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

STAFF SUMMARY REPORT – John Wolfenden
MEETING DATE: February 14, 2018

ITEM: **5E**

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

DISCUSSION: This is a semiannual 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 mid-fiscal year (FY) 2017-18 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 restoring and protecting water quality. For the cleanup programs, we have two 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 are on track to exceed our target in the SCP program but are below benchmarks in the UST and DOD programs. Underperformance in the UST program is caused by several factors including: discharger recalcitrance, staff focus on high-priority SCP cases, and staff changes. We will be focusing more attention on UST case closures in the remainder of the FY.

Cleanup Program	FY 17-18 Cases Closed		
	Target	Actual*	% of Target
UST	35	9	26%
SCP	35	25	71%
DoD**	15	40	38%
Total	110	49	44%

*As of December 31, 2017
**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 the elimination of threats to

human health and water quality. We are on track to exceed our targets in the UST and SCP programs and are slightly below the benchmark in the DOD program.

Cleanup Program	FY 17-18 Cases Starting Active Remediation		
	Target	Actual*	% of Target
UST	5	3	60%
SCP	20	15	75%
DoD	10	4	40%
Total	35	22	63%

*As of December 31, 2017

Figure 1 in Appendix A shows how our targets and results have tracked over time in the three cleanup programs. To put this in perspective, Figure 2 in Appendix A shows the total number of active, inactive, and closed cases in each program over time.

UST Program

We continue to work with our local-agency partners, State Water Board staff, and U.S. EPA to move fuel UST cases toward cleanup and case closure, before the "window" for State funding closes in 2025. Below are updates on two efforts toward that goal:

The Expedited Claim Account Program (or ECAP) is intended to resolve different interests at specific sites. It was established in 2015 and focuses on UST sites that are nearing the $1.5 million cap on fund reimbursement. It increases coordination between regulators, claimants, consultants, and the UST cleanup fund. Statewide, about 120 fuel UST cases are enrolled in ECAP, including 7 from our region. The initial results have been positive: faster processing of claims by the UST cleanup fund, fewer ineligible costs, and cost savings to the State.

The "stalled cases" project is intended to identify fuel UST cases that are not making progress toward necessary cleanup and closure – and find solutions. Last year, State Water Board staff asked regulators to assess their open sites to identify stalled cases and identify the reasons for the situation (such as recalcitrant dischargers or offsite access problems). In our region, we identified about 60 stalled cases, or 20% of our open cases. This year, State Water Board staff, in cooperation with its consultant, Redhorse, and U.S. EPA staff will meet with each regulator to discuss how best to get the stalled cases moving again.

We are preparing to accept additional cases from Local Oversight Program agencies with fewer than 70 active cases. We expect Solano County and Sonoma County to drop out of the Local Oversight Program in FY 2019-20. We also expect a temporary influx of new fuel UST cases as tank owners comply with State requirements to phase out single-wall tanks. Owners can

either properly close the tank or upgrade it to meet the double-wall standards by the 2025 deadline. We have over 750 single-wall tanks in our region, and we expect this effort to generate a number of new leaking tank cases.

SCP Program
The SCP Program continues to benefit from the funding mechanisms provided by the Site Cleanup Subaccount program created by SB445. The Program is on track to significantly exceed both targets and recent performance for both of our performance measures. This is due to both the grant mechanism that has created funding for sites with limited ability to pay and funding the staff time to work on cases without a discharger willing to reimburse us for our oversight time. Appendix B provides details on the work we are doing with SB445 funds in four project areas – unfunded cases, dry cleaner spill sites, abandoned and inactive mines, and sustainable groundwater management – as well as SB445 grants.

DoD Program
Our eight Board staff in the DoD program focus on overseeing cleanup of former military facilities, including those that have been transferred from the DoD to local entities, such as a city or its master developer, for redevelopment or open space. We currently oversee 31 Department of Defense/Energy facilities in our program. These comprise about 400 individual cleanup sites. Since program inception in the mid-1990s, about 900 cleanup sites have been closed.

Typically, much of the cleanup is complete by the time of land transfer. One exception are 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.

