

**STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

MEETING DATE: October 9, 2019

ITEM: 4  
SUBJECT: **EXECUTIVE OFFICER'S REPORT**

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## **Partnerships Create Pesticides Success Stories – (James Parrish)**

U.S. EPA regularly reviews all registered pesticides to ensure their uses are protective of human health and the environment. These registration reviews are driven by the ever-evolving science that informs U.S. EPA's understanding of risks from pesticides applications. While the Federal Insecticide, Fungicide, and Rodenticide Act mandates these registration reviews, it does not require U.S. EPA to ensure compliance with Clean Water Act standards. Urban runoff<sup>1</sup> is the main pathway of pesticides entering surface waters, but pesticides can also enter surface waters through municipal wastewater discharges. Therefore, on par with implementing our TMDL for Diazinon and Pesticide-Related Toxicity in Urban Creeks from urban runoff, we work with other agencies to track U.S. EPA pesticides registration activities and collaborate with U.S. EPA to ensure that registration decisions are well-informed and protective of water quality on all fronts — including municipal wastewater discharges.

To keep U.S. EPA informed about how pesticides affect water quality, we regularly submit comments on proposed pesticides regulations. While U.S. EPA weighs a number of ecological and human health criteria against the benefits pesticides provide, its risk assessments tend to prioritize human health. Thus, U.S. EPA can underestimate municipal wastewater as a source of pesticides pollution in surface waters, as well as the adverse impacts from pesticides on the wastewater treatment process and the associated regulatory burdens on wastewater agencies. For example, when pesticides are registered for uses like pool and spa treatments or pet flea control applications, they are likely to reach sewers (e.g., through draining a pool or washing pets or pet bedding treated with flea control products), where they can pass through treatment plants and be discharged to receiving waters. Furthermore, pesticides in wastewater can disturb or kill the microbes used to treat wastewater and impede wastewater agencies efforts to meet treatment standards. We hope to raise awareness within U.S. EPA's Office of Pesticide Programs that wastewater treatment plants are not designed to remove pesticides.

While often our comments may seem to get little or no U.S. EPA attention, the history of our efforts proves that persistence eventually leads to success. Through recommendations in our comment letters, U.S. EPA recently proposed label language for three types of pool and spa pesticides (lithium hypochlorite, copper compounds, and zinc and zinc salts) to prevent acute aquatic impacts to surface waters when pools and spas are drained. The label language prohibits users from draining pool and spa water to gutters, storm drains, or natural water bodies, and requires users to contact their local wastewater and stormwater authorities for discharge instructions to avoid harming downstream wastewater treatment plants and receiving waters. This groundbreaking precedent allows us to easily refer U.S. EPA to its own standard to mitigate discharges of all pesticide products used in swimming pools and spas.

This success story was not a result of our efforts alone — it was a culmination of a long collaboration with other partners, including the Bay Area Clean Water Agencies, the

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<sup>1</sup> Urban runoff is any water that runs over developed areas, either by stormwater or water waste linked to urbanization (e.g., overwatered lawns).

California Stormwater Quality Association, the California Department of Pesticides Regulation (DPR), private consultants, and others. Together, our shared knowledge, ambition, and collective voices present sound scientific evidence for U.S. EPA to consider in its registration reviews. For instance, in 2016, the Regional Monitoring Program funded a study that found fipronil, an active ingredient in pet flea control products, in effluent from eight Bay Area wastewater treatment plants at levels above U.S. EPA's freshwater chronic benchmark to protect aquatic invertebrates.<sup>2</sup> The following year, DPR published a dog washing study using dogs treated with flea control products containing fipronil that demonstrated how a dog's wash-water can contain fipronil at concentrations more than seven orders of magnitude above U.S. EPA's benchmark.<sup>3</sup> This type of wash-water typically goes down a drain and flows to a wastewater treatment plant, showing U.S. EPA that indoor uses of certain pesticides are a potentially significant source of pesticides toxicity in wastewater, which is then discharged to surface waters. We expect U.S. EPA to release its fipronil registration review for public comment in early 2020. We have already presented these studies to U.S. EPA, and we plan to track U.S. EPA's registration review to evaluate whether it underestimates fipronil's risk to surface water. If it does, we will submit comments encouraging U.S. EPA to update label language on fipronil-based products to minimize their overuse.



Collaboration among interested agencies and stakeholders allows us to collectively convey a unified message to U.S. EPA that pesticides in wastewater is a pathway for toxicity in surface waters. We will continue collaborating with our partners to reinforce this message. With U.S. EPA's recent acceptance of our proposed label language for pool and spa pesticides, we are optimistic that our continued efforts will create more success stories.

