

STATE OF CALIFORNIA

**REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

MEETING DATE: June 8, 2016

ITEM: **4**

SUBJECT: **EXECUTIVE OFFICER'S REPORT**

EXECUTIVE OFFICER'S REPORT: *June 2016*

A Monthly Report to the Board and Public

NEXT MEETING: June 8, 2016

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

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Pollution Prevention is Year-Round, Becoming More Creative (James Parrish)

Each fall, the Water Board recognizes one or two wastewater agencies or individuals who have demonstrated exemplary pollution prevention efforts through our Dr. Teng-chung Wu Pollution Prevention Award, affectionately known as the “WuHoo Award!” In reality, hundreds of pollution prevention activities are underway that receive little recognition. This item summarizes a few from our recent review of the agencies’ annual pollution prevention reports.

Many wastewater agencies continue with their tried-and-true pollution prevention strategies that involve public outreach and product take-back events. Such activities have led to notable reductions in pollutants discharged to wastewater treatment plants – and eventually to surface waters. For example, San Francisco has reduced pesticide use 73 percent since 1996, and the East Bay Municipal Utility District recently suspended its mercury take-back events, due to its success in reducing mercury-containing products within its community (the District continues to accept mercury-containing products at its main office).

To stay effective, pollution prevention efforts are evolving. Wastewater agencies are moving to new and creative efforts, such as implementing pilot study programs and working directly with regulatory agencies that set point-of-use rules. These efforts include developing work plans with building managers for pesticide-free pest control and monitoring effectiveness, and engaging earlier in the regulatory process with agencies such as the California Department of Pesticide Regulation and U.S. EPA. Wastewater agencies also continue to improve their understanding of contaminants of emerging concern by contributing to studies of alternative pesticides that are coming into common use and developing more accurate analytical methods

for detecting microplastics in the Bay.

The goal of pollution prevention is to prevent water pollution by preventing or reducing the use and discharge of pollutants at their source before the pollutants can be discharged to wastewater collection and treatment systems. Following our recent review, we provided individual feedback to each wastewater agency and refinery about its pollution prevention programs, and our feedback was overwhelmingly positive. Although we cannot publicly recognize every deserving program each year, we do appreciate their efforts and are pleased to see the programs' continuous improvement.

Wastewater PCBs and Mercury Loads (Jordan Cheng, Manda Au)

The loads of PCBs and mercury in wastewater discharges in 2015 continued to be well below the Board's wasteload allocations for mercury and PCBs. The Board first established the allocations when it adopted total maximum daily loads in 2007 for mercury and in 2010 for PCBs. The allocations are required in a watershed permit last reissued in 2012 and on schedule for reissuance in 2017. Figure 1a shows that mercury loads from municipal and industrial wastewater discharges were consistent with previous years. This is most likely a result of continued pollution prevention efforts, industrial source control, and excellent solids removal.

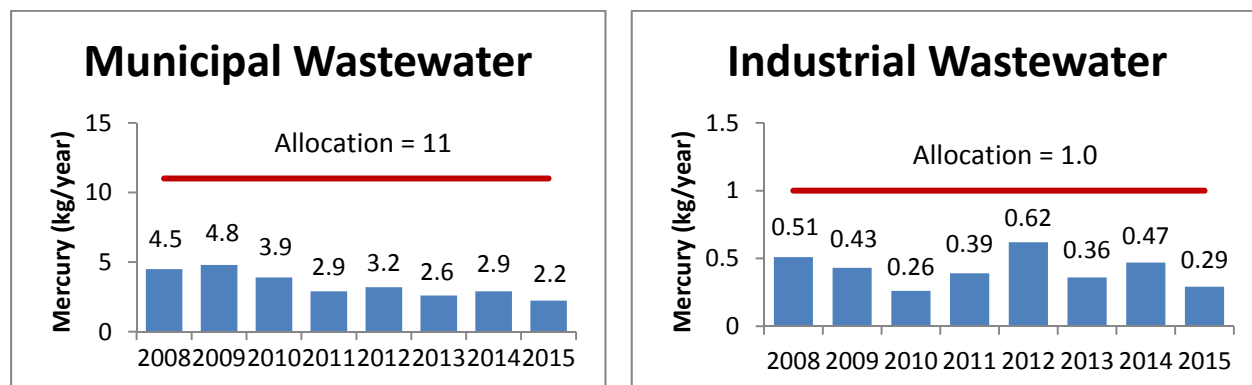


Figure 1a. Mercury Loads from 2008 to 2015.