At this point in the program lifecycle, the workload consists mainly of the more complex sites with longer cleanup timeframes. Many of these sites are located near a shoreline with contamination in the tidal mixing zone, which makes assessment and cleanup a significant challenge. As a result we anticipate our case closure rate of 40 per year will slow somewhat, and some privatized sites may require orders to compel cleanup.

Vapor Intrusion Guidance
In 2014, Cal/EPA initiated a workgroup to address discrepancies between the Department of Toxic Substances Control (DTSC), and the Water Boards regarding the management of releases of volatile substances with the potential to migrate through the environment into indoor air. Currently, there are several vapor intrusion guidance documents that are used statewide including two primarily used by the State agencies: this Regional Water Board's Environmental Screening Levels and DTSC's 2011 Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air.

Together, staff from our office, the State Water Board, and DTSC have created a consensus approach to the investigation and risk evaluation of vapor intrusion. In summer 2017, the team solicited agency feedback on a draft version of new supplemental guidance. We are currently revising the guidance in response to this feedback and soliciting input from industry and community representatives. The guidance provides a standardized approach for vapor intrusion assessments conducted throughout the State and proposes development of a California vapor intrusion database to further refine the approach. The team intends to post the interim final version of the document this spring and encourage implementation statewide. We will receive public input during the first year of implementation and will revise the guidance as warranted.

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

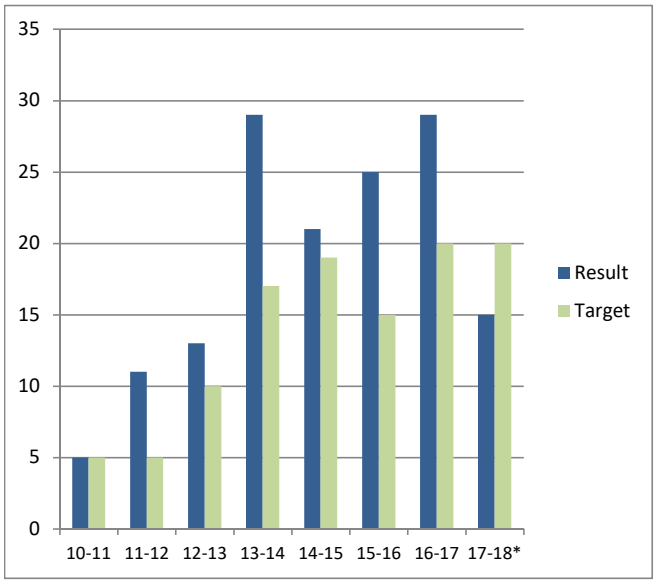
File No. 1210.47 (JDW)
Appendix A – Trends in Performance Targets and Results
Appendix B – Site Cleanup Subaccount Projects

Appendix A

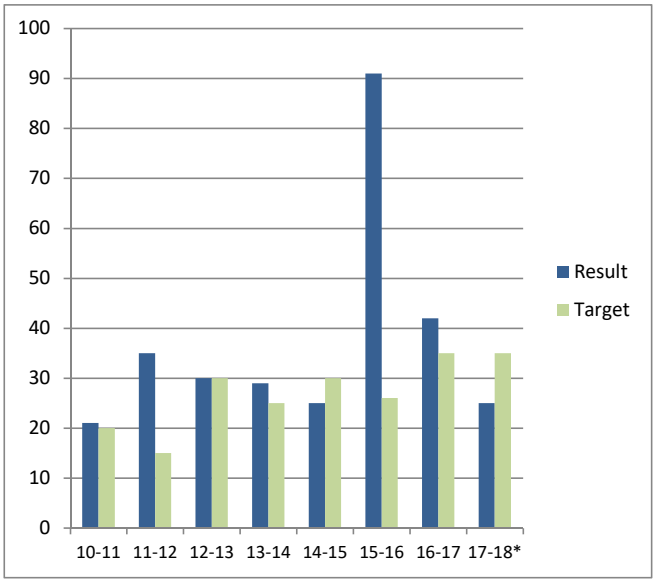
Trends in Performance Targets and Results

