

INFORMATION SHEET

Clean Harbors Buttonwillow, LLC (Clean Harbors) own and operates the 320-acre Buttonwillow Facility (Facility) located approximately eight miles west of Buttonwillow in Kern County. Closure of Class II Waste Management Units (WMUs) Nos. 18, 21, 22, 23, and 27 is currently regulated by Special Order 98-165 which modified Waste Discharge Requirements (WDRs) Order 96-094.

The Facility lies on an alluvial fan originating from the Treblor Range to the west. Site topography is characterized as planar, with elevations varying from 410 to 340 feet mean sea level, and sloping to the Northeast. Three ephemeral stream channels drain toward the site. All ephemeral channels have been improved to divert precipitation events away from the WMUs.

Three groundwater zones have been identified in the upper 600 feet of sedimentary sequence. The Board, Department of Toxic Substance Control (DTSC) and the Environmental Protection Agency (EPA) have defined these zones as follows: the Upper Perched Zone, the Intermediate Perched Zone, and the Lower Water Table Zone. Groundwater quality in all three groundwater zones is generally considered to be poor with total dissolved solids (TDS) concentrations ranging from 2070 to 7380 milligrams per liter in all three zones. There are no producing wells within a one-mile radius, other than two water supply wells located at the Facility, used primarily for dust control and equipment washing.

Closure of WMUs 18, 22, 21, 23, and 27 consists of sludge solidification by adding dry, non-hazardous soil. After treatment, the solidified sludge is compacted in accordance with the approved closure plan. The proposed Order amends the original conventional final cover closure design, to construction of a vegetated, minimum three-foot thick evapotranspirative soil cover system as an engineered alternative over five WMUs instead of four in lieu of the cover design specified in Special Order 98-165, which included a soil and geomembrane cover and clean-closure for WMU 27. WMU 27 was previously considered to be within a 100-year floodplain, necessitating a clean-closure for this WMU. However, studies by the Federal Emergency Management Agency determined that this is not the case, enabling WMU to be closed in place. The proposed design exceeds the minimum prescriptive requirements of title 27 for non-municipal solid waste landfills.

The Facility is in an arid environment with an average annual precipitation of approximately five inches and an average pan evaporation rate of approximately 108 inches. Closure of the five WMUs would result in greater protection for human health, the environment, and water quality. The WMUs never accepted hazardous or municipal solid waste.