Figure 1b shows that PCBs loads were about 65 percent below the allocation for municipal wastewater discharges and 55 percent below for industrial dischargers. The PCB loads for 2015 were less variable than previous years because of better laboratory techniques. As noted in the June 2014 Executive Officer's Report, the substantial decrease from 2012 to 2013 in municipal wastewater PCBs was attributed to laboratory contamination.

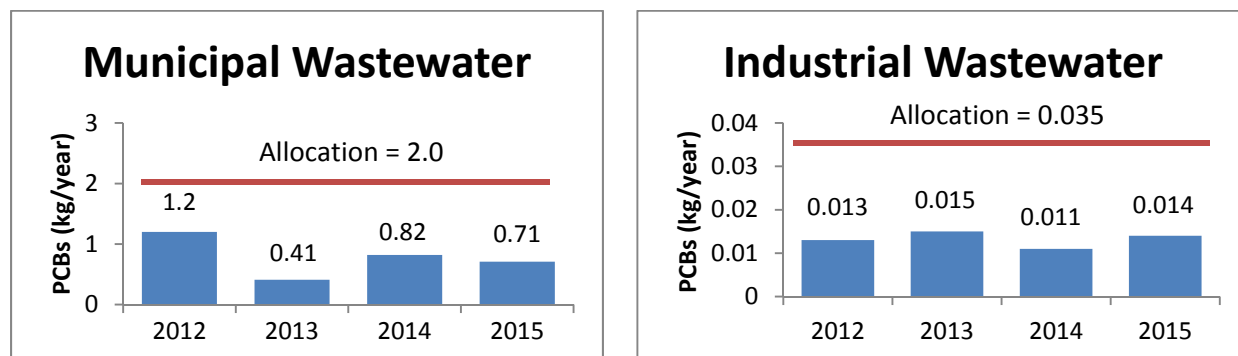


Figure 1b. PCBs Loads from 2012 to 2015.

Newby Island Landfill Update (Vic Pal)

In January 2015, we began receiving odor complaints from community residents near the Newby Island Landfill (Landfill), located on the San Jose/Milpitas boundary, just west of I-880's Dixon Landing Road interchange. The Board regulates the Landfill under waste discharge requirements last updated in 2005. We responded to the complaints by inspecting the Landfill and working with the Landfill owner (Republic Services) and surrounding industrial facilities, including the San Jose/Santa Clara Water Pollution Control Plant, to identify and take actions to minimize any odors that may have been impacting the surrounding community. As a result, a regional plan to mitigate odors was developed, and Republic Services has implemented improvements to its Landfill operations to minimize odors.

The City of San Jose, in early 2015, postponed its vote on a proposed height expansion of the Landfill, in part to further study odors in the surrounding community. Since then, the City has further postponed this vote several times, the most recent being a vote scheduled for May 17. In the past few weeks our Board members, staff, other regulating agencies, and State and local government officials have received a flurry of emails from community members regarding odors emanating from the Landfill. On May 5, staff investigated these complaints by conducting an inspection of the Landfill and meeting with Landfill staff to discuss the odor complaints. During the inspection, Board staff did not observe significant odors or other violations.

In addition to making complaints about the Landfill's odors during the Board's April and May 2015 public forum, members of the community raised concerns about detections of the chemical 1,4-dioxane in groundwater beneath the Landfill. In response to these concerns, Board staff independently tested for 1,4-dioxane in groundwater and in Landfill leachate. As a result of these tests, Board staff informed the Board and the community that the concentrations of 1,4-dioxane detected at the site were far below the appropriate action levels (i.e., the Water Board's 2013 Environmental Screening Levels for protection of estuarine and marine habitats), and no further action was recommended.