Figure 1: Comparison of Performance Measures
Performance Targets and Results for Two Performance Measures Used for the Three Cleanup Programs

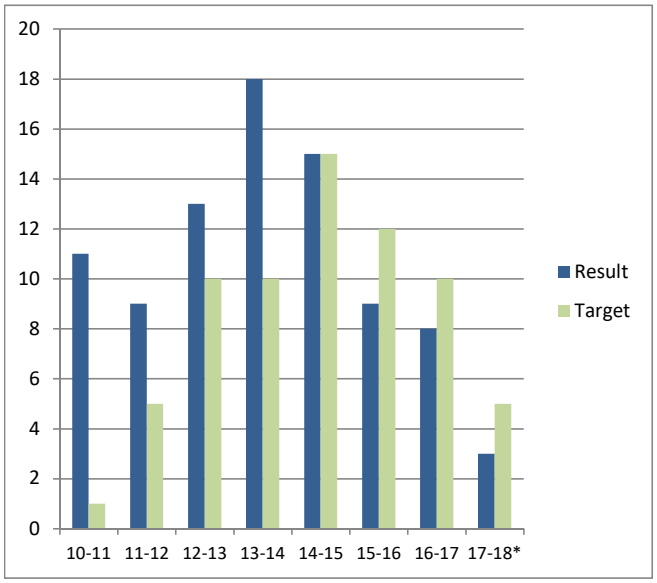
SCP - Cases Starting Remediation



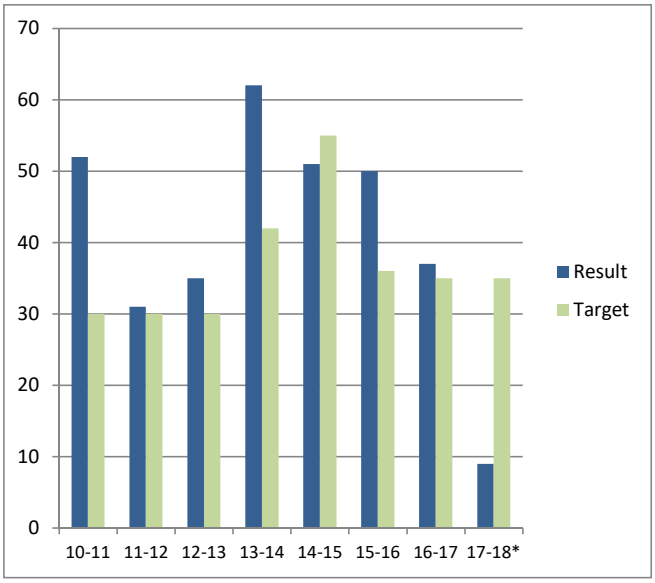
SCP - Case Closures



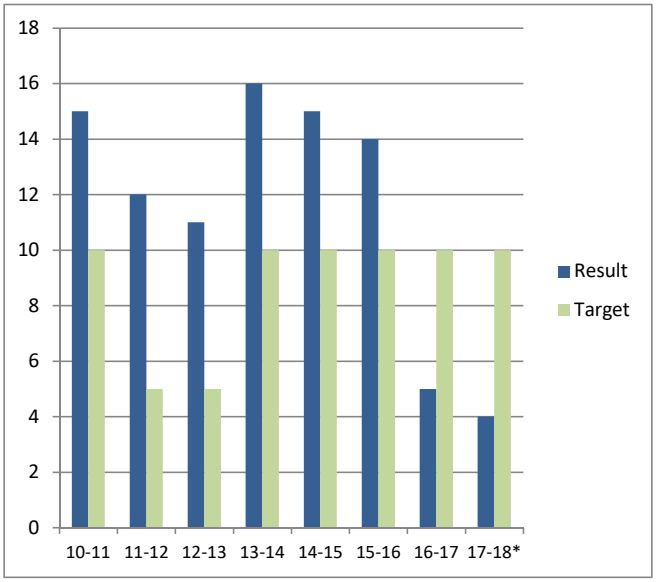
UST - Cases Starting Remediation



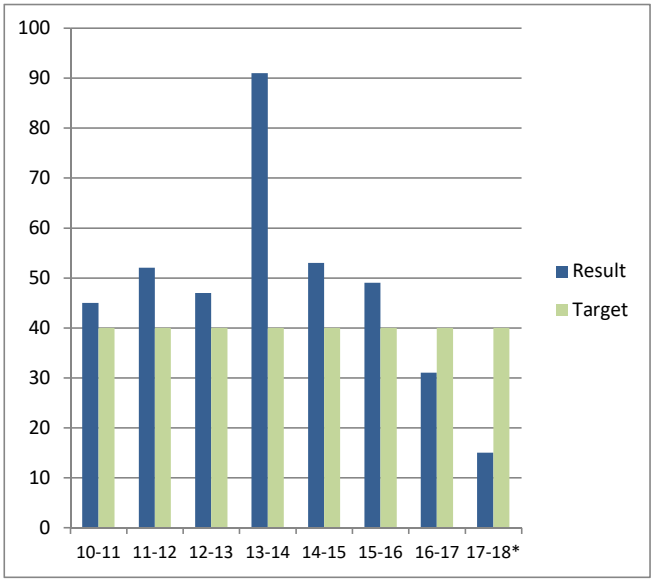
