demolition projects associated with cleanup must implement the substantive requirements of the statewide Construction General Permit for stormwater discharges. These include the selection, design, implementation, and proper maintenance of appropriate Best Management Practices (BMPs) to minimize stormwater pollution.

Over the past two months, staff has conducted inspections at several federal facilities including: the Presidio of San Francisco, the Hamilton Army Airfield's North Antenna

Field in Novato, Hangar One at Moffett Air Field in Mountain View, and the Lawrence Berkeley National Lab in the Berkeley Hills.

When we inspect a site we look for erosion control BMPs such as hydroseeding, mulching, erosion control blankets, and mats, to prevent soil particles from being detached by rainfall or wind, and sediment control BMPs such as fiber rolls, silt fencing, straw bales, and sediment basins, to trap soil particles after they have been dislodged.



Example of the use of fiber rolls, mulching, silt fencing and sediment controls installed after cleanup at a former landfill at the Presidio of San Francisco.

We will continue to work closely with the Board's stormwater program staff to educate responsible parties, conduct inspections, and, if necessary, enforce BMP requirements for stormwater pollution runoff control at DoD and DoE facilities undergoing cleanup.

East Bay MUD to Expand Resource Recovery Program (Robert Schlipf) East Bay Municipal Utility District (EBMUD) recently initiated plans to significantly expand its "waste to energy" program. When complete in 2013, EBMUD will generate energy equivalent to that needed to power 2,500 homes, or twice its onsite energy needs. It currently generates about 90% of the energy needed to power its wastewater treatment plant near the Bay Bridge. An added benefit of this program would be that more wastes will be diverted from disposal, thus preserving landfill capacity and reducing greenhouse gas emissions.

EBMUD has long been a leader in recovering methane from its treatment plant's digesters and converting the methane (using turbines) to electricity for onsite needs. In 2002, EBMUD produced about 40% of its onsite energy needs from its digesters. To more fully utilize digester capacity, it began a program to accept septage and FOG (fats, oil and grease) from waste haulers. This provided both more waste for the digesters to convert to methane, as well as a proper and convenient outlet for these problematic waste streams. EBMUD then gradually started including winery waste and food scraps. The 2013 planned expansion will include a new pre-processing facility capable of increasing food waste processing from the current 35 tons per day to 200 tons per day.

As changes to the waste streams in treatment plant digesters can affect the quality of waters discharged, we will continue to work with EBMUD on this important program to ensure measures are in place to minimize any potential water quality impacts.

Skaggs Island Cleanup and Transfer to Fish and Wildlife Service (Agnes Farres) The Navy recently finalized a No Further Action Record of Decision (ROD) for the Skaggs Island Naval Reservation (see photo below), which is located near the north shore of San Pablo Bay in Sonoma County. The ROD includes nine areas site-wide where soil cleanup has been completed (i.e., no further action needed) and wetlands can be restored. Contamination sources on the site included a pistol range, a disposal area, sewage treatment facilities, chemically treated wooden antenna poles, and an incinerator. Cleanup goals were achieved through soil excavation, and no groundwater cleanup was needed. Transfer of Skaggs Island from the Navy to the U. S. Fish and Wildlife Service (Service) is anticipated in early 2011.

Skaggs Island was created more than a century ago by land companies that dredged and diked the delta for farming. The Navy acquired the former tidal marshland in 1941 and built a naval radio station to provide ship-to-shore and point-to-point communications. In 1961, the Navy built a large direction-finding high-frequency antenna used for communications and intelligence gathering on the site. By the late'80s, military and civilian personnel worked on Skaggs Island providing communications, computer support, and training to Navy and U.S. Department of Defense facilities. Skaggs Island was officially decommissioned in 1993 after 51 years of operation.

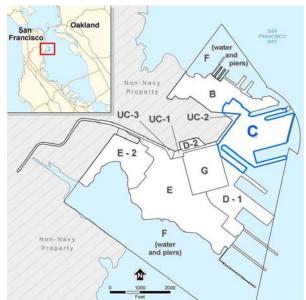
Skaggs Island provides habitat for over 20 threatened and endangered species and is critical for migratory birds traveling along the Pacific flyway. Under a 2009 agreement, the Navy will transfer 3,310 acres of Skaggs Island to the Service for inclusion in the San Pablo Bay National Wildlife Refuge. The Island's remaining 1,080 acres is part of a privately owned hay farm known as Haire Ranch.



Hunters Point Shipyard Cleanup of Parcel C (Ross Steenson)

Since January 2009, the Navy has finalized five Records of Decision (RODs) addressing seven of the eleven parcels at the former Hunters Point Shipyard. The most recent ROD is for the area referred to as Parcel C.

The Parcel C ROD sets the stage for cleanup and eventual transfer of the parcel to the San Francisco Redevelopment Agency and subsequently to Lennar Corporation for redevelopment. Reuse plans for Parcel C include educational/cultural, maritime/industrial, open space, research and development, and mixed commercial and residential.



