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

STAFF SUMMARY REPORT – Cheryl Prowell
MEETING DATE: August 10, 2016

ITEM: **5**

SUBJECT: **Cleanup Programs – Status Report Including Case Closures**

DISCUSSION: This is a semi-annual status report on the Board's three cleanup programs: the Underground Storage Tank (UST) Cleanup Program, the Site Cleanup Program (SCP), and the Military Cleanup Program (also known as the Department of Defense or "DoD" program). These programs oversee the investigation and cleanup of soil and groundwater pollution. This report summarizes our fiscal year (FY) 2015-16 performance-measure accomplishments and provides updates on key activities in the cleanup programs.

Performance Measures
The Regional Water Boards have been using performance measures for several years to gauge our effectiveness in protecting and restoring water quality. For the cleanup programs, we have two performance measures: number of cases closed and number of cases starting active remediation

Results for the performance measure *Number of Cases Closed* are shown below. This measure indicates the elimination of threats to human health and water quality. We exceeded our FY targets for all three programs. The large number of case closures in the SCP program was a result of screening our inactive cases, which is explained in the discussion of SB445 below.

Cleanup Program	FY 15-16 Cases Closed		
	Target	Actual	% of Target
UST	36	50	139%
SCP	26	91	350%
DoD	40*	49	123%
Total	125	178	175%

*internal target (no statewide target)

Results for the performance measure *Number of Cases Starting Active Remediation* are shown below. This measure indicates the transition from site investigation to actual cleanup, which leads to beneficial uses being restored or protected. We exceeded our targets in the SCP and DoD programs. We were under target for the UST program. Due to the age of our remaining program cases (average is 22 years), fewer cases are starting active cleanup because the majority of our cases are already in or beyond this phase.

Cleanup Program	FY 15-16 Cases Starting Active Remediation		
	Target	Actual	% of Target
UST	12	9	75%
SCP	15	25	167%
DoD	10	17	170%
Total	37	50	135%

UST Program
In February 2016, the State Water Board re-certified six Local Oversight Programs (LOPs) in our region: Alameda, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties. This re-certification allows LOPs to continue overseeing fuel UST cases and will be valid through June 2019. However, we expect the LOPs with smaller caseloads to give up their programs before then and transfer their remaining UST cases to our office (e.g., Solano and Sonoma counties). LOPs oversee about 60% of the open fuel UST cases in our region.

We continued last FY's effort to evaluate fuel UST sites with chlorinated solvent impacts. We oversee 81 such cases. Some solvent impacts are due to onsite waste oil tanks. We are actively following up on 23 of these cases using State Water Board guidance. If we find significant solvent impacts, we will open a new SCP case for the site and require necessary cleanup.

We continued to press UST dischargers to comply with GeoTracker upload requirements. State law has required electronic submittal of information to GeoTracker since 2005. Dischargers first "claim" their site in GeoTracker and then upload reports and data. We decreased our "unclaimed" sites inventory by 50%, issued Water Code section 13267 directives to non-compliance sites, and are now preparing notices of violation for recalcitrant sites. We are also investigating 56 sites with no electronic submittals in the last three years and will follow up as needed.

SCP Program
Starting last July, implementation of Senate Bill 445 (Hill, 2014) has significantly changed the SCP program. SB445 directs that a portion of the State's gasoline-storage tax proceeds be used to remedy non-fuel contamination problems at under-funded sites. The State Water Board has created the Site Cleanup Subaccount for this purpose. Funds in the subaccount can be used in three ways: grants to under-funded sites, contracts for cleanup of "orphan" sites, and Water Board staff oversight.

Grants: Several sites in our region have applied for grant funding. The grants will pay for investigation and cleanup of previously unfunded or under-funded sites. The first grants are anticipated to be awarded later this year. We expect additional funding cycles every 6-12 months.

Contracts: The State Water Board is taking the initial steps to set up area-wide contracts for orphan sites. New contracting requirements have slowed this effort.

Staff oversight: SB445 provided no new staff resources; the Regional Water Boards were required to shift 20% of their SCP cost recovery staff resources over to SB445 work. Each region has defined SB445 projects best suited to its needs. We defined four such projects: 1) screening backlogged SCP cases, 2) identifying and overseeing under-funded dry cleaner spill sites, 3) overseeing inoperative mines, and 4) improving regional groundwater management. Appendix A provides a description of the four projects and our progress to date.

In sum, we have made significant progress on all four projects. However, the 20% shift of resources out of the cost-recovery portion of the SCP program has had consequences. The shift has come at a time when the economic recovery spurred interest in Brownfield redevelopment, creating new cases and increasing activity on our existing SCP caseload. In the short run, we have coped by more explicitly prioritizing our SCP cases to focus our oversight efforts on high-priority cases (see below). We have also spearheaded efforts to restore the regions' SCP cost recovery staff resources to previous levels. That effort was successful, and the FY16-17 budget includes 17 new SCP staff positions statewide; the State Water Board has allocated four of the new positions to our region. We will begin hiring efforts shortly, following internal staff rotations.

