INFORMATION SHEET

ORDER R5-201X-XXXX
ORANGE AVENUE DISPOSAL, INC.
FOR POST-CLOSURE MAINTENANCE AND CORRECTIVE ACTION
ORANGE AVENUE LANDFILL
FRESNO COUNTY

The Orange Avenue Disposal, Inc. (hereinafter Discharger), a California corporation, owns and maintains the Orange Avenue Landfill (facility) south of North Avenue, on the east side of Orange Avenue, within the City of Fresno. The 40-acre facility contains one closed, unlined 30-acre waste management unit. The proposed Order revises the existing WDRs to provide for post-closure maintenance and corrective action.

The waste management facility is located in the central portion of the San Joaquin Valley within the southern portion of the Great Valley geomorphic province of California. The Great Valley is a nearly flat northwest to southeast trending structural basin spanning approximately 450 miles from the Cascade Mountains in the north to the Tehachapi Mountains in the south, and 50 miles wide from the Coast Ranges in the west to the Sierra Nevada in the east. The Great Valley has been filled with a sequence of alluvium of Pliocene to Holocene age that overlies sedimentary rocks of Cretaceous to Tertiary age. These sedimentary units, in turn, overlie a crystalline basement of Paleozoic and Mesozoic metamorphic and igneous rocks. Sediments containing fresh groundwater in the San Joaquin Valley are largely unconsolidated silts and sands derived from river channel, flood plain, and alluvial fan deposits of Pliocene to Recent age.

The depth to first encountered groundwater ranges about 70 feet to 75 feet below the native ground surface. Groundwater elevations range from about 210 feet MSL to 215 feet MSL. The groundwater is unconfined. The depth to groundwater fluctuates seasonally as much as 12 feet. Monitoring data indicate background groundwater quality for first encountered groundwater has electrical conductivity (EC) ranging between 890 and 1,445 micromhos/cm, with total dissolved solids (TDS) ranging between 600 and 950 milligrams per liter (mg/L). The direction of groundwater flow is generally toward the northwest. The direction of groundwater flow varies seasonally and periodically flows toward the west-northwest. The estimated average groundwater gradient is approximately 0.003 feet per foot. The estimated average groundwater velocity is 100 feet per year.

Volatile organic compounds (VOCs) that are not naturally occurring have been detected in groundwater along the point of compliance. The VOCs consistently detected in groundwater are carbon tetrachloride, chloroform, 1,1-dichloroethane (1,1-DCA), cis-1,dichloroethene (cis-1,2-DCE), tetrachloroethylene (PCE), trichloroethylene (TCE), and trichlorofluoromethane.

The Discharger submitted the Phase 3 Evaluation Monitoring Program Report on 15 September 2011. The nature of the release was demonstrated to be volatile organic compounds that originated from landfill gas. The extent of the release plume is about 3,060 feet to the northwest of the Unit. The vertical extent is above the depths of 100 to 110 feet below ground surface.

The Discharger completed an Engineering Feasibility Study in accordance with Section 20425(c) of Title 27. The Engineering Feasibility Study concluded that the most technically and economically feasible corrective action alternative is monitored natural attenuation with landfill gas extraction as a source control.

The Discharger completed construction of an engineered alternative (evapotranspirative (ET)) final cover system in December 2012. The ET cover design was consistent with the performance goals of the prescriptive standard and affords at least equivalent protection against water quality impairment. The final cover consisted of a five-foot thick soil layer placed above the existing one foot of interim cover for a total cover of six-feet.

The action to revise waste discharge requirements for this existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resource Code section 21000, et seq., and the CEQA guidelines, in accordance with Title 14, Section 15301. This order requires full containment of wastes and does not permit degradation of surface water or groundwater. Further antidegradation analysis is therefore not needed. The discharge is consistent with the antidegradation provisions of State Water Resources Board Resolution 68-16.