

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

STAFF SUMMARY REPORT: Katie Kulha
MEETING DATE: May 8, 2024

ITEM: 8

Site Cleanup Program Update

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

STAFF SUMMARY REPORT: Katie Kulha
MEETING DATE: May 8, 2024

ITEM: 8

Site Cleanup Program Update

DISCUSSION:

This item provides an update on the Site Cleanup Program which oversees the investigation and cleanup of soil, sediment, soil vapor, and groundwater contamination from spill and leak sources other than underground storage tanks and military lands (Department of Defense program). This report summarizes our accomplishments over the last five fiscal years (FY) and provides updates on key activities in the cleanup program.

Site Cleanup Program Background

Management of Site Cleanup Program cases is provided by Water Resource Control Engineers, Engineering Geologists, and Environmental Scientists across the Groundwater Protection and Toxics Cleanup Divisions. The Site Cleanup Program includes 21.1 positions funded by direct cost recovery from dischargers and 2.8 positions funded from the Site Cleanup Subaccount (SCAP) program created in 2015 by Senate Bill 445. Program staff currently manage 630 active cleanup cases across the region.

	Start of FY		During FY
FY	Active Cases	Inactive Cases	New Cases
2019-20	637	212	38
2020-21	624	224	42
2021-22	636	227	30
2022-23	639	189	21
2023-24	630	172	11

Performance Measures

Each year we set and track performance targets to measure program progress. There are four primary performance measures for the Site Cleanup Program. These include, 1) the number of cases closed; 2) the number of cases starting remediation; 3) the number of cases where human health exposure is controlled; and 4) the number of cases where groundwater contaminant migration is controlled. Case closure is granted when contamination no longer

poses a threat to water quality and the environment or a risk to public health and safety. We have exceeded our target for case closures year to date and will likely close more cases before the Fiscal Year ends.

Cases are considered to have started remediation when interim mitigation or remediation to address urgent concerns begins or when comprehensive remediation to address the full extent of contamination is implemented. We have seen slower progress moving cases into remediation over the last several years. Of our 630 open cases, 164 (26%) remain in the site assessment phase, which means that investigation is ongoing and clean up has not started. Of cases that have been sufficiently investigated, 91 ongoing, human health exposure controlled and 88% have groundwater migration controlled.

FY	Cases Starting Remediation		Cases Closed	
	Target	Actual	Target	Actual
2019-20	25	11	25	33
2020-21	20	9	20	25
2021-22	20	12	20	30
2022-23	15	12	20	27
2023-24 ¹	15	8	20	24

¹ Targets are through June 30 and actual values are as of April 15.

Strategic Workplan

The Regional Water Board’s [Strategic Workplan](#) establishes organizational and program-specific priorities, targets, and milestones over a two-fiscal-year period to measure our progress in advancing and achieving our Region’s priorities. The Site Cleanup Program priorities for fiscal year 24/25 and 25/26 are listed below.

- Ensure cleanup cases are prioritized and that regulatory actions are taken to control vapor intrusion, contaminant migration, and other exposures and discharges as quickly as feasible to protect water quality, human health, and the environment.
- Address potential adverse impacts from sea level rise and groundwater rise.
- Apply an Environmental Justice lens to inform cleanup priorities.
- Assess and investigate potential PFAS discharges.
- Assess, investigate, and clean up polychlorinated biphenyls discharges at upland source sites, in creek/Bay sediments, and in known hotspots.
- Update the Environmental Screening Levels to be consistent with the latest science (e.g., toxicity criteria).

The Site Cleanup Program priorities are consistent with our Region’s commitment to environmental justice and racial equity, which is outlined in more detail in our [Racial Equity and Environmental Justice Work Plan](#) and in the State Water Board’s [Racial Equity Action Plan](#). This

includes prioritizing regulatory actions on cases located in communities that have suffered and continue to suffer disproportional socioeconomic and pollution burdens and racial inequities.

Our approach to evaluating impacts from sea level rise and groundwater rise is one piece of our Region's climate action strategy. Our case managers consider the need for sea level rise and groundwater rise vulnerability assessments when evaluating remedial alternatives and post-remediation monitoring. For sites that meet our low-threat case closure criteria (i.e., they are fully investigated, have taken appropriate remedial actions, and are implementing monitored natural attenuation) we evaluate the potential adverse effects of groundwater rise on the remaining low-level residual contamination.

A major driver of work for the Site Cleanup Program is the threat to human health due to vapor intrusion of contamination from soil vapor to indoor air. Of our active cleanup cases, approximately 53% have soil vapor contamination from vapor-forming chemicals such as tetrachloroethene which was commonly used at dry cleaners for decades. Over the last few years, at least 90 Site Cleanup Program cases have reported detections of vapor-forming chemicals in indoor air above relevant health screening levels. In February 2023, the Department of Toxic Substances Control (DTSC) and the State Water Board released the [Final Draft Supplemental Guidance: Screening and Evaluating Vapor Intrusion](#). This guidance is a tool to promote state-wide consistency for screening buildings for vapor intrusion. In June 2022, our Region prepared and released the [Vapor Intrusion Mitigation Guidance](#), a technical resource document which provides information about selecting and monitoring vapor intrusion mitigation measures. We shared details about this guidance document in the April 2024 Executive Officer's Report.

We are also working on a growing number of cases involving per- and polyfluoroalkyl substances (PFAS). This work is driven by recent State Water Board orders issued to airports, metal platers, and bulk fuel terminals, and the discovery of several public supply wells in the Santa Clara and Livermore Valleys affected by PFAS contamination. This has unique challenges due to the ubiquity and legal use of PFAS in products and processes, high mobility in the environment, high treatment costs, and lack of drinking water standards for the vast majority of PFAS.

Challenges

Redevelopment projects continue to be an ongoing driver of work for the Site Cleanup Program. Often contaminated soil, soil vapor, and groundwater are identified as part of due diligence evaluations conducted as properties are sold. Developers, lenders, and local building departments rely on regulatory agency oversight by the Regional Water Board, the DTSC, or County Environmental Health Departments to ensure that cleanup and mitigation actions are protective for the new land use(s). Sometimes redevelopment is proposed for a property that we already oversee. Redevelopment projects bring opportunities and challenges. Developers are usually willing to propose, fund, and implement investigation and cleanup actions, and provide cost recovery for our regulatory oversight. However, they also usually expect investigation and cleanup to occur in a quick timeframe, which can be challenging with staff resources and competing priorities.

With recent droughts and future impacts due to climate change, groundwater is more precious than ever and we're taking a closer look at how and where groundwater is and may be used in our region. Consistent with the State Water Board's implementation of California's [Water Supply](#)

[Strategy](#), we are evaluating our groundwater basins and prioritizing groundwater resources considering current use, future plans, and community reliance. This will inform our management decisions for site cleanup and other programs.

Funding for investigation and cleanup of cases is an ongoing challenge for the Site Cleanup Program. Often the parties responsible for the cleanup have limited funds, which slows investigation and cleanup progress. SCAP funding is currently available for 16 cleanup cases in our Region; however, 30 additional cleanup cases have applied for SCAP funding and have not received it. Applications for SCAP funding are prioritized based on several factors including threat to human health or the environment, disadvantaged or small community impact, and overall environmental benefit of the project. The SCAP funding program has an annual budget of \$34 million and there are at least 470 applications statewide, with more applications being submitted every month. The SCAP budget provides funding for roughly five new cases each fiscal year along with continuing funding for high priority previously funded cases.