SCP case prioritization: In a December, 2015, Board status report[1] we presented a new prioritization system that we are using in the SCP program. The system defines the priority of each SCP case based on a combination of factors, including threat to human health and the environment, discharger capacity (to conduct cleanup), and customer service. It quantifies each factor and relies on GeoTracker for much of the underlying data. In response to Board input, we have made a few changes to the prioritization system. The major changes are:

- If there is a current uncontrolled exposure with the potential to impact human health, the case is automatically given high priority.
- The threat element was separated into three parts: human health, groundwater, and surface water. The prior system was strongly biased to threats to groundwater. The weighting was adjusted to provide better balance.
- The discharger capacity element was revised and relabeled as "economic considerations." This element now considers the economic impact of

[1] http://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2015/December/7_ssr.pdf

Brownfield redevelopments, the discharger's ability to pay, and "bang for the buck." It no longer considers the discharger's willingness to pay.

- The customer service element was revised to focus on the public, not the regulated community. It considers the level of community involvement for the case as well as whether the case is located in an environmental justice community.

We are using the revised SCP prioritization system going forward on both SCP cost recovery and SB445 (under-funded) sites.

DoD Program

Board staff in the DoD program focuses on overseeing the cleanup of former military facilities and facilitating the transfer of land from DoD to local entities, such as a city or its master developer, for redevelopment or open space. Typically, at the time of land transfer, much of the cleanup we have required has been completed, with the exception of many of the petroleum cleanup sites at each facility that constitute much of the post-transfer cleanup.

After the land transfer, our DoD staff continues to oversee facilities that have remaining cleanup and/or requirements to manage residual contamination. At that time, we stop charging our staff time to the DoD program, enroll the new land owner in the SCP program, and start charging our staff time to that new owner under the SCP program. These facilities are transferred out of the DoD program and moved into the SCP program.

It is vital that we continue to provide oversight of transferred former military facilities to help streamline their redevelopment and restoration in a manner that is protective of human health and the environment. The table in Appendix B depicts where we have provided such oversight and where it is planned in the future.

RECOMMEN-
DATION: This is an information item only and no action is necessary.

File No. 1210.47 (CLP)
Appendix A – SB445 Projects
Appendix B – DoD Facility Transfers for Redevelopment/Reuse

Appendix A

SB445 Projects

SB445 Projects in Region 2

At our region, we have shifted portions of 15 staff members' time to work on four SB445 projects: 1) screening backlogged SCP cases, 2) overseeing under-funded dry cleaner spill sites, 3) overseeing inoperative mines, and 4) improving regional groundwater management. Below is an update on the projects.

Screening Backlogged SCP Cases: Our region started FY15-16 with a backlog of 227 inactive SCP cases. With the assistance of State Board staff, we identified additional cases that had never been officially closed or entered into GeoTracker, causing the number of backlogged cases to grow. We screened our entire backlog using the following steps: 1) prioritizing the cases for SB445 grant funding or enforcement action, 2) determining the resources and next steps needed to move the cases toward closure, and 3) updating our GeoTracker database with all currently available case information. The GeoTracker updating activities have resulted in identifying and counting over 40 case closures this FY for SCP cases that were actually closed in prior FYs; this is the main reason we are far ahead of the FY 15-16 performance measure for cases closed in the SCP program. This screening has identified a few sites that warrant more aggressive management – and we are activating those cases – but also verified that the remaining backlog generally consists of lower-priority cases.

At the start of FY16-17, we have 305 backlogged cases and 532 active cases, for a total of 933 open cases in the SCP program. Now that the screening is complete, we will focus this FY on overseeing the highest priority of the unfunded cases.

Dry Cleaner Spill Sites: The purpose of this project is to proactively identify current and past dry cleaner locations where there have been solvent releases and where those releases pose significant threats to major groundwater resources in our region. We have focused our initial efforts in two key groundwater basins: Santa Clara Valley and Livermore Valley. During FY15-16, we completed the following accomplishments:

- Conducted 160 searches for responsible parties
- Sent out 120 site history requirement letters
- Received 80 site history reports
- Responded to 20 site history reports
- Prepared model letters for each regulatory step to make our process more efficient
- Prepared a "frequently asked questions" document to accompany our site history requirement letters

Our next steps include the following tasks:

- Respond to all remaining site history reports
- Require source investigation workplans and reports where appropriate
- Follow up with those potential responsible parties who have yet to respond to our site history requirement letters
- Enroll sites in cost recovery or refer them to SB445 grant funding as appropriate

Our biggest challenge has been working with smaller "mom-and-pop" responsible parties who are not familiar with our regulatory process and who may fear the financial ramifications of investigating and cleaning up a site. We will continue to take extra time to educate and assist these responsible parties.

Mines: In our region, approximately 50 mines were abandoned after mineral extraction and processing, leaving behind a legacy of contamination that threatens the environment and human health. Our mercury mines are of particular concern because discharges of mercury to water can lead to high concentrations of the neurotoxin methylmercury in fish and shellfish, which are consumed by people and wildlife, a widespread problem in the San Francisco Bay and its tributaries for which fish consumption advisories have been issued. We have successfully cleaned up some of our worst polluting mines, including two large mercury mines, but the remaining mines need to be evaluated for their potential to impact water quality. A portion of SB445 funds is being used to accomplish this and to collect the information necessary to enroll mines that require cleanup into funded regulatory programs.

