

INFORMATION SHEET

ORDER R5-2017-XXXX
COUNTY OF TEHAMA AND CITY OF RED BLUFF
FOR CONSTRUCTION, OPERATION, CLOSURE, AND POST-CLOSURE MAINTENANCE
TEHAMA COUNTY / CITY OF RED BLUFF
CLASS III MUNICIPAL SOLID WASTE LANDFILL
TEHAMA COUNTY

Tehama County and the City of Red Bluff, through a joint powers authority called the Tehama County / City of Red Bluff Landfill Management Agency, own and contract for operation of a landfill two miles northwest of the City of Red Bluff in Tehama County, Section 15, T27N, R4W, MDB&M. Site topography consists of rolling hills with ground elevation ranging from 420 to 536 feet mean sea level. The facility receives an average 23 inches of precipitation each year, largely between October and May, and has a pan evaporation of approximately 66 inches per year.

The disposal site was opened in 1964 as an open burn dump. In 1974, the site was converted to a sanitary landfill, and in 1978, the California Integrated Waste Management Board classified the site as a Class II-2 disposal facility. Waste Discharge Requirements Order No. 88-036 reclassified the facility as a Class III waste facility accepting only non-hazardous municipal solid waste. The site is comprised of approximately 159.6 acres of which 83.6 acres were associated with the original landfill area and 76 acres were acquired in 1999 and 2000.

The existing and future landfill area is approximately 52.7 acres of which 41 acres have been constructed. Existing landfill units consist of: the unlined Phase 1 Waste Management Unit (WMU) which covers 31.6 acres; and the lined Phase 2 WMU, Cells 1A, 1B, and 2A which cover 9.5 acres. Future development of the Phase 2 WMU will include approximately 12 acres, referred to as Cells 2B, 3, and 4. The Phase 1 WMU reached capacity in February 2017, and closure activities will begin in the summer of 2017. The Phase 2 WMU is projected to reach capacity in 2040.

The facility is located within the Great Valley Geomorphic Province and is underlain by the Tehama Formation. Immediately beneath the landfill, the Tehama Formation consists primarily of well-consolidated dense to very dense clays and sandy clays with interbedded sands and gravels. The uppermost water-bearing sand occurs at a depth of approximately 90 to 145 feet below ground surface and is monitored by the facility's groundwater monitoring program. Based on groundwater monitoring data collected through 2016, a release to groundwater has not been confirmed. However, concentrations of calcium, chloride, sodium, and sulfate appear to be increasing in well OB-5 which is located downgradient of the Phase 1 WMU. The implications of these apparent concentration trends will be evaluated by the detection monitoring program.

Landfill influence on vadose zone water quality is suggested by data collected from lysimeters L-1 and L-3 which show increasing trends for chloride, electrical conductivity, and total dissolved solids and periodic volatile organic compound (VOC) detections. A 2007 Engineering Feasibility Study concluded that VOCs detected in the lysimeters were the result of landfill gas migration. The facility operates a landfill gas extraction system to address these impacts and conducts monthly monitoring of landfill gas probes. Methane has not been detected in landfill gas probes since 2011. MRP R5-2017-XXXX requires sampling of landfill gas probes for VOCs when methane is detected, when VOCs are detected in lysimeter samples, or at least every five years.