

California Regional Water Quality Control Board  
San Francisco Bay Region  
**EXECUTIVE OFFICER'S REPORT**  
A Monthly Report to the Board and Public

**August 2008**

*The next regular scheduled Board meeting is August 13, 2008.  
See <http://www.waterboards.ca.gov/sanfranciscobayH/> for latest details and*

Items in this Report (Author[s])

\*\*\*\*\*

<b>State Board Issues MMP Early Settlement Letters</b> (Christine Boschen) .....	Page 1
<b>Pending Administrative Civil Liabilities Complaints</b> (Brian Thompson) .....	Page 2
<b>Objectives for Cyanide in San Francisco Bay</b> (Naomi Feger) .....	Page 3
<b>State Board Approves Walker Creek Mercury TMDL</b> (Jill Marshall) .....	Page 3
<b>Petroleum Refinery Mercury Studies</b> (Richard Looker) .....	Page 4
<b>Peyton Slough Salt Marsh Restoration Status</b> (Lindsay Whalin).....	Page 4
<b>Amorco Terminal, Golden Eagle Refinery, Martinez</b> (Vic Pal).....	Page 6
<b>Toxics Cleanup Division Accomplishments</b> (Stephen Hill) .....	Page 7
<b>DTSC Coordination</b> (Stephen Hill).....	Page 7
<b>Groundwater NPDES general permit</b> (Farhad Azimzadeh).....	Page 8
<b>Staff Presentations</b> .....	Page 8

\*\*\*\*\*

**State Board Issues MMP Early Settlement Letters** (Christine Boschen)

On July 28, the State Water Board issued 33 Mandatory Minimum Penalty (MMP) “Expedited Payment Program” letters to San Francisco Bay Region surface water dischargers. The letters address 158 violations that occurred from January 1, 2000, to March 31, 2008, and represent \$474,000 in fines. This effort is part of a Statewide Enforcement Backlog Initiative.

The Water Code mandates the imposition of MMPs for specific NPDES permit violations. The Statewide Enforcement Backlog Initiative has two primary goals:

1. To validate the MMP information in our statewide compliance database (CIWQS) to ensure that all the violations and related enforcement actions are accurately reflected; and
2. To eliminate the MMP enforcement backlog by December 31, 2008.

In June 2008, CIWQS identified over 7,000 unaddressed violations statewide (dating back to January 1, 2000). At the minimum assessment of \$3,000 per violation, these violations represent over \$21 million in uncollected fines. Our Region’s violations represent a small portion—only 2%—of the statewide backlog because we have consistently assessed MMP fines since the requirement became effective in 2000. The added benefit of this initiative is that it provided us the opportunity to verify our violation and enforcement records and correct data entry errors in CIWQS. With the issuance of these early settlement letters, we should be able to eliminate our NPDES enforcement backlog by December 2008.

Dischargers who receive an "Expedited Payment Program" letter may dispute their violations before electing for early settlement. If a discharger believes there has been an error, it has 30 days to notify us and explain the circumstances. We will then confirm or dismiss the disputed violations, and if MMPs are warranted, the discharger will have 30 more days to decide whether to accept the settlement offer. If a discharger elects early settlement, the State Water Board will allow 30 days for public comment. If no substantive comments or new information is received, the State Water Board will issue an invoice and provide 30 days for payment. If a discharger forgoes early settlement, the State Water Board will issue a formal MMP complaint, provide an opportunity for public comment, and consider the MMPs at a State Water Board hearing.

San Francisco Bay Region NPDES Statistics

Facilities with individual NPDES Permits	76
Facilities with no outstanding violations	40 (53%)
Facilities referred to State Board for MMPs	33 (41%)
Facilities retained for higher level enforcement	5 (6%)
Facility held back for further investigation	1 (1%)

**Pending Administrative Civil Liabilities (ACL) Complaints (B. Thompson)**

The Assistant Executive Officers issued sixteen ACL complaints in July that are noticed for the September 10, 2008 Board hearing. Copies of the complaints can be found on our web site at [http://www.waterboards.ca.gov/sanfranciscobay/pending\\_en.shtml](http://www.waterboards.ca.gov/sanfranciscobay/pending_en.shtml).

Fourteen of the complaints address reporting requirement violations of the State Industrial Stormwater General National Pollutant Discharge Elimination System (NPDES) permit. This permit requires submittal of annual reports by July 1<sup>st</sup> of each year.