Map of Hunters Point Shipyard, showing Parcel C (highlighted)

The cleanup approach documented in the Parcel C ROD includes:

- decontaminating buildings and structures;
- excavating contaminated soil, storm drains, and sewer lines;
- treating groundwater to reduce VOCs and metals and/or monitor groundwater;
- installing protective soil, asphalt, and concrete covers; and
- implementing land use, engineering, and administrative controls to maintain cover integrity and protect future site occupants, utility workers, and the public from unintentional exposure to residual contaminants.

Transfer of this parcel is forecast for mid-2013. The Navy anticipates that all or most of the cleanup will be complete prior to transfer.

Earlier this year, the Navy finalized the ROD for Parcel D-2, which was discussed in the August 2010 Executive Officer's Report. The remaining parcels for which RODs have yet to be finalized include E, E-2 (former industrial landfill), F (submerged lands and piers), and UC-3. The Navy expects to issue the next ROD, for Parcel E-2, in late 2011.

Alameda Point Naval Air Station Cleanup of IR Site 2 (John West)

Since October 2008, the Navy has finalized seven Records of Decision (RODs) covering 349-acres at the former Alameda Naval Air Station (NAS). The most recent ROD is for Installation Restoration (IR) Site 2, which is a 110-acre former landfill and wetlands on the west end of Alameda (figure below).

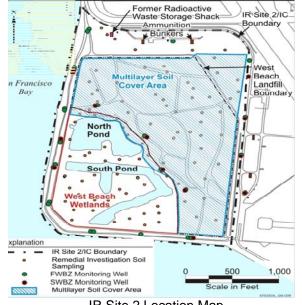
From 1956 through 1978, IR Site 2 was used for disposal of 1.6 million tons of

household, industrial, and process waste generated by former NAS activities. Remaining chemicals of concern at IR Site 2 include: radionuclides (Radium 226), PCBs, benzo(a)pyrene, pesticides (total DDx), and various metals (cadmium, chromium, lead, molybdenum, and zinc). IR Site 2 is designated for a federal agency-to-agency transfer (i.e., from the Navy to the Office of Veterans Affairs). The proposed future use is for wetland habitat and low-impact recreation.

The cleanup approach documented in the ROD includes:

- surface scanning and removal of radiological hotspots;
- installation of a multi-layer landfill protective cover;
- wetland mitigation and long-term effectiveness monitoring;
- methane gas monitoring;
- monitoring natural attenuation for soil and groundwater; and,
- engineering and institutional controls.

Similar to other former landfills, the selected remedies focus on containment and isolation of waste through capping. Natural attenuation (biodegradation, dispersion, and dilution) may also reduce the concentration and aid the degradation of organic contaminants. A multi-layer soil cover remedy was selected based on a detailed analysis of potential alternatives that determined it would be protective of human health and the environment including the adjacent wetland area. Statutory five-year reviews will be conducted pursuant to federal law to assess if the remedy remains protective.



IR Site 2 Location Map

Dublin Gasoline Spill - Completion of Cleanup (Cleet Carlton)

On October 27, we confirmed completion of cleanup activities at the site of a May 2009 gasoline spill in Dublin. The spill occurred when an accident involving a petroleum tanker truck and a passenger car resulted in 2,600 gallons of gasoline spilling into the storm sewer in San Ramon. The gasoline traveled more than a mile through the storm sewer before re-surfacing at an open drainage channel in Dublin.

We coordinated with the City of Dublin and Alameda County Environmental Health to

address human health concerns immediately after the spill and during cleanup. Emergency cleanup procedures immediately following the spill included pumping the gasoline-water mixture out of the channel, recovering floating free product, removing impacted vegetation and soil from the channel, and installing temporary diversion pipes to divert subsequent storm drain flows around a dammed 100-foot segment of the channel.

We also coordinated with Alameda County Flood Control & Water Conservation District Zone 7 and the Department of Fish and Game to ensure appropriate measures were taken for subsequent cleanup of petroleum-impacted soils. Over the next several months, the dammed portion of the channel was dewatered to allow application of a biodegradation agent to the exposed impacted surface soil. Monitoring continued through the fall and showed significant reductions in the area of remaining impacted soil. A final verification report in July 2010 showed that any residual gasoline and related chemicals had been reduced to safe levels for human health and the environment.

Prior to issuing a No Further Action letter, staff distributed a Fact Sheet to interested parties and provided a 30-day comment period. No comments were received, and on October 27, we issued a No Further Action letter and closed the case.

Enforcement – Complaints and Settlements (Brian Thompson)

On October 29, I issued an ACL order to Transbay Container Terminal I (Transbay) after it reached a settlement agreement with the Board's Prosecution Team. Transbay resolved several facility issues that were stipulated in the settlement agreement, and a 30-day public comment period did not generate any opposition to issuing the order. The order requires Transbay to pay a fine of \$13,300 to the State's Cleanup and Abatement Account for alleged untimely submittal of an annual report required by the Statewide Industrial Storm Water Permit.

On October 6, TWC Storage, LLC (TWC) paid the \$25,000 liability imposed by the Board at a May 2006 hearing. TWC paid this liability after its petition of the decision was denied (reported in the October 2010 Executive Officer's Report). A \$20,000 liability was paid to the Waste Dischargers Permit Fund, and a \$5,000 liability was paid to the Cleanup and Abatement Account.