As a point of interest, Republic Services informed us in late April that it had unexpectedly discovered 15 empty underground storage tanks (USTs) while digging to build a new waste disposal cell on the Landfill's currently-permitted waste footprint. Republic believes that the USTs were not used for liquid storage at the Landfill but were disposed of at the Landfill some 40 years ago. All USTs have now been removed and scrapped for proper disposal at another facility. The soils beneath where the USTs were buried were tested for contaminants, and all chemicals were well below appropriate action levels.

Vapor Intrusion Response at San Leandro Site (Cherie McCaulou)

Water Board staff responded promptly after receiving news in May that solvents from one of our San Leandro cleanup sites have migrated into overlying buildings at levels that could pose a short-term public health risk. We have notified the Alameda County Environmental Health Department and have directed the discharger to immediately implement vapor mitigation measures. Those measures were taken within a week of our being notified.

The site is located at 1964 Williams Street in San Leandro. Several companies, including Hills Brothers Coffee Company (predecessor to Nestle USA) used the site from 1968 to 1982 to

develop a process for freeze drying. Trichloroethylene (TCE) was used and stored onsite during the freeze drying operations. Releases of TCE were identified in 1989 when a property buyer was performing "due diligence" environmental investigations. Cleanup activities have been ongoing at the site since 1995, and the site has been subject to Board-adopted Site Cleanup Requirements since 2000. The plume of TCE-contaminated groundwater (with concentrations still exceeding cleanup goals) extends over 1,500 feet from the source property. Several large industrial buildings overlie this plume.

Vapor intrusion evaluations have been conducted in three of these overlying buildings beginning in 2010. Initial results, from near-site buildings, did not suggest a vapor intrusion problem. Nestle USA, the discharger, recently obtained permission to sample indoor air at the source property. Passive air samplers were deployed from April 11 to May 2. This sampling found concentrations in indoor air up to $54 \mu\text{g}/\text{m}^3$, over U.S. EPA's "Urgent Response Action Level" of $24 \mu\text{g}/\text{m}^3$ for a commercial/industrial setting. This action level is based on recent findings that a pregnant woman's exposure to TCE during the first trimester can result in fetal heart defects. U.S. EPA recommends that action should be taken within days to reduce or eliminate exposure when this action level is exceeded.

We were notified of these results on May 19 and responded promptly. We provided a Proposition 65 notification to Alameda County Environmental Health on May 25. We directed Nestle USA to immediately provide vapor intrusion mitigation at the affected building. Nestle USA has coordinated with the owners of the 1964 Williams Street property, which is now used as a warehouse. Air purifiers were installed on May 25. Pilot studies are underway in downgradient buildings to test sub-slab venting as an interim corrective action. This pilot study was expanded to the 1964 Williams building on May 27. Additional confirmation samples will be collected the week of May 30 to document the effectiveness of interim measures. We will keep the Board updated on progress made in correcting this public health hazard.

Harmful Algal Blooms Workshop (Karen Taberski, Carrie Austin, Alexandra Grant)

Water Board staff from the Planning Division convened a workshop on May 9 to address the State and Region's awareness of the increase of cyanobacteria in harmful algal blooms (CyanoHABs). The workshop was an outgrowth of Karen Taberski's information presentation at the January Board meeting. The East Bay Regional Park District supported the workshop by hosting the event at its Trudeau Center in Oakland.

Over 60 stakeholders and representatives from a wide array of agencies such as park districts, county environmental health departments, and water districts came together to discuss regional needs and goals, regional coordination and communication, and necessary next steps for monitoring, minimizing, and managing CyanoHABs. Speakers for the event included representatives of the U.S. EPA, California Department of Public Health, State Water Board, San Francisco Estuary Institute (SFEI), and East Bay Regional Park District. Bruce Wolfe provided an introduction to the workshop and made a call to action to workshop attendees, stating that we would rather plan our response to these events in advance than be in a reactive mode when they occur.