UST - Case Closures



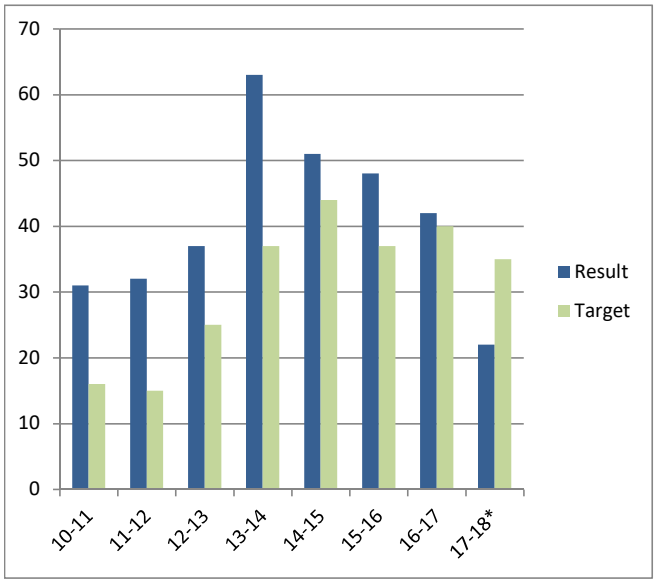
DOD - Cases Starting Remediation



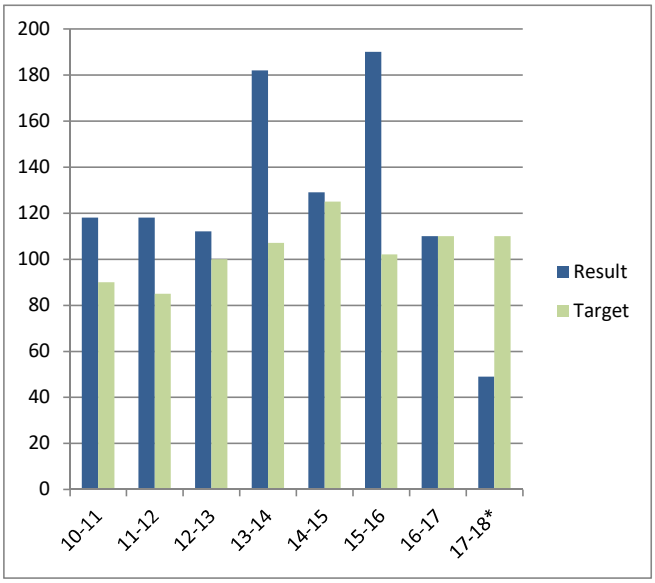
DOD - Case Closures



Combined - Cases Starting Remediation

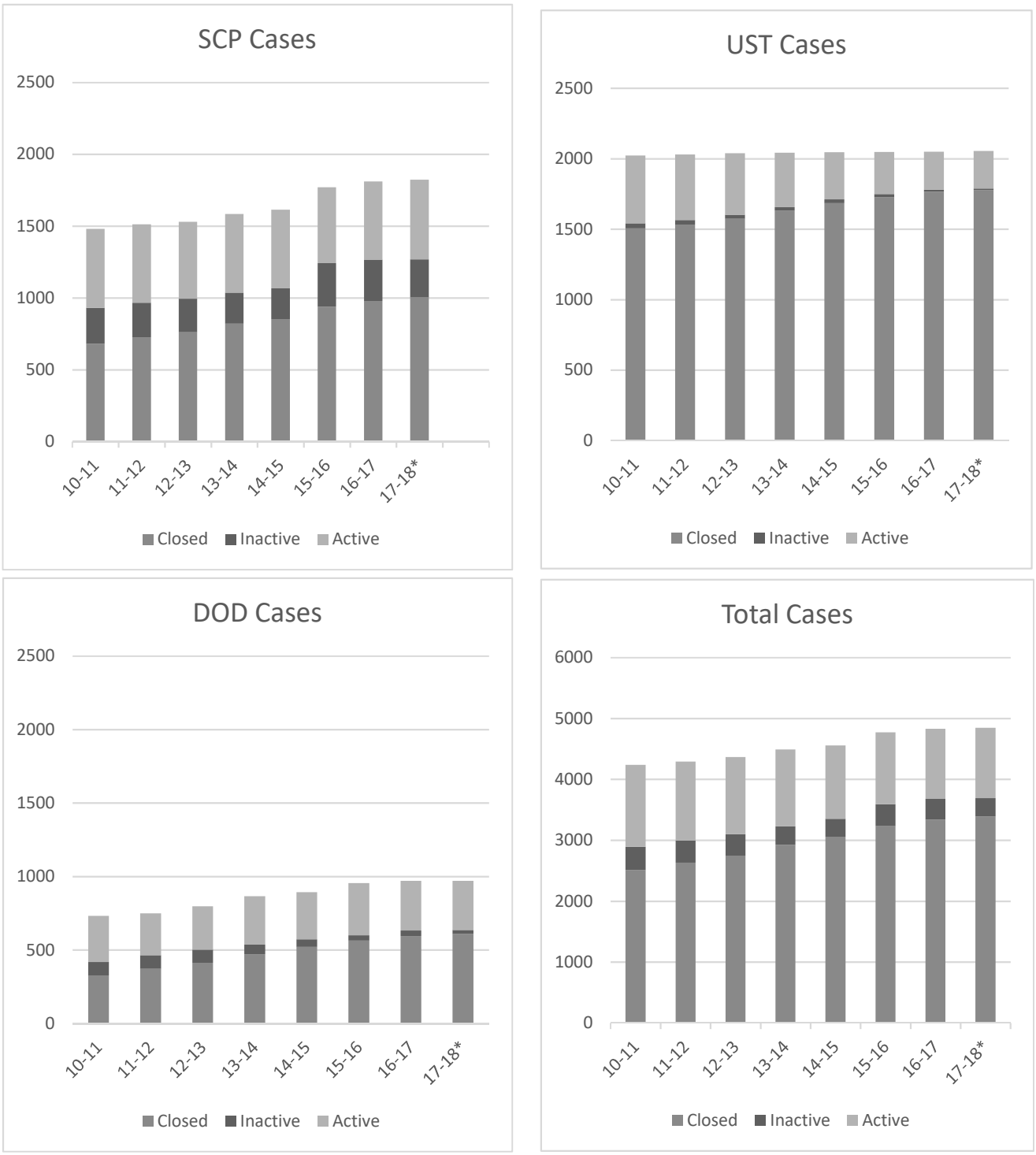


Combined - Case Closures



* = FY 17-18 shows progress halfway through the FY

Figure 2: Status of Cases in the Three Cleanup Programs



* = FY 17-18 shows progress halfway through the FY

Appendix B

SB445 Site Cleanup Subaccount Projects

SB445 Site Cleanup Subaccount Projects

Our Region receives 2.8 staff positions funded through the SB445 Site Cleanup Subaccount. Using this staff time, we are continuing to work on four projects: unfunded cases, dry cleaner spill sites, abandoned and inactive mines, and sustainable groundwater management. Below is some project-specific news:

