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

STAFF SUMMARY REPORT – Cheryl Prowell
MEETING DATE: September 13, 2017

ITEM: **6F**

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) 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) 2016-17 performance results 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 show the public what our programs accomplish and whether the environment is improving. For the cleanup programs, we have two performance measures: number of cases closed and number of cases starting remediation. FY 16-17 targets and results are shown below. Trends in our performance targets and results over the last seven years are provided in Appendix A; Board members requested this additional information during the last status report.

The *Number of Cases Closed* performance measure indicates the elimination of threats to human health and water quality. Last FY, we met our targets in the UST and SCP program and were somewhat below our internal target in the DoD program. However, the DoD target has been exceeded during the past six years. The target will be lowered in the future as former military bases transfer land to private entities and are overseen under the SCP program.

Cleanup Program	FY 16-17 Cases Closed		
	Target	Actual	% of Target
UST	35	37	106%
SCP	35	42	120%
DoD	40*	31	78%
Total	110	110	100%

*internal target (no statewide target)

The *Number of Cases Starting Active Remediation* performance measure indicates the transition from site investigation to actual cleanup, which leads to beneficial uses being restored or protected. Last FY, the UST program was

slightly below target, the SCP program significantly exceeded its target, and the DoD program was substantially below target. As military base cleanups mature and reach completion, we expect to see a continued decline in cases starting active remediation in the DoD program. During this fiscal year, we continued the trend of closing more cases than we opened in the UST program. As the number of cases in the UST program decreases, we will have fewer cases that need to start active remediation in a given year.

Cleanup Program	FY 16-17 Cases Starting Active Remediation		
	Target	Actual	% of Target
UST	10	8	80%
SCP	20	30	150%
DoD	10	5	50%
Total	40	43	108%

SCP Program

Last year, implementation of SB445 fundamentally changed the SCP program by diverting 20% of our SCP resources to work on previously unfunded cases and related projects. In response, we developed a prioritization tool to manage our increased SCP workload. The prioritization system developed last year continues to guide our program. This year we revised it again to increase the priority of cases with concentrations of a particular solvent (trichloroethene or TCE) that has the potential to cause short-term health impacts to the developing fetus.

We are continuing to adapt to these changes and integrate the new funding source into our program. We have hired two new staff in the SCP program as a result of a budget change proposal effective FY 16-17 and are in the process of hiring two more. Progress on the projects funded through SB445's Site Cleanup Subaccount program is discussed in Appendix B.

UST Program

The UST Program receives a portion of its funding from U.S. EPA in the form of an annual grant. While there is some uncertainty in U.S. EPA's future funding, we expect identical grant funding in FY 17-18 to that received in FY 16-17. Additionally, U.S. EPA provides contractor assistance for stalled UST cases to move them into the next regulatory phase.

We continued last FY's effort to evaluate opened fuel UST and waste oil tank sites that also have chlorinated solvent impacts. We oversee 41 such cases including 12 cases where the solvent impacts may also be coming from offsite sources. We are actively following up on these cases, requiring sampling of waste oil constituents according to 2015 State Board guidance. If we find significant solvent impacts, we will open a new SCP case for the site and require necessary investigation and cleanup.

We continued to press UST dischargers to comply with GeoTracker upload requirements. State law has required electronic submittal of information to the State's GeoTracker database since 2005. Dischargers first "claim" their site in GeoTracker and then upload reports and data. We decreased our "unclaimed" sites inventory by 50% over the last two years, by issuing section 13267 directives to non-compliant sites. We are now preparing notices of violation for recalcitrant sites. We are also investigating 49 sites with no electronic submittals in the last three years and will follow up as needed.

DoD Program

Board staff in the DoD program focus 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, much of the cleanup has been completed at the time of land transfer. One exception is DoD petroleum sites, which may require continued oversight by our DoD staff after transfer and through redevelopment. After the land transfer, we stop charging our staff time to the DoD program and enroll the remaining cleanup sites and new land owner in the SCP cost recovery 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.

