

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

STAFF SUMMARY REPORT: Keith Roberson
MEETING DATE: February 14, 2024

ITEM: 8B

Land Disposal Program Update

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Land Disposal Program Update

DISCUSSION:

This item provides an update on the Land Disposal Program and summarizes its purpose, legal authority, available resources, achievements, and current challenges. The last update to the Board was in September 2018.

The primary goal of the Land Disposal Program is to protect water quality at sites where solid waste is discharged to land for permanent disposal, such as at municipal solid waste landfills and industrial waste impoundments. We achieve this goal by reviewing, inspecting, and approving the design and construction of base liners and final covers at active disposal sites, and by evaluating waste isolation and containment through long-term monitoring of groundwater at both active and closed disposal facilities. The program is authorized by Title 27 of the California Code of Regulations as well as the California Water Code.

Five full-time staff are assigned to our Land Disposal Program. The Land Disposal Program is funded for 2.5 staff positions. Land Disposal Program staff also spend about half of their time overseeing Site Cleanup Program cases, which is covered by case-specific cost-recovery resources. The Land Disposal Program is funded for 1.2 supervisory/managerial positions.

Our Land Disposal Program staff oversee the Region's 11 active landfills (9 receive municipal solid waste; 2 receive only inert construction and demolition debris) and 58 closed landfills. We evaluate landfill liner and cover design reports, review groundwater and surface water monitoring data, and evaluate post-closure land use proposals for regulatory compliance and environmental protection. The Land Disposal Program includes regulatory oversight of abandoned mines, compost operations, and designated waste management units at industrial sites such as petroleum refineries and chemical plants. The Land Disposal Program does not regulate the disposal of hazardous wastes, discharge of waste into water bodies, or unintentional releases or spills unless the releases are from regulated waste disposal facilities.

Waste disposal facilities are typically regulated with waste discharge requirements (WDRs). Cleanup and Abatement orders (CAOs, also referred to as site cleanup requirements) are issued as needed to address releases from waste disposal facilities. Over the past five years, the Regional Water Board adopted 10 site-specific WDRs, 2 general WDRs, and 1 CAO generated by the Land Disposal Program. The general WDRs updated the waste acceptance criteria for contaminated soils at the 11 active landfills and required long-term flood protection planning and reporting to consider sea level rise, groundwater rise, and extreme storm events based on the best available climate science at 16 bayfront landfills. Item 7 on the agenda of this month's Board meeting proposes adoption of a general WDRs order that would require similar long-term flood protection planning and reporting requirements at 27 additional bayfront

and oceanfront landfills and industrial facilities that are vulnerable to the impacts of climate change due to their low elevations and waterfront locations.

Strategic Work Plan

As described in Item 8A on the agenda of this month's Board meeting, the Regional Water Board's [Strategic Workplan](#) establishes organizational and program-specific priorities and targets and milestones over a two-fiscal-year period to measure our progress in advancing and achieving our Region's priorities. The Strategic Workplan also includes the State Water Board's program-specific performance measures that we set each fiscal year. These Strategic Workplan priorities guide our work and how we allocate our limited resources.

Land Disposal Program Priorities

The Strategic Workplan sets forth three Land Disposal Program priorities:

1. Update landfill and land disposal WDRs as necessary, including to address PFAS and require new vulnerability assessments for sites that are vulnerable to sea level rise and groundwater rise.
2. Oversee redevelopment of closed landfills for commercial and recreational purposes.
3. Regulate bayfront land disposal facilities that are vulnerable to sea level rise.

The Strategic Workplan specified five targets and milestones for the current fiscal year to achieve the Program Priorities:

1. Consider developing new general WDR amendment regarding PFAS at landfill and land disposal facilities at sites not covered by the Statewide PFAS landfill order.
2. Update WDRs as needed to require Long-Term Flood Protection Plans.
3. Work with land disposal sites to ensure acceptable flood protection plans are prepared.
4. Review and comment on documents that pertain to aspects of development with the potential to impact groundwater and surface water quality.
5. Bring new sites under regulation as needed.

Land Disposal Program Performance Measures

The Strategic Workplan also includes the State Water Board's program-specific performance measures that it tracks each fiscal year. There are two performance measures for the Land Disposal Program, which are the number of sites that are inspected each year and the number of permits (WDRs) that are adopted each year. Last fiscal year, we conducted 44 inspections at landfills and 17 inspections at non-landfill waste disposal sites. One general WDRs order and one site-specific WDRs order were adopted by the Board.

Accomplishments

We have made significant progress in implementing our priorities. The Land Disposal Program got involved early in the effort to require sites that are inherently vulnerable to sea level rise, such as Bayfront landfills, to begin planning how to protect facilities from physical damage caused by rising sea levels. To date, 38 of our landfills and other land disposal facilities have submitted Long-Term Flood Protection Plans. These Plans are updated every five years to incorporate evolving climate science and guidance. In 2022, we began requiring these vulnerable sites to consider groundwater rise as well.

We continue to consider developing a new general WDR amendment regarding PFAS at landfill and land disposal facilities at sites not covered by the Statewide PFAS landfill order; and continue to review and comment on documents that pertain to aspects of development with the potential to impact groundwater and surface water quality.

Challenges

New challenges for the Land Disposal Program include the following:

- Updating and disseminating guidance for vulnerability assessments of sea level rise and groundwater rise at low-elevation land disposal facilities along the Bay margin;
- Reviewing Long-Term Flood Protection Plans for low-elevation land disposal facilities vulnerable to sea level rise and groundwater rise;
- Reviewing and responding to increasingly complex proposals for residential and/or commercial redevelopment on top of closed landfills;
- Responding to known and potential releases of PFAS chemicals from land disposal facilities;
- Responding to an increasing number of community concerns about land disposal facilities and waste management units;
- Reviewing requests for emergency disposal of an increased volume of disaster-related wastes driven by climate change; and
- Considering requests for termination of monitoring at very old, closed landfills.