Unfunded Cases – Within the Site Cleanup Program, there are currently about 250 unassigned cases that may be causing impacts to human health and the environment. This project provides oversight for high-priority, unassigned cases and then either brings them into our cost recovery oversight program, encourages the responsible parties to apply for Site Cleanup Subaccount Grant funding, or reviews the cases for possible low threat closure. So far, case closures have been the highlight of the project. The case closures from this project account for about one quarter of the closures for the SCP program for the first half of this fiscal year. During the first half of FY 2017-18, we had the following accomplishments:

- Provided oversight for 60 unfunded cases.
- Closed 6 cases.
- Made 12 non-case determinations – this removes cases from our system that are overseen by another agency or were opened without adequate documentation of a release.
- Brought one case into cost recovery.

Dry Cleaner Spill Sites –There are several thousand former and current dry cleaners in our region. We estimate that more than half of them have had solvent spills. This project proactively identifies 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. Our initial steps are to conduct searches for responsible parties and then require site history information and source investigation investigations to determine if solvent spills have happened. If no spills are discovered, then we close the case. If spills are discovered, then we request the responsible party to enroll in our cost recovery program, and we transfer the case to our Site Cleanup Program. During the first half of FY 2017-18, we continued moving sites through these steps, closed one case, and enrolled two cases that had spills into our cost recovery program.

Abandoned and Inactive Mines – In our Region, approximately 50 known mines were abandoned after mineral extraction and processing, leaving behind a legacy of contamination that threatens the environment and human health. Ten mines have been cleaned up, and another ten mines are currently under investigation and/or are being remediated. The remaining 30 mines need to be evaluated to determine if they are causing pollution. However, abandoned mine land inspections are laborious, and resources for investigations and oversight of cleanup are limited. SB 445 funds allow us to prioritize and screen mines, ensuring the worst ones are addressed under the Site Cleanup Program, as feasible.

In the first half of FY 2017-18, we had the following accomplishments:

- Drafted a Quality Assurance Project Plan, including data quality objectives.
- Compiled available data on mines accessible, from both our files and internet databases (e.g., USGS and OEHHA), into a Mines Summary Database.

- Performed additional satellite reconnaissance of mine sites via satellite imagery and geospatial mapping tools, especially to inform inspection plans.
- Finalized and implemented a tool to prioritize the mines, based on potential impacts to water quality. Results are accessible on our webpage.
- Developed inspection/site screening protocols, including inspection plans, safety plans, and standard operating procedures for use of our X-Ray Fluorescence Spectrometer.
- Performed two site inspections, the first as a pilot test of inspection and data collection protocols, the second of our highest priority mine.

In the next six months, we will inspect two high priority mines and evaluate regulatory actions for the high priority mines, potentially including cleanup and abatement orders. More information on this project may be found at this website: (https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/MinesCleanupProgram.html).

Sustainable Groundwater Management – Groundwater basins in our Region supply about 20% of the drinking water used in the Region. We have formed a multi-divisional staff team to evaluate the Region's groundwater basins. Our approach includes: 1) engaging local groundwater agencies and reviewing their groundwater management plans, 2) evaluating baseline conditions including beneficial uses, supply well impacts, localized salt and nutrient areas of concern, and other water quality/habitat threats, and 3) documenting findings for each groundwater basin in a fact sheet for information sharing and coordination with local agencies and the public. During the first half of FY 2017-18, we had the following accomplishments:

- 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.
- Reviewed SNMPs for the Niles Cone (near Fremont) and the Napa Valley basins.
- Developed and prioritized source-investigation strategies to address impacted supply wells.
- Coordinated with the State Water Board's Division of Drinking Water to receive real-time notification of supply well contaminant impacts.
- Used the State Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) program to view and evaluate data from drinking water supply wells.

More information on this project may be found in the January 2018 status report to the Board at this website:
https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2018/January/7_1_ssr.pdf

Grants – We now have two cases that have received SB445 Grants (P&K Cleaners, and Bayshore Equipment Rentals). 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 time we can devote to the above four projects.