Napa River Sediment TMDL approved by State Board (Michael Napolitano) The Napa River Sediment TMDL Basin Plan Amendment was approved by the State Board on October 5. The next step is review and approval by the State Office of Administrative Law, and then ultimately by USEPA, which has expressed strong support for the amendment throughout the process. We are already engaged in early implementation of the TMDL. (See the write-up regarding Special Congressional Recognition for Support of Napa River Restoration below.)

Adopted Orders Search Made Easier (Anna Torres)

The Information Technology (IT) Unit of the Board's Management Services Division has developed an Adopted Orders database to help users find information more efficiently on our website. One can search by discharger name, order number, order type, or county. Currently, the system contains all Board orders for the 2000s, and the 1990s are not far behind. The remaining years will be posted by decade, one decade per month. In the meantime, one can find the orders for the previous years located in the

<u>Adopted Orders Listed by Year</u> page of our website. Also of note is that the posted orders are Optical Character Reader (OCR) friendly to assist the visually impaired. The Adopted Orders Search page can be found at:

http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders_db/in dex.php.

In-house Training

We had no training in October. Our November training will be on writing skills. Brownbag seminars included an October 28 session on saving and investing for retirement conducted by former Board staff Mark Ruderman.

Presentations

On October 1, Keith Lichten spoke at the quarterly Bay Area Planning Directors Association meeting, organized by the San Francisco Estuary Partnership. The meeting's focus was Best Practices for Greener Site Development, and Keith spoke on implementation of the new Municipal Regional Stormwater Permit, as well as successful Bay Area examples in which low-impact-development stormwater measures were incorporated into high-density redevelopment projects. Recently completed projects include San Francisco's Leland Avenue, the Glashaus residential project in Emeryville, and the Casa Feliz low-income housing project in San Jose.

On October 11, I spoke at a press conference called by Contra Costa County and the Bay Area Flood Protection Agencies Association on the U.S. Army Corps of Engineers' proposed vegetation policy that would require removal of riparian forests along streams and rivers with federally-constructed levees. (See also the letter on this topic in Item 7, Correspondence.) I emphasized that this policy does not recognize our mandate to protect and restore the multiple beneficial uses of streams and rivers and would put local flood management agencies at risk of violating our orders issued to them. I was joined by, among others, Congressman John Garamendi and representatives of the Department of Fish and Game and the Department of Water Resources, in which the central argument against implementing the proposed policy is that it violates federal and State environmental laws and makes compliance by local agencies difficult or impossible.

As a followup to the press conference, Congressman Garamendi is sponsoring a coordinated California congressional delegation letter to the Corps to seek a recession of this policy. I'll keep the Board informed about this issue.

On October 22, I participated in the groundbreaking of Santa Clara County's Advanced Recycled Water Treatment Facility. The Facility is a joint project between the Santa Clara Valley Water District and the San Jose/Santa Clara Water Pollution Control Plant that will apply microfiltration, reverse osmosis, and ultra-violet disinfection to the Plant's tertiary treated wastewater. The Facility, when operational in 2012, will provide up to 10 million gallons a day of highly purified recycled water that will meet the quality requirements of business users throughout Santa Clara Valley.

On October 26, I spoke at the dedication of the Novato Sanitary District's upgraded wastewater treatment plant. The upgraded plant consolidates treatment of wastewater from two aging treatment plants into one, includes full redundancy of treatment units,

and ensures full treatment without blending of all flows up to 47 million gallons a day, versus the 9 million gallons a day capability of the aging plants. In my remarks, I applauded the District in making the right choice of upgrading and consolidating its plants, so that it can more consistently comply with its NPDES permit discharge requirements.

BAWN's Assessment and Monitoring Working Group Meeting (Dale Hopkins) On October 13, staff from the Board's Planning/TMDL Division were featured speakers at the Bay Area Watershed Network (BAWN)'s quarterly Assessment and Monitoring Working Group. BAWN is an ongoing multi-stakeholder watershed collaboration effort that focuses on outreach and education, policy, land and water use issues, and Integrated Regional Water Management Program coordination. The Assessment and Monitoring Working Group brings together scientists, restoration practitioners, agencies and watershed groups to discuss monitoring methods and programs as well as science needs, project criteria, and funding priorities for Bay Area watershed projects.

Jan O'Hara and Karen Taberski gave presentations on the monitoring component of the Municipal Regional Stormwater Permit, which includes requirements for bay, creek and special project monitoring, and on the statewide Surface Water Ambient Monitoring Program, which is working closely with the Bay Region's stormwater programs on a regional monitoring coalition.

Leslie Ferguson gave a talk on coho salmon in crisis and the role of creeks and watersheds in the fate of coho and other endangered salmonid species. Her talk focused on the lack of spatial, genetic, and morphological diversity as salmon numbers decline, the need for maintaining conditions that foster species variability, and why stream restoration should be encouraged for all life stages of anadromous fishes.