



CALIFORNIA WATER BOARDS

State Water Resources Control Board

Regional Water Quality Control Boards

Water Board Function: Contaminated site cleanup & Brownfield oversight

Provide oversight of soil and groundwater cleanups at sites to protect water quality, and human and ecological health. Types of sites include spills, current and former industrial facilities, and commercial facilities such as dry cleaners where releases of contaminants have occurred. Facilitate cleanups at brownfield sites for beneficial re-use or redevelopment to economically benefit communities.

Water Board Program(s) Relevant to Function:

Site Cleanup Program and Brownfield Program. The environmental cleanups at the various sites range in complexity from simple cleanups to complex Superfund cleanups. A complex cleanup process can involve multiple State Board programs such as Underground Storage Tanks, Land Disposal, Stormwater, and NPDES, and requires staff to have knowledge of, and develop skills related to, multiple State Board programs.

Problem/Issue Description:

Polluted and contaminated soil and groundwater at sites in the Site Cleanup Program and Brownfield Program threatens water quality and both human and ecological health. At these sites, contaminants such as fuels, solvents, and metals have caused significant groundwater contamination. With the discovery of various pollutants in groundwater aquifers, many drinking water wells have been shut down due to unacceptable concentrations of contaminants. Once a groundwater supply is polluted, it is difficult and expensive to clean up. Contaminants in soil can also act as long-term continuing sources of groundwater pollution, leaching into the groundwater for years in some instances. Stormwater running over and/or eroding contaminated soil can also be a significant source of surface water pollution.

Contaminants in the soil can also adversely impact the health of animals and humans when they ingest, inhale, or touch contaminated soil, or when they eat plants or animals that have themselves been affected by soil contamination. Volatile organic compounds, such as many common industrial solvents, can also pose a threat to human health by volatilizing from the soil into indoor air spaces, such as living or work spaces.

At brownfield sites, contaminants in both the soil and groundwater often impede or prevent beneficial economic re-use of these sites, resulting in economic impacts to both individual property owners and communities. The presence of these brownfields, which often are blighted properties, has an immediate negative economic effect on the neighboring community. These communities often look to the cleanup of these facilities to support re-use and redevelopment as a means for maintaining the economic vitality of the immediate neighborhood and the community as a whole.

Overview of Function:

The State and Regional Water Boards oversee the investigation and cleanup of approximately 6,000 open sites (both active and backlogged) with soil and groundwater pollution in the Site Cleanup Program and Brownfield program. Approximately 72 PYs are currently allocated for this work (12 PY general fund and 60 PY cost recovery). Although the primary focus of the program is restoration of groundwater quality, both of these programs address all environments, including surface water, groundwater, soil, sediment, the vadose zone, and air where vapor releases may affect public health. Upon confirming that an unauthorized discharge has polluted, is polluting, or threatens to pollute water quality, the Regional Board initiates, pending available resources, oversight of site investigation and cleanup. Generally, dischargers perform cleanup on a voluntary basis. New sites are discovered as a result of recent spills, property transactions, or nearby environmental investigations.

State and Regional Water Board authority for cleanup of contaminated sites is found under the following laws:

- California Water Code, Division 7, Section 1300, Section 13304, and Section 13172,
- California Health and Safety Code, Chapter 6.7, and
- Section 120(f) of CERCLA, Title 42, U.S.C., Section 9620(f).

The Regional Board's legal authority for regulation of site cleanup is found in Division 7 of the California Water Code, State Board plans and policies (specifically Policies 92-49 and 68-16), and the Region's water quality control plans (Basin Plans). Basin Plans complement and implement the California Water Code and State Board policies, and provide the foundation for the Regional Board's site cleanup regulatory program. These plans designate the beneficial uses of surface and ground water, setting the narrative and numerical water quality objectives to protect those beneficial uses, and establishing implementation plans to achieve the standards established by the plan. The Regional Boards must ensure that dischargers clean up soil and groundwater to levels that achieve background water quality, or, if background is not reasonable, an alternative level may be set that is the most stringent level that is economically and technologically feasible and at least complies with Title 23 California Code of Regulations (CCR) section 2550.4, protects beneficial uses of water and achieves Basin Plan standards. Section 2550.4 requires consideration of, among other things, public health risks, and damage to wildlife and crops from exposure to waste. A health or ecological risk assessment may be necessary to comply with Resolution 92-49 and to meet the requirements of Title 23 CCR Section 2550.4.

Role of Water Board Staff:

The State Water Board oversees the SCP administrative activities that include:

- Managing and maintaining the SCP Cost Recovery Billing Database
- Preparing and tracking budgetary expenditure/allotment status reports
- Preparing and facilitating Quarterly SCP Roundtable Meetings and training sessions
- Prepare quarterly billing and collect SCP fees

- Providing technical and policy support to Regional Board staff
- Coordinate with staff from other State and federal regulatory agencies to promote and expedite cleanups.

Regional Board staff prepares and submits cleanup order, cease and desists order, and administrative civil liability order to Regional Board for consideration and adoption. State Board and Regional Board staff coordinates with staff of other State and local agencies.

The Regional Water Boards activities include:

- Identifying sources and locations of pollution
- Identifying responsible parties
- Enforcing Water Code requirements with responsible parties through either voluntary compliance or preparing and implementing enforcement orders
- Providing technical oversight of site cleanups
- Participating in technical work groups with state/federal/local environmental agencies to develop mitigation alternatives for contaminated sites
- Reviewing and commenting on technical reports/studies designed to develop remedial alternatives and to demonstrate innovative investigation and remediation technologies
- Achieving public outreach and education through the use of tools such as factsheets and participation in public meetings.

Role of Regional Board Members:

Conducts public hearing, and considers and adopts enforcement order.

Role of State Board Members:

Reviews petitions from Regional Board adoption of enforcement order. Adopts policies and regulations.

Primary Issues of Concern:

Include (1) the number of sites and brownfields in the state requiring cleanup, (2) “orphan” sites with no identified responsible party to perform the cleanups, (3) the identification of new exposure pathways, such as indoor vapor intrusion, that often require specialized staff training and necessitate lower cleanup levels, (4) the identification of new emerging contaminants of concern at sites, and (5) the extensive staff time often required to bring sites into the Site Cleanup Program where a responsible party needs to be identified or a responsible party is not cooperative.

Definition of Key Terms:

Brownfields are defined in several different ways in various State and federal regulations, but in common-use language are generally defined as real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.