Fines of \$24,200 are proposed for each of the following facilities for not submitting the annual report due July 1, 2007:

- **Marin County:** Kalin Cellars Inc. (Novato)
- **Contra Costa County:** RMC Pacific Materials Inc. (San Ramon), Ecology Control Industries Inc. (Richmond), and Varian Chromatography Systems (Walnut Creek)
- **Napa County:** Napa Cellars (Oakville), Mustards Grill and Consentino Winery (Napa), American Canyon Sanitary Landfill (American Canyon), Napa Garbage Services, Inc., and Storybook Mountain (Calistoga)
- **Sonoma County:** Willowbrook Feed (Petaluma)

Fines for late submittal of the annual report due July 1, 2007 are proposed for the following facilities (difference in amounts reflect different late submittal dates):

- **Marin County:** Nicasio Rock Quarry (Nicasio) - \$11,550
- **Contra Costa County:** Eagle Marine (Martinez) - \$11,075
- **Napa County:** Domaine Mumm (Rutherford) - \$11,125 and Rutherford Grove Winery (Rutherford) - \$11,100

The two remaining complaints propose fines for the owner of the Leona Heights Sulfur Mine in Alameda County (Oakland) and the United Technologies Corporation (UTC) in Santa Clara County (San Jose). A fine of \$200,000 is proposed for the owner of the Leona Heights Sulfur Mine for violating the reporting requirements of a Cleanup and Abatement Order, and a fine of \$5,000 is proposed for UTC for discharging untreated groundwater from a groundwater extraction/cleanup system to a creek.

### **Objectives for Cyanide in San Francisco Bay (Naomi Feger)**

On July 22, 2008, the U.S. EPA approved site specific marine water quality objectives (SSOs) for cyanide in San Francisco Bay. The Board approved SSOs in December 2006. The new SSOs, will replace the nationally-derived objectives for cyanide. The new objectives are 2.9 ug/L for chronic conditions (4-day average) and 6.9 ug/L for acute conditions (one-hour average) and are based on evaluating toxicity data for west coast resident crab species. In its approval letter to the Board, EPA complimented the State on its public participation efforts in the development and review of the objectives. EPA's approval is subject to completion of Endangered Species Act consultations with the US Fish and Wildlife Service and the National Marine Fisheries Service, which they anticipate concluding in the near future.

### **State Board Approves Walker Creek Mercury TMDL (Jill Marshall)**

On July 15, 2008, the State Water Board approved our Basin Plan amendment establishing a mercury TMDL and two water quality objectives in the Walker Creek Watershed. This TMDL was adopted by the Board in January 2007. Walker Creek flows through former mercury mining areas and drains to Tomales Bay in western Marin County.

Both Walker Creek and Tomales Bay are listed as impaired by mercury, pathogens, nutrients, and sediment; a TMDL for pathogens in the Tomales Bay watershed was incorporated into the Basin Plan in February 2007. Staff is coordinating implementation actions designed to address all four impairments. Last month the Board approved a Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed, a key component of implementation. A joint EPA-Water Board clean-up effort at the Gambonini mine site in the late 1990s has resulted in dramatic reductions in mercury discharged. We expect that by following best management practices, the property owners will continue to protect downstream waters. In fact, the downstream landowners will benefit from work done at Gambonini, as many of the low cost, low-tech soil and creek stabilization methods tested on the mine site will be appropriate implementation actions for grazing waiver compliance.

As for Soulajule Reservoir, staff familiar with the Santa Clara Valley Water District's innovative approaches to evaluating and managing methylmercury production in reservoirs plan is working with the Marin Municipal Water District as they embark on TMDL implementation.

**Petroleum Refinery Mercury Studies (Richard Looker)**

The Bay Area petroleum refineries are nearing completion of studies to evaluate the amount of mercury cycling through their facilities during crude oil refining. Preliminary results indicate that far less mercury is entering the refineries in crude oil than we originally calculated based on the available literature values.

The San Francisco Bay Mercury TMDL, first adopted by the Board in 2004, identified the need to assess the significance of petroleum refineries as a source of mercury discharges to the Bay. Mercury enters petroleum refineries because it is contained in crude oil. Mercury can leave the refineries through a variety of pathways including: air emissions, wastewater, refined products, and other waste streams. Based on crude oil mercury concentrations reported in the literature, we estimated that as much as 1700 kg/yr of mercury may be entering Bay Area petroleum refineries, but we could only account for a small fraction of this mercury in exit pathways (i.e., products or waste streams) for which we had data. The need to resolve this accounting discrepancy motivated requirements for the petroleum refineries to measure mercury in all input and exit streams to estimate the amount of mercury in these streams on a yearly basis. We have worked with the refineries to ensure that the studies met our information needs, but also took into account scheduling and logistical considerations attendant to such a complex undertaking.