**Figure 1: DPR staff lend a hand to wash volunteer dogs. Photos from DPR's poster, "The Washoff Potential of Fipronil from Dogs Treated with Fipronil Pet-Care Products,"2016.**

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<sup>2</sup> Sadaria, A. M., Sutton, R., Moran, K. D., Teerlink, J., Brown, J. V., & Halden, R. U. (2016). Passage of fiproles and imidacloprid from urban pest control uses through wastewater treatment plants in northern California, USA. *Environmental Toxicology and Chemistry*, 36(6), 1473-1482. doi:10.1002/etc.3673

<sup>3</sup> Teerlink, J., Hernandez, J., & Budd, R. (2017). Fipronil washoff to municipal wastewater from dogs treated with spot-on products. *Science of the Total Environment*, 599-600, 960-966. doi:10.1016/j.scitotenv.2017.04.219

### **Finding of Suitability to Transfer Cleanup Parcels at Treasure Island (Katrina Kaiser)**

In September, the Navy issued its eighth Finding of Suitability to Transfer ("FOST 8") for about 25 acres of land at Treasure Island (Figure 2), which is planned for transfer to the City of San Francisco's Treasure Island Development Authority (TIDA). A FOST is the Navy's way of documenting that all necessary cleanup remedies are either completed, or are in place and operating properly and successfully, and that the property is safe for transfer and planned reuse, which includes commercial, residential, and open space.

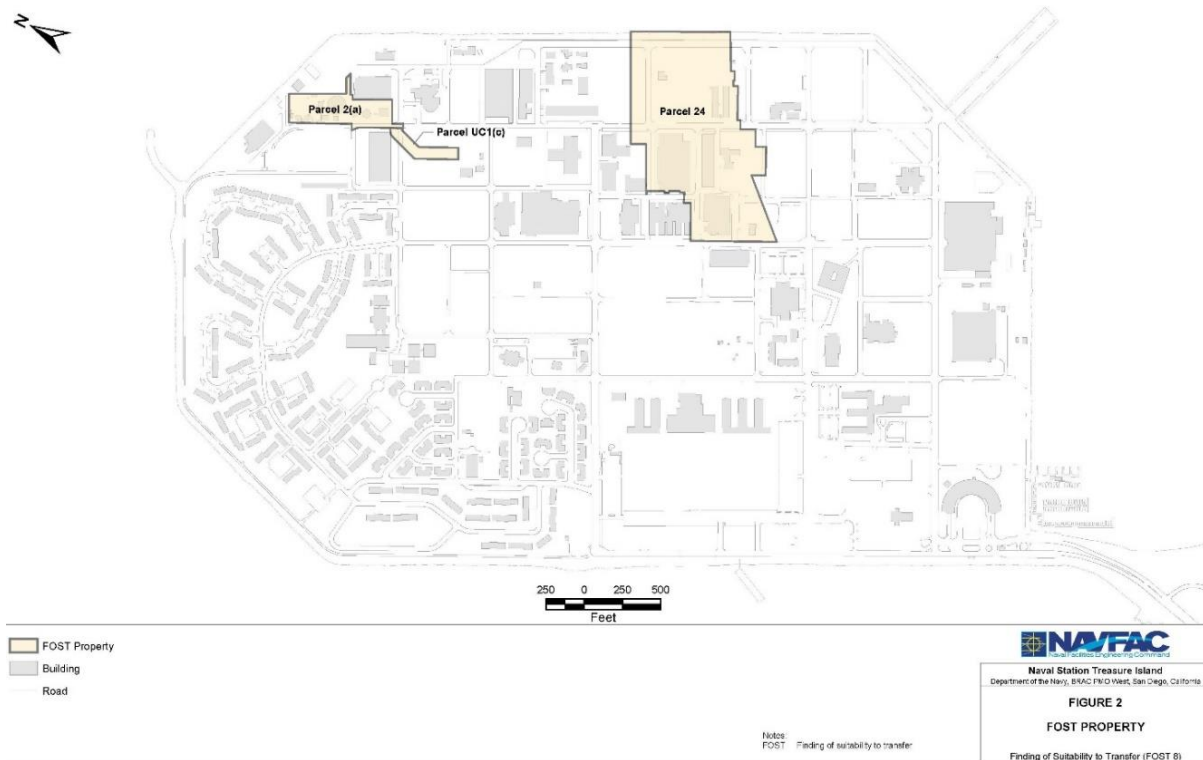
In all, the Navy has now cleaned up about three-quarters of the former Naval Base, including Yerba Buena Island and submerged lands. FOST 8 includes three cleanup areas known as Site 24 (a former drycleaner facility), Parcel 2 (the former wastewater treatment plant) and Utility Corridor 1.

At Site 24, the Navy conducted in-situ bioremediation to treat volatile chlorinated solvents, including perchloroethylene (PCE), that had leaked into groundwater from the former drycleaner operation. The purpose was to abate potential contaminated groundwater discharge threats to San Francisco Bay, and reduce risks and threats associated with potential vapor intrusion into buildings, and contact with contaminated soil and groundwater. Groundwater beneath Treasure Island is not considered a potential source of drinking water due to the thinness of the freshwater lens beneath the island and the potential for seawater intrusion.