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

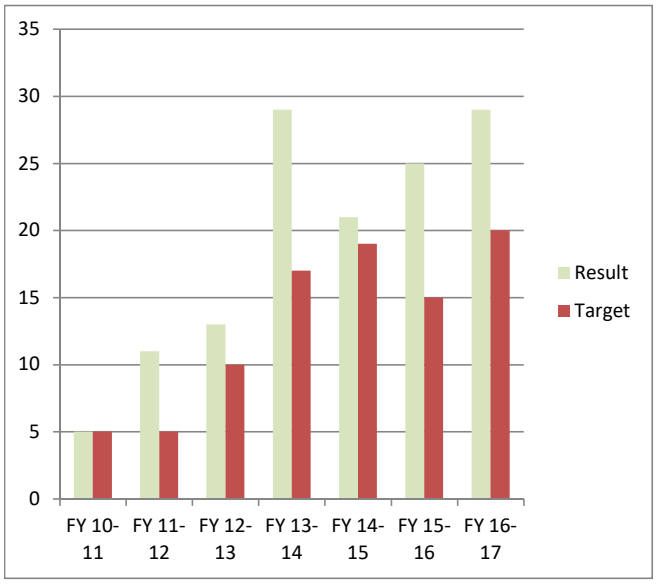
File No. 1210.47 (CLP)
Appendix A – Trends in Performance Targets and Results
Appendix B – Site Cleanup Subaccount Projects

Appendix A

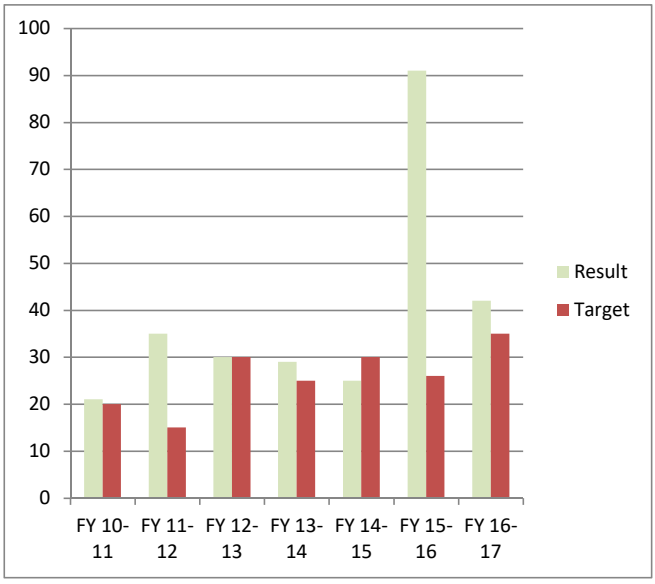
Trends in Performance Targets and Results

Comparison of Performance Measures
Performance Targets and Results for two performance measures used for the three cleanup programs