The studies are nearly complete and the refineries have submitted some preliminary results. Based on the three months of crude oil mercury analysis reported, the amount of mercury entering all petroleum refineries combined in crude oil appears to be between 180 and 260 kg/yr, substantially less than the earlier estimate of 1700 kg/yr. Several months of fuel gas sampling showed that less than 2 kg/yr of mercury is emitted directly to the air due to combustion of fuel gas at these facilities. In addition, less than 30 kg/yr of mercury leaves the facilities in refined products (diesel fuel, automobile fuel, and aviation fuel) and approximately 400 kg/yr of mercury leaves the facilities in various waste streams sent to off-site disposal. We have not yet received information on the amount of mercury contained in petroleum coke, and there is additional crude oil analysis and stack emissions testing still in progress which could affect these estimates.

The draft final report will be submitted for our comment on August 31, and the final report is due October 31. We will present a report to the Board once the final results are available.

**Peyton Slough Salt Marsh Restoration Status (Lindsay Whalin)**

In 2001, as part of the Rhodia site cleanup, the Board approved a restoration plan for Peyton Slough. That plan is being successfully implemented and efforts are now underway to connect the marsh by Rhodia to the upstream McNabney Marsh, and restore these Marshes to healthy salt marsh habitat. Located in Martinez, just south of the Benecia Bridge, the marshes have been significantly impacted by development. Prior to the construction of a flood protection levee, the railroad, and Waterfront Road, McNabney and Rhodia Marshes were a single contiguous salt marsh complex.



A major obstruction to allowing brackish Bay water to reach McNabney Marsh were four Kinder Morgan pipelines which reduced flow in to (and out of) McNabney Marsh. In October of 2007, Kinder Morgan removed the restriction by lowering the four pipelines. The net benefit is that increased flow will amplify tidal inundation, transforming more of McNabney Marsh from freshwater wetland to salt marsh.

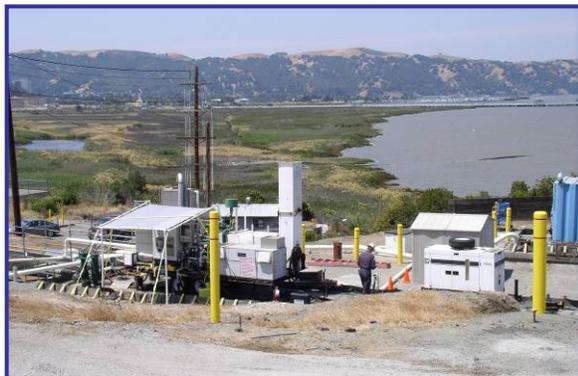
The primary remaining steps toward restoring the salt marsh are to begin bidirectional operation of the tide gate located on Peyton Slough in Rhodia Marsh and to widen the culvert below Union Pacific Railroad. The Peyton Slough Wetland Advisory Committee, of which Board staff Lindsay Whalin is a member, is working on a schedule that will maximize the benefit of bidirectional operation while maintaining flood control and mosquito abatement. A project to widen the railroad bridge culvert is also in the works.

### **Amorco Terminal, Golden Eagle Refinery, Martinez (Vic Pal)**

#### **SITE BACKGROUND**

The Amorco Terminal encompasses approximately 100 acres that's been continually used for petroleum industry-related operations for more than a century. The terminal includes five aboveground storage tanks (AST) and a marine wharf used for petroleum loading and unloading. Fuel oxygenates, primarily methyl tert-butyl ether (MTBE), have been detected in the northern portion of the terminal.

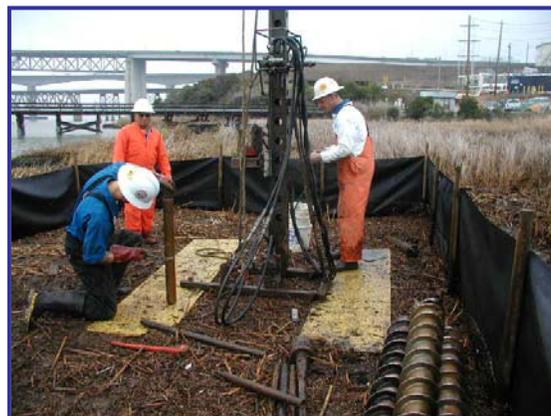
A Cleanup and Abatement Order (CAO) was issued by the Board in 2006, which required the Golden Eagle Refinery to investigate and remediate fuel oxygenates at the terminal.



The affected areas are identified in the CAO as two operable units. The CAO established the investigation and remediation effort of both units, and assigned tasks and milestones for each. The upland unit includes the ridge area in the east, and contains the ASTs. The other unit includes a wetland area adjacent to the Carquinez Strait.

### SITE INVESTIGATIONS

In response to the CAO, several investigations have been completed. The investigations concluded that the source of the MTBE plume most likely originated in the mid-1990s from a section of corroded underground pipe near one of the ASTs which once stored MTBE. The MTBE-impacted groundwater plume then migrated west. The current investigation has defined the horizontal and vertical extent of the impacted area in the upland operable unit. Further investigations are being conducted to delineate the impacted area in the wetland unit.