Bioremediation at Site 24 has successfully addressed the threat of contaminated groundwater discharge to the Bay. However, contaminant concentrations in soil, groundwater, and soil vapor still exceed remedial goals in some areas. While the onsite buildings are unoccupied, TIDA plans to reuse them for commercial purposes, and may also redevelop portions of the site for other commercial or residential use.

To address these potential future risks at Site 24, the Navy and TIDA will restrict digging below certain depths without special soil and groundwater handling procedures, and require the installation, monitoring, and maintenance of vapor intrusion mitigation systems (VIMS) for occupied buildings.

After transfer, we will continue to co-regulate implementation of the requirements with the Department of Toxic Substances Control, as both agencies are signatories to the 1992 Federal Facilities Site Remediation Agreement for the former Naval Base.



**Figure 2: FOST 8 Parcels.**

### **Mare Island Investigation Area F1 Record of Decision (Elizabeth Wells)**

On August 15, 2019, I signed the Record of Decision (ROD) for the site at Mare Island known as Investigation Area F1. The ROD addresses both CERCLA and petroleum contamination.

Investigation Area F1 is located on the southeastern shore of Mare Island and is 62 acres in size, including about 6.7 acres of wetland (see Figure 3). Before the 1900s, the site was primarily a tidal wetland along the original eastern shoreline of Mare Island. By 1932, most of the area's ground elevation was raised by placement of imported fill. The Navy started using upland areas in Investigation Area F1 as early as 1857. This use continued through 1975 for the manufacturing, storing, and processing of munitions.

For the purpose of the remedial investigation, Investigation Area F1 was subdivided into seven subareas. These include six upland areas that will be used for mixed industrial land use with a limited area of regional park area (Subareas 1 through 5 and 7) and one wetland/open space area (Subarea 6).

The Navy conducted investigations and cleanup actions at Investigation Area F1 beginning in 1983. Chemicals of concern identified in the remedial investigation included metals, volatile organic compounds, semivolatile organic compounds, petroleum hydrocarbons, and polychlorinated biphenyls. In 2007 and 2008, abrasive blast material was removed from the site (Subarea 1) and disposed of offsite. Based on further investigation activities and human health and ecological risk assessments, additional Subareas (4,5, and 6) were identified as requiring remedial action to be protective of human health and the environment (see Figure 4).



The feasibility study evaluated remedial alternatives for Subareas 4, 5, and 6. The selected remedy includes soil and sediment excavation, offsite disposal, and institutional controls. DTSC and Regional Water Board staff concurred with the Navy's selected remedial alternative.

**Figure 3:**  
**Location of Investigation Area F1.**



**Figure 4: Investigation Area F1 subareas requiring remediation.**

**In-house Training (Carrie Austin)**

We resumed our in-house trainings in September, after taking a break over the summer. The September topic was Project Management and covered defining projects, tools and procedures for project management (such as project charters), how to manage a project team and how to analyze and manage risk. We learned that project management principles and tools apply to all types of assignments at the Water Board. The extent to which the tools need to be applied depends on the scale of the project. We discussed important aspects of project management like effective teamwork and stakeholder engagement which make projects more successful. This training was organized by the Watershed Division (Imtiaz-Ali Kalyan).

**Enforcement Actions (Jessica Watkins and Brian Thompson)**

There were no proposed or settled enforcement actions since September's report.

**401 Water Quality Certification Applications Received (Abigail Smith)**

The table below lists applications received for Clean Water Act section 401 water quality certification from July 18 through August 14, 2019. A check mark in the right-hand column indicates a project that may be in BCDC jurisdiction.

<b>Project Name</b>	<b>City/Location</b>	<b>County</b>	<b>May have BCDC Jurisdiction</b>
SFPUC Ornellas Pond Erosion Control	Fremont	Alameda	
Heron Bay Levee Maintenance, COSL Proj No 2006.0111	San Leandro		✓
Lauterwasser Creek Sediment and Vegetation Removal	Orinda	Contra Costa	
Grayson Creek Outfalls	Pleasant Hill		
Norris Creek between Tareyton Ave and Broadmoor Dr	San Ramon		
Oak Creek at Broadmoor Dr and Belle Meade Dr	San Ramon		
242 Beach Road Dock and Pier Repair	Belvedere	Marin	✓



Triple C Ranch Bridge Riparian Restoration	San Anselmo		
San Francisco Police Dept - Hyde St Harbor Dock Replacement	San Francisco	San Francisco	✓
Port of Redwood City Public Fishing Pier Replacement	Redwood City	San Mateo	✓
Felt Reservoir Dam Construction	Portola Valley	Santa Clara	
SJ-SC Regional Wastewater Facility Headworks Improvements and New Headworks	San Jose		
Saratoga Creek Hazard Tree Removal and Restoration	Saratoga		
Via Regina Road Berm Stabilization	Saratoga		
CMA Boar Basin Maintenance Dredging	Vallejo	Solano	✓
Riverview Apartments Development	Petaluma	Sonoma	