

INFORMATION SHEET

ORDER R5-201X-XXXX
MADERA COUNTY
OPERATION, CONSTRUCTION, AND CORRECTIVE ACTION
FAIRMEAD MUNICIPAL SOLID WASTE LANDFILL
MADERA COUNTY

The County of Madera (hereafter Discharger) owns and contracts for operation of the Fairmead Municipal Solid Waste Landfill (Facility), located approximately five miles southeast of the City of Chowchilla in Madera County. The California Regional Water Quality Control Board (Central Valley Water Board) adopted Waste Discharge Requirements (WDRs) Order R5-2004-0161 on 15 October 2004, which classified the Facility as a Class III landfill as defined in Title 27, California Code of Regulations, section 20005 et seq. (hereafter Title 27). The proposed revised Order provides for continuing operation and construction, and incorporates corrective action.

The 121-acre Facility consists of three waste management units (WMUs) covering approximately 97 acres. WMU 1 is unlined and WMUs 2 and 3 are lined. The Facility is underlain by the Chowchilla River System. The Quaternary age alluvium (Riverbank Formation) is typically vertically and horizontally anisotropic and consists of interbedded thin beds and lenses of gravel, sand, silty-sand, clayey-sand, silt, sandy-silt, clay, and sandy-clay. Beds and lenses of coarser-grained materials, channel and point bar deposits, are located about 200 to 300 feet bgs, and are localized and not continuous to the point of forming a single recognizable aquifer. The first encountered groundwater beneath the Facility ranges between 109 and 115 feet below ground surface. Groundwater elevations range between 102 and 122 feet above mean seas level (MSL) depending on location at the Facility.

Volatile organic compounds (VOCs) have been detected groundwater. The latest self-monitoring report (1st Semiannual 2014) reported the following VOC detections in groundwater: 1,1-dichloroethane, cis-1,2-dichloroethylene, dichlorodifluoromethane, methyl-tert-butyl ether, p-dichlorobenzene, tetrachloroethylene, trichloroethylene, and trichlorofluoromethane. Inorganic waste constituents, reported in the most recent self-monitoring report, detected at concentrations statistically exceeding their respective background concentrations include: bicarbonate, calcium, magnesium, potassium, sodium and total dissolved solids.

Cleanup & Abatement Order No. 96-161, adopted on 21 June 1996, directed the Discharger, in part, to complete an Evaluation Monitoring Program (EMP), submit an Engineering Feasibility Study (EFS) for a Corrective Action Program (CAP), and implement a CAP. An EMP addressing the release was completed in November 2000 and attributed the release to landfill gas migration. An EFS was submitted in October 2001 and a subsequent addendum was submitted in March 2003. On 22 May 2003, Central Valley Water Board staff approved a CAP that consisted of monitored natural attenuation (MNA) and enhanced landfill gas control, which included the installation of soil vapor extraction wells.