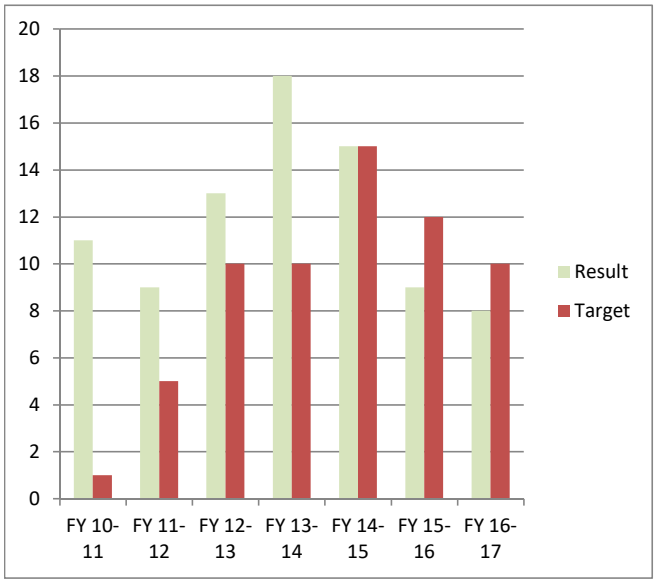
SCP - Cases Starting Remediation



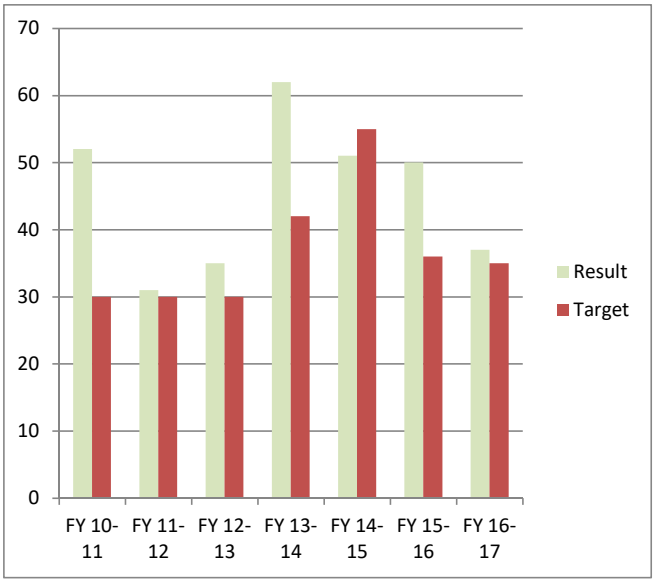
SCP - Case Closures



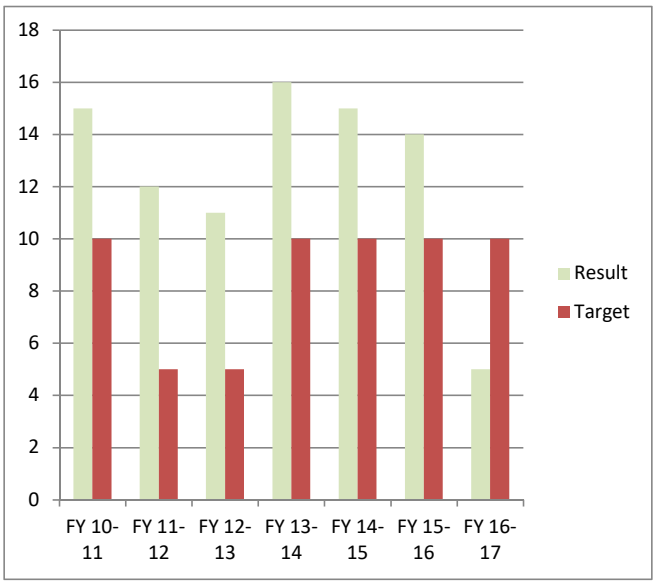
UST - Cases Starting Remediation



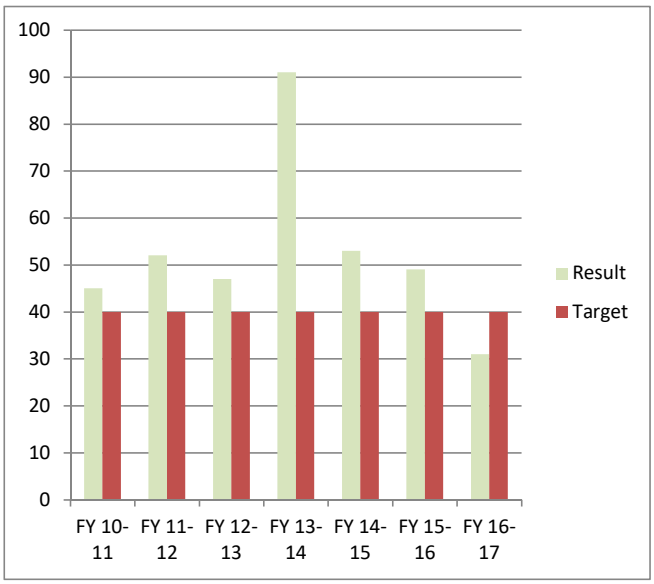
UST - Case Closures



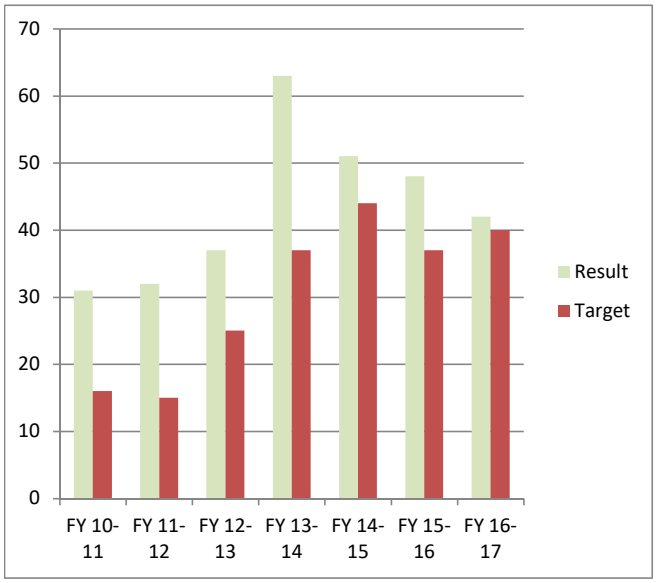
DOD - Cases Starting Remediation



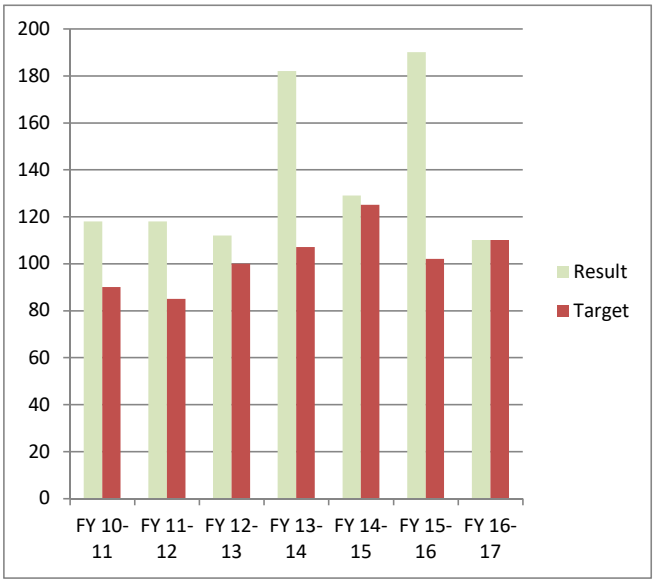
DOD - Case Closures



Combined - Cases Starting Remediation



Combined - Case Closures



Appendix B

SB445 Site Cleanup Subaccount Projects

SB445 Site Cleanup Subaccount Projects

Our Water Board receives 2.8 positions funded through the SB445 Site Cleanup Subaccount. We used this funding in FY 16-17 to continue work on four projects described below: unfunded cases, dry cleaner spill sites, unremediated mines, and sustainable groundwater management.

Unfunded Cases – The project initially focused on screening our SCP program backlog. With that task completed in FY 15-16, the focus in FY 16-17 has been on overseeing high-priority unassigned cases as summarized below. Case closures are the project's highlight for this fiscal year. These case closures account for about one third of the closures for the SCP program as a whole this fiscal year.

- Provided oversight for 35 unfunded cases;
- Closed 10 cases (1 additional closure recorded from 1996);
- Made 2 non-case determinations;
- Brought 1 case into cost recovery;
- Transferred 1 case to county oversight; and
- Encouraged unfunded sites to apply for SB445 Site Cleanup Subaccount Grant funding; one of our sites received a grant award (P&K Cleaners), with four other applications submitted and under review.

