

INFORMATION SHEET

WASTE DISCHARGE REQUIREMENTS ORDER R5-20018-XXXX
CITY OF AUBURN AND RECOLOGY AUBURN PLACER
AUBURN LANDFILL
CLOSED CLASS III LANDFILLS
POST-CLOSURE MAINTENANCE. EVALUATION MONITORING
AND CORRECTION ACTION
PLACER COUNTY

Background

The Auburn Landfill is a closed, municipal solid waste (MSW) landfill facility about three miles north of Auburn near Elders Corner. The landfill facility consists of two landfill units, referred to as Landfill 1 (25-acres) and Landfill 2 (3-acres), both of which are unlined. Landfill 1 (LF-1) operated from 1958 until September 1983, accepting primarily household refuse and nonhazardous industrial wastes. Landfill 2 (LF-2) operated from 1958 to 1979, accepting industrial (Formica plant) wastes subsequently classified as hazardous. Both landfill units were closed with a compacted soil cover in 1984 prior to the enactment of Chapter 15 regulations and as such are “closed, inactive, or abandoned” (CAI) units under Title 27, section 20080(d)(1).

Geology

The site geology generally consists of thin layer of surface alluvium underlain by sedimentary or metamorphic bedrock. The surface alluvium generally consists of up to two feet of silt and/or clay loam soil interspersed with bedrock outcrops. Bedrock at the site generally consists of sheared shale and sandstone interrupted by protrusions of greenstone or green schist that appear as large boulders in the central and northwest portions of the site. The permeability of the weathered/fractured bedrock is estimated to be about 1×10^{-4} cm/sec.

Groundwater

A March 2017 DWR supply well survey found an estimated 161 domestic supply wells, 3 industrial supply wells, 1 agricultural iwell, and one public supply well within a one-mile radius of the site. See Attachment 1. Shallow groundwater at the site generally flows to the southwest consistent with topography. The depths to groundwater range from about 1.5 feet below ground surface (bgs) in the southwest corner of the site to about 50 feet bgs in the northeast corner of the site. Background groundwater quality is average with total dissolved solids (TDS) of about 370 milligrams per liter (mg/L). There are currently 15 landfill monitoring wells for the facility, including 10 onsite wells and four offsite monitoring wells. Six of the wells are directly down gradient, one is upgradient and the others are side gradient.

Historical monitoring indicates volatile organic compounds (VOCs) and elevated concentrations of general minerals in groundwater downgradient of the landfill indicative of a leachate release from the facility. With the exception of MTBE and BTEX constituents (which the Discharger attributes to an historical release from a former underground storage tank at the site), concentrations of VOCs in wells at the site have generally declined to trace

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or non-detect levels. Elevated concentrations of alkalinity (1,100 mg/L), chloride (240 mg/L), hardness (1,700 mg/L) and TDS (1,400 mg/L) continue to be detected in point of compliance wells at the site, however, and at lower, but still elevated, concentrations downgradient offsite.

Landfill Unit Design

LF-1 consists of two unlined fill areas referred to as the Northern Fill Area (NFA) and Southern Fill Area (SFA). Both fill areas were generally excavated to bedrock and constructed with a dendritic, non-Title 27 leachate collection system prior to filling. The leachate collection system consisted of a network of French drains plumbed via header pipe to a concrete sump at the toe of the SFA along Shale Ridge Road. The sump was equipped with two automatic pumps that pump sump liquid to a sewer manhole near the facility office at the top of the main access road from Shale Ridge Road. Up to 10 million gallons of liquid are typically pumped per year, mostly during the wet season. LF-2 consisted of five pits excavated to estimated depths ranging from 5 to 30 feet bgs. No leachate collection facilities were installed at LF-2. See Attachment 2.

Revised WDRs

These revised WDRs re-classify LF-2 as a Class III landfill unit and require that groundwater monitoring of the unit include phenols given the unit's waste disposal history noted above. The Discharger is also required to evaluate the final cover over both units (LF-1 and LF-2) to ensure that the final covers over both units comply with Title 27 standards. See WDR Postclosure Specification E.1. The Discharger is also required to submit a work plan for the installation of additional onsite monitoring wells at the units to comply with Title 27 detection/corrective action monitoring requirements. See WDR Provision I.7.b. An Evaluation Monitoring Program work plan is also required to determine the base of landfill wastes in areas of the landfill where it is suspected that groundwater may be in contact with wastes during the wet season, including the excavation pits at LF-2 and the western and central parts of the Southern Fill Area (SFA) where the landfill waste column is closer to groundwater. See WDR Evaluation Monitoring and Corrective Action Specification H.1. Any Engineering Feasibility Study submitted under the WDRs in response to a release is required to address, among other issues, Title 27 siting and containment system requirements, including minimum groundwater separation requirements. See WDR Evaluation Monitoring and Corrective Action Specification H.5.

The WDRs also require that the Discharger provide financial assurances for the two landfill units consistent with Title 27 requirements for landfill units not regulated by CalRecycle financial assurance sections of Title 27. Cost estimates for postclosure and corrective action are required to be included in an updated Postclosure Maintenance Plan and a corrective action report to be submitted for the facility. See WDR Provisions I.8.f and I.8.a.

The WDRs also require that the Discharger submit a revised Water Quality Protection Standard (WQPS) Report and an updated Sample Collection and Analysis Plan reflecting installation of the above wells, updated concentration limits, and proposed data analysis methods. The Monitoring and Reporting Program in the WDRs generally requires quarterly groundwater elevation monitoring, semiannual monitoring for VOCs and general minerals, and five-year monitoring for landfill constituents of concern (COCs). The next

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five-year COC monitoring event is required to be conducted by September 2020.

Surface drainage at the site is to an ephemeral tributary to Rock Creek about 3,000 feet southwest of the site. Rock Creek flows to the northwest into Dry Creek, a tributary to Coon Creek, which flows into the Sacramento River.

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