The State and Regional Water Boards and the California CyanoHAB Network (CCHAB) have been developing resources to help lake managers and environmental health departments address

the risks posed by CyanoHABs. Some of these resources include: a decision tree for sampling, monitoring, and posting; standard operating procedures for sampling and analyzing samples; laboratory analytical resources; trainings; and a biweekly newsletter. An important goal of the workshop was to improve communications between lake managers and the Water Board when events do occur.

Additionally, the Water Boards have contracted with SFEI to download and analyze satellite imagery for large lakes statewide. We are eagerly anticipating this system to come online this fall. Participants at the workshop discussed how these resources could be best utilized and improved upon. The turnout and participation at this workshop demonstrated a robust commitment by local agencies to work together develop a regional strategy for CyanoHABs.

In-house Training

Our May training was offsite and looked at our water quality protection and restoration activities at the Presidio in San Francisco. We saw the results of site cleanup and habitat restoration at Mountain Lake, stormwater controls and pathogen TMDL implementation at Crissy Field, and stream restoration at Tennessee Hollow. We have no in-house training scheduled in June. Brownbag seminars included a May 17 session on a new in-situ groundwater cleanup method that uses liquid activated carbon to treat chlorinated solvents and petroleum.

Staff Presentations

Nicole Fry and Ross Steenson of our staff presented at a pair of two-day staff seminars – on April 27-28 in Riverside and on May 2-3 in Sacramento - about vapor intrusion. Vapor intrusion is the migration of volatile chemicals (such as the dry cleaning solvent perchlorethylene) from soil or groundwater into occupied buildings. The seminars were held to inform cleanup staff at the nine regions about recent developments on this topic. Attendees heard a full range of vapor intrusion topics: human health risks; how we set screening levels in indoor air, soil vapor, and groundwater; guidance for assessing and mitigating vapor intrusion; and how we communicate vapor intrusion risk to the potentially-affected public. Nicole's presentation focused on human health risk and our Environmental Screening Levels for vapor intrusion; Ross' presentation focused on site-specific screening levels and reviewing site-specific vapor intrusion models. About 150 State and Regional Water Board staff attended the two sessions, including 20 staff from our office who attended the Sacramento session.

Carrie Austin, an engineer in the Planning Division, was invited to speak on mercury control actions at the National Conference on Ecosystem Restoration. Her April 19 TED-style talk was well received. Carrie's talk was linked to her activities implementing mercury TMDLs in our region and the development of a [Statewide Water Quality Control Program](#) to address mercury contamination in reservoirs. The mercury control program is anticipated to address mercury-impaired reservoirs statewide, including 11 reservoirs in our Region.

On May 16, Adriana Constantinescu, an Engineering Geologist in the Groundwater Protection Division, presented an overview of both the Air Force's Environmental Restoration Program and the Air Force's regulatory role at the monthly Travis Regional Armed Forces Committee (TR AFC) meeting. TR AFC is an organization formed 17 years ago under the auspices of the Solano County, Fairfield-Suisun, and Vacaville Chambers of Commerce. It is the mission of TR AFC to

maintain liaison with the personnel at Travis Air Force Base and to promote the mission of the base to the community.

The meeting was well attended and the presentation was well received by 75 participants, including the Base's three commanders from the 60th Air Mobility Wing, the 349th Air Mobility Wing, and the 621st Contingency Response Group (Col. Maddox, Col. Williams, and Col. Meyer, respectively). City of Fairfield Mayor Harry Price, County Supervisor Michael Reagan, and Fairfield-Suisun Chamber of Commerce President Debi Tavey were also present.

Brian Thompson and Ben Martin of the NPDES Wastewater Division attended the Palomares Elementary School's 10th Annual Watershed and Science Expo on May 20. The Castro Valley Unified School District and the Alameda County Clean Water Program fund this Expo, with a variety of organizations and agencies volunteering to host exhibits focused around watershed science. Over 1,000 third grade students from 12 schools, including six Title I schools, participate in this event each year.