### REMEDIATION PROGRAMS

As directed by the Board, an interim remedial action (IRA) comprised of three extraction wells and an on-site treatment system, was installed, and commenced operation in January 2007. The objectives of the IRA are to remove the contaminant mass from groundwater and minimize further migration of dissolved-phase MTBE by extracting groundwater from the source area. To date, more than 670,000 gallons of MTBE-impacted groundwater has been extracted. The extracted groundwater is treated at an on-site treatment unit before it is transported to the Golden Eagle Refinery Wastewater Treatment Plant for further treatment and disposal. It is estimated that more than 10,300 pounds of MTBE have been recovered since the IRA commenced operation.

In an effort to augment the recovery and accelerate the site cleanup, three additional extraction wells are scheduled for installation



this summer. It is anticipated that groundwater cleanup will continue thru 2010.

**Toxics Cleanup Division Accomplishments** (Stephen Hill)

Last fiscal year (July 2007 thru June 2008), the Toxics Cleanup Division accomplished the following:

- Took on 66 new Brownfield cases consistent with Cal/EPA's interagency memorandum of agreement;
- Issued 6 site cleanup requirements (most following Board hearing and order adoption), as well as several hundred directives pursuant to Water Code section 13267;
- Prepared enforcement materials resulting in the imposition of administrative civil liability against two recalcitrant dischargers;
- Issued 14 "comfort" letters to owners or prospective purchasers of Brownfield sites, to encourage restoration;
- Closed 66 low-risk cases (fuels and non-fuels sites), signifying the completion of cleanup and allowing staff to shift attention to more significant cleanup sites;
- Met or exceeded workplan commitments for the UST and Site Cleanup programs; and
- Updated our Environmental Screening Levels to reflect changes in underlying toxicity factors and to make them more accessible to staff and the public.

**DTSC Coordination** (Stephen Hill)

On July 17, supervisors in the Toxics Cleanup Division met with their counterparts at the California Department of Toxic Substances Control (DTSC) at DTSC's Berkeley office. Both agencies are responsible for site cleanup in the Bay Area and face many of the same challenges. Below is a partial list of the topics discussed. We intend to continue such coordination meetings in the future.

- Implementation of a major reorganization at DTSC earlier this year intended to consolidate site-cleanup programs and to speed up site cleanup and closure;
- Pending updates in agency guidance to address vapor intrusion (the migration of volatile pollutants from groundwater or soil into occupied buildings);
- Expected increase in the number of PCBs-impacted site cleanups as a result of the Water Board's recently-adopted PCBs TMDL; and
- Adequacy of the process for determining appropriate "lead agency" for new Brownfield sites, as defined in a 2005 inter-agency memorandum of agreement.

**Groundwater NPDES general permit** (Farhad Azimzadeh)

Last April, the Board issued a new type of NPDES general permit that complements our older general permits for discharges from fuel and solvent groundwater cleanup sites. This new general permit regulates the discharge of extracted groundwater from three general

categories: aquifer protection and salinity barrier wells, reverse osmosis concentrate from aquifer protection wells, and high volume structure dewatering requiring treatment.

As of June 30 of this year, 18 discharges are covered under this general permit (16 under the first category and one under each of second and third categories). This general permit has streamlined our permitting process by shortening the time needed to approve a discharge, reducing the number of items needing Board approval, and enabling staff to focus on compliance.

### **Staff Presentations**

During July, Bruce Wolfe made the following presentations: on July 10, he spoke to the Lake Merritt Breakfast Club in Oakland, describing the Board's high priority actions, with an emphasis on those affecting Oakland and the Lake Merritt watershed; on July 15, he spoke on the Board's role in minimizing and enforcing against sanitary sewer overflows at a multi-agency meeting in Sausalito called by Assemblyman Huffman; on July 17, he spoke to the full BCDC commission at its regular meeting, emphasizing the Board's current stormwater and TMDL priorities and our next steps in addressing the mothball fleet's impacts; and, on July 24, he was part of a panel with Tam Doduc and Dorothy Rice of the State Board and Alexis Strauss of U.S. EPA at the California Council on Environmental and Economic Balance's Summer Issues Seminar, describing the need for developing the upcoming stream and wetland policy, and the next steps in coordinating that development with the State Board and the North Coast Water Board.

On July 25, Chuck Headlee spoke at a legal seminar put on by the Bar Association of San Francisco. The seminar focused on a new state Brownfield law, the California Land Reuse and Revitalization Act (CLRRA) of 2004. Mr. Headlee described the Water Board's experience with implementing the new law. Our region was the first region to enter into a CLRRA agreement with a Brownfield developer; the agreement provides liability protection for the developer provided he complies with certain conditions regarding site cleanup. Our sister agency, the California Department of Toxic Substances Control, has entered into several such agreements.