



CALIFORNIA WATER BOARDS

State Water Resources Control Board

Regional Water Quality Control Boards

Water Board Function: Department of Defense site cleanup oversight

Provide oversight of soil and groundwater cleanups at active and former military facilities statewide to protect water quality, and human and ecological health. Facilitate property transfers from the Department of Defense (DoD) to local reuse agencies for beneficial re-use at closed and closing military facilities.

Water Board Program(s) Relevant to Function:

Department of Defense Program.

The environmental cleanups at the various facilities range from a few UST 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 current and former DoD facilities threatens water quality and both human and ecological health. At DoD facilities, leaking underground and aboveground storage tanks, as well as solvents used in aircraft and vehicle maintenance activities, 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 closing and closed military facilities, contaminants in both the soil and groundwater often impede beneficial economic re-use of these sites, resulting in economic impacts to both individual property owners and communities. Closing of DoD facilities often 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 community.

Overview of Function:

The State and Regional Water Boards oversee the investigation and cleanup of sites with soil and groundwater pollution at DoD facilities. There are approximately 160 DoD and former DoD facilities encompassing approximately 4,200 individual sites being actively worked on by staff. Forty (40) PYs are currently allocated to the DoD Program, all of which are cost recovery positions. Although the primary focus of the program is restoration of groundwater quality, the DoD Program deals with 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 on DoD facilities as a result of recent spills, property transactions at closing or closed DoD facilities, or nearby environmental investigations.

The DoD environmental restoration program is generally carried out within the environmental legal framework of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund. 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 Board administers the DoD Program by providing program administration assistance related to the Defense State Memorandum of Agreement (DSMOA) and Navy Cooperative Agreement. Program administration tasks performed by the State Board staff include:

- Managing and maintaining the DoD Program Cost Recovery Billing Database for Navy sites.
- Managing and maintaining the DoD Daily Log Database to track expenditures for invoicing Department of Toxic Substances Control (DTSC) on DSMOA sites.
- Preparing and tracking budgetary expenditure/allotment status reports.
- Preparing data for monthly billings.
- Providing technical and policy support for Regional Board staff.
- Supplying current and historical program information to management.
- Responding to inquires from stakeholders, including the DoD, the Legislature, and others regarding the DoD program.
- Providing legal advice to the Regional Board staff concerning clean ups at DoD facilities, through the Office of the Chief Counsel.
- Coordinate with staff from the various Department of Defense services, and coordinate with staff from other State and federal regulatory agencies to promote and expedite clean up at these sites.

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

Regional Board regulatory oversight at DoD facilities includes:

- Participating in technical work groups with DoD and other State/federal/local environmental agencies to develop mitigation alternatives for contaminated sites, following the federal Superfund process,
- 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 participation in public meetings such as Restoration Advisory Boards,
- Resolving disputes through agreed upon dispute resolution processes, and
- Tracking and documenting hours expended on DoD oversight activities.

Role of Regional Board Members:

Conducts public hearing, and considers and adopts enforcement order. (Authority is limited by federal law.)

Role of State Board Members:

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

Primary Issues of Concern:

The primary issue of concern remains the sheer number of DoD sites in the State that continue to pose a threat to human health and the environment, and the cost to clean up those sites relative to the amount of funds available. Lack of current funding has pushed the investigation and cleanup of many of these sites to the future, while water quality and the environment continue to be threatened or impacted.

Definition of Key Terms:

DSMOA (Defense State Memorandum of Agreement): Cost reimbursement for the Army and Air Force are covered under this agreement, signed in 1993. Cost reimbursement for Navy sites are covered under the Navy Cooperative Agreement.