There were two exhibits representing the Water Board. Students participated in the water reuse and stormwater pollution exhibit by adding "pollutants" to a model of a shopping center (dyed water, confetti, and vegetable oil), seeing how sprinkled water washed pollution into a model of the Bay, and learning how rain barrels and low impact development (parking lot landscaping) can help with water conservation and Bay protection. Students also participated in a Palomares Creek assessment exhibit by following an exercise similar to the bioassessments performed as part of the Board's Surface Water Ambient Monitoring Program. Students assigned scores for physical characteristics of the riparian corridor and habitat quality; compared measurements of temperature, pH, dissolved oxygen, and turbidity to suitable parameters for fish populations; and looked under rocks to assess the population of "bugs" and "critters" (benthic macroinvertebrates).

401 Water Quality Certification Applications Received (Keith Lichten)

The table below lists those applications received for Clean Water Act section 401 water quality certification from April 23 through May 20. A check mark in the right-hand column indicates a project with work that may be in BCDC jurisdiction.

Project Name	City/Location	County	May have BCDC Jurisdiction
San Lorenzo Creek – remediation and bank stabilization	Castro Valley	Alameda	
Glen Echo Creek – bank stabilization at Klein property	Oakland	Alameda	
UP Railroad Martinez Subdivision - bridge replacement	Hercules	Contra Costa	✓
Moraga landslide repair	Moraga	Contra Costa	
Marin Municipal Water District – North Marin line stabilization	Lagunitas	Marin	
Simmons Lane wall repair	Novato	Marin	
Redwood Creek – bank stabilization at Hendry Ranch	Napa	Napa	

Project Name	City/Location	County	May have BCDC Jurisdiction
India Basin – sediment and soil characterization	San Francisco	San Francisco	✓
Bear Gulch upper diversion fish passage	Woodside	San Mateo	
Calero County Park – pond and wetland restoration	San Jose	Santa Clara	
Alviso Pump Station – pumping rate and outfall expansion	San Jose	Santa Clara	✓
Bay Area Pipeline – Mallard Farms pipeline replacement	Suisun Marsh	Solano	✓
Vallejo Marina dredging project	Vallejo	Solano	✓

Enforcement Actions Proposed and Final (Lila Tang)

The following tables show recent administrative civil liability complaints, proposed settlements, and final actions. There are also two complaints on which Board staff and the dischargers are in settlement discussions. All complaints and proposed actions and settlements are available at http://www.waterboards.ca.gov/sanfranciscobay/public_notices/pending_enforcement.shtml.

New Complaint			
This complaint was recently opened for public comment:			
Discharger	Violation(s)	Penalty Proposed	Comment Deadline
John D. Sweeney and Point Buckler Club, LLC, at Point Buckler Island in Suisun Marsh	Unauthorized discharge of fill to waters of the State and U.S.	\$4,600,000 ¹	June 16, 2016

¹ Proposed action includes a Tentative Cleanup and Abatement Order; both were initially scheduled for Board hearing on August 10, 2016, but the discharger has a pending request to reschedule the hearing.

Proposed Settlement			
The following is noticed for public comment. If no significant comment is received by the deadline, the Executive Officer will sign an order implementing the settlement.			
Discharger	Violation(s)	Penalty Proposed	Comment Deadline
East Bay Municipal Utility District, San Pablo Water Treatment Plant, in Kensington	Discharge limit exceedances.	\$9,000 ²	June 17, 2016

² Includes 50 percent to supplement RMP³ studies.

Final Actions			
On behalf of the Board, the Executive Officer approved the following:			
Discharger	Violation(s)	Penalty Imposed	Supplemental Environmental Project
City of Richmond, Groundwater Treatment System at Point Molate, in Richmond	Discharge limit exceedances.	\$15,000	\$7,500 to RMP ³
Vallejo Sanitation and Flood Control District, Wastewater Treatment Plant, in Vallejo	Discharge limit exceedance.	\$3,000	\$1,500 to RMP ³

³ RMP is the San Francisco Bay Regional Monitoring Program managed by the San Francisco Estuary Institute to collect water quality information in support of management decisions to restore and protect beneficial uses of the region's waters.

The State Board's Office of Enforcement includes a statewide summary of penalty enforcement in its Executive Director Report at http://www.waterboards.ca.gov/board_info/eo_rpts.shtml.