In FY 17-18, we will continue to oversee the highest priority unfunded cases. For each, our goal is to bring them into our cost recovery oversight program, encourage the responsible parties to apply for Site Cleanup Subaccount Grant funding, and/or review the cases for possible low threat closure.

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. We have focused our initial efforts in two key groundwater basins: the Santa Clara and Livermore valleys. During this FY, we accomplished the following:

- Used the following tools in searching for potentially responsible parties (PRPs):
    - County assessor websites to identify site owners for potential dry cleaner sites
    - Historic aerial photos to research building locations from past decades
    - Historic fire insurance maps to research dry cleaner operations from past decades
    - Westlaw, a contract property and property-owner search tool, to research site-specific issues
    - Google searches to research phone numbers and addresses of PRPs;
- Issued 40 letters as we continued to require and respond to site history reports, investigation workplans, and investigation reports;
- Based on results from the investigation reports, enrolled four polluted sites into our cost recovery program and shifted these four sites out of the SB445 Dry Cleaner Spill Sites project;
- Closed out four cases where releases were not found.

Unremediated Mines – There are 38 known inoperative mines in our Region that pose a potential threat to water quality and have not been sufficiently characterized previously due to lack of funding. SB445 Site Cleanup Subaccount funds are being used to collect the data necessary to evaluate potential or existing water quality impacts prior to identification and enrollment of responsible parties into the SCP program. In FY 16-17, staff researched and developed an approach to prioritize these mines for inspection and cleanup and to most efficiently utilize limited staff time and resources. The approach consists of ranking the mines for potential threat utilizing existing

sources of data on mine/mining waste characteristics and surface water connectivity and impairment. We use GIS databases at USGS, U.S. EPA, California Department of Conservation, and our offices as well as virtual aerial inspection of sites using Google Earth.

We had the following specific accomplishments in FY 16-17:

- Drafted a Quality Assurance Project Plan with Data Quality Objectives for the project;
- Developed a Mines Summary Database to summarize and track all sources of data used in the inspection prioritization effort and to track status of investigations for each mine;
- Drafted a general inspection safety plan;
- Drafted a Standard Operating Procedure for our X-Ray Fluorescence Spectrometer that will be used to analyze metals and metalloids in mining wastes/soils/sediments;
- Performed final satellite reconnaissance with all previous mine case managers; and
- Ranked the 38 known mines to prioritize inspections (information on previously unknown mines is being collected for future analysis).

After we develop site-specific inspection and safety plans for the highest priority mines and arrange site access, inspections will be performed in FY 17-18 to collect data necessary to prioritize mines for regulatory action. GeoTracker case files will be created to document progress, including case closure for mines identified in this effort that do not pose a threat to water quality.

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. The goal of this project 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 groundwater pollutant source identification and abatement.

In FY 16-17, the internal staff team continued preparing "quick look" tables for our 14 priority groundwater basins to summarize water quality and prioritize basins that may need salt and nutrient management plans (SNMPs) or further source investigations. To date, we have evaluated SNMPs for Livermore Valley and Santa Clara Valley. Resolutions of support for the Livermore Valley and Santa Clara Valley SNMPs were brought to the Board in March and November 2016, respectively. In FY 17-18, we will complete evaluation of SNMPs for the Niles Cone (near Fremont) and the Napa Valley.

The team is also developing and prioritizing source-investigation strategies to address impacted supply wells. We are coordinating with the State Water Board's Division of Drinking Water to receive real-time notification of supply well contaminant impacts. We are also using the State Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) program to view and evaluate data from drinking water supply wells.

Future Challenges – As the number of cases receiving SB445 Site Cleanup Subaccount grants and contractor services grows, we will need to use an increasing portion of our time to oversee those cases. This will reduce the amount of funding we can devote to these four projects. We will explore alternative ways to continue these projects and will brief you on our findings.