As detailed in the March 2016 Mines Cleanup Program Status Update[2], staff has collated existing information on our mines, is developing a prioritization scheme, and is conducting site characterization using available data and GIS. This strategy was developed after coordinating with federal and State regulatory agencies who manage mines through the California Abandoned Mine Lands Agency Group – and after reviewing existing prioritization and site characterization approaches. In addition, we have submitted the necessary procurement information to purchase a mobile x-ray fluorescence spectrometer, used to identify metal concentrations in soil. This instrument will permit onsite identification of contaminated mining waste that could discharge to surface water. Data collected by this instrument can also be used as evidence to require investigations and cleanups, to enroll sites in funded regulatory programs, including the SCP program, for which staff costs can be recovered. During FY16-17, we anticipate completing GIS characterization, prioritizing the mines, and performing inspection and preliminary site characterizations of those mines with the highest potential impacts.

Sustainable Groundwater Management: Engaging the local agency planning process to identify baseline conditions, drinking water well impacts, and localized salt and nutrient areas of concern is essential to protecting and restoring groundwater beneficial uses. This project focuses on the nexus between the management of groundwater resources on a basin scale and the protection of water quality at individual sites and water supply wells. For non-point source impacts, basin-scale groundwater management plans and salt and nutrient management plans often provide the best summary of available information. At the same time, they include plans for future groundwater resource development, which can affect our cleanup and restoration decisions, particularly those involving cleanup timeframes. The goal is to identify baseline groundwater conditions, share information amongst our regulatory programs, and make recommendations for selective use of our regulatory tools to control discharges and drive further source identification and abatement.

[2] http://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2016/March/8_ssr.pdf

In the past year our project team has tracked the status of local groundwater management planning efforts in several of the region's 14 priority groundwater basins. We've evaluated salt and nutrient management plans for the Livermore Valley and Santa Clara Valley and are currently reviewing plans for the Niles Cone (near Fremont) and the Napa Valley. A resolution of support for the Livermore Valley plan was brought to you in March 2016, and we anticipate bringing similar resolutions to you in FY16-17.

Evaluating local agency plans is proving to be extremely valuable as it is informing our priority-setting and decision-making regarding site cleanups, source investigations, recycled water projects, and local agency management plans for onsite wastewater systems. For example, in the Livermore Valley and the Coyote Valley near Morgan Hill, we have been able to identify areas of concern where discharges from current and past agricultural land uses and septic systems have resulted in elevated levels of nutrients in groundwater. For these areas, the team is working with local water districts to develop a path forward for investigating and controlling contributing discharges.

The team has also coordinated with the State Board's Division of Drinking Water to receive real-time notification of permitted water supply well contaminant impacts. We're using tools such as well completion logs and State Board's GeoTracker GAMA database to develop and prioritize source investigation strategies. While the team initially focused on our region's high-yield groundwater basins, we now hope to turn attention toward vulnerable, lower-yield basins with important community reliance.

Appendix B

DoD Facility Transfers for Redevelopment/Reuse

DoD Facility Transfers for Redevelopment/Reuse in the San Francisco Bay Region

Existing Transfers	Transferee	Acreage	Transfer Date	Privatized Cleanup Status
Moffett Field Naval Air Station	NASA	2,200	1994	Ongoing
Presidio of San Francisco	National Parks Service	1,491	1994	Completed in 2014
Hamilton Army Air Field	State Lands Commission	929	1995	Completed in 2014
Mare Island Naval Shipyard	State Lands Commission; City of Vallejo	2,824 651	2002	Early Transfer - Ongoing
Point Molate Naval Fuel Depot	City of Richmond	373	2003	Early Transfer - Ongoing
Oakland Army Base	City of Oakland	366	2003	Ongoing
Hamilton Navy Housing	City of Novato	9	2004	Ongoing
Point Molate Naval Fuel Depot	City of Richmond	40	2010	Ongoing
Alameda Naval Air Station (Alameda Point)	City of Alameda	1,480	2013	Ongoing
Alameda Naval Air Station (Alameda Point)	US Dept. of Veterans Affairs	624	2014	Ongoing
Treasure Island Naval Station	City of San Francisco	750	2014	Ongoing
Parks Army Reserve Force Training Area	City of Dublin	21	2014	Ongoing
Hunters Point Naval Shipyard	City of San Francisco	13	2015	Ongoing
Subtotal		**11,771**		
Planned Transfers	**Transferee**	**Acreage**	**Transfer Date**	**Privatized Cleanup Status**
Alameda Naval Air Station	City of Alameda	878	2016	Ongoing
Hunters Point Naval Shipyard	City of San Francisco	845	2016-22	Ongoing
Concord Naval Weapons Station	City of Concord	5,038	2016-22	Not started
Treasure Island Naval Station	City of San Francisco	994	2016-22	Not started
Mare Island Naval Shipyard	City of Vallejo	1,218	2016-22	Not started
Subtotal		**8,973**		
Grand Total		**20,744**		