

INFORMATION SHEET

CALAVERAS COUNTY DEPARTMENT OF PUBLIC WORKS
ROCK CREEK MUNICIPAL SOLID WASTE
CLASS II LANDFILL
CLASS II SURFACE IMPOUNDMENT
CALAVERAS COUNTY

The 200-acre facility is 2/3 of a mile east of Milton in Calaveras County. The facility consists of a Class II landfill, which is being constructed in four phases. Each phase will include a surface impoundment for leachate storage and evaporative disposal. Phase 1-A, consisting of a 6.1-acre Class II landfill and a 2.4 million gallon surface impoundment, was constructed in 1990 and began receiving wastes in October 1990. Phase 1-B was constructed in 1994 and began accepting wastes in October 1994. Waste Discharge Requirements (WDRs) Order No. 97-199 reflects the expansion of the Class II landfill as Phase II-A, the clean closure of the Class II surface impoundment, and the design and construction of a new Class II surface impoundment. Order No. 97-199 was subsequently rescinded with the adoption of Order No. 5-01-149, which was adopted to reflect the design changes in the Phase II-A landfill to correct problems associated with water discovered beneath the liner along the eastern sideslope.

This revision reflects the expansion of the facility with the construction of a new cell. This cell, Phase II-B, will accept Class II and III municipal solid waste on 7.3 acres directly south of the existing Phase II-A.

The facility accepts municipal solid waste, ash, sewage treatment sludge, petroleum contaminated soil, and miscellaneous materials. These wastes are classified as "nonhazardous solid waste" or "designated waste", using the criteria set forth in Title 27.

The Stockton East Water District's (SEWD) proposed Farmington Canal Project crosses the Rock Creek Facility at the downstream, southerly end of the project site. The canal would pass approximately 400 feet from the southernmost extremity of the ultimate placement of waste and would cross over the existing site creek in a flume or other structure, which would physically separate the two streams of water. The beneficial uses of the water conveyed by the proposed canal include agricultural and domestic use.

The Calaveras County Board of Supervisors passed Resolution No. 88-484 on 14 November 1988 approving a settlement agreement between the Discharger and SEWD. The settlement agreement specifies the Discharger and the District perform specific actions to prevent impacts on the proposed Farmington Canal Project.

The facility receives a yearly average rainfall of 19.42 inches as measured at the New Hogan Dam. The mean annual evaporation for this facility is 7.5 inches as measured at the New Hogan Dam.

The predominate geologic formation at this site is the Tertiary Aged Valley Springs Formation, which consists of boulder sized gravels, sands, silts, and clays. The soils immediately underlying the WMUs are light brown to gray silty sand and a red brown sandy silty clay.

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Phase 1-A was lined with a minimum thickness of 24 inches of compacted clay with a permeability of 1×10^{-6} cm/sec. The compacted clay was overlain with a vapor barrier and blanket LCRS. Leachate from the Phase 1-A LCRS gravity drains to the Class II surface impoundment. Phase 1-B was lined with a composite liner system consisting of compacted clay of minimum thickness 24 inches with a maximum permeability of 1×10^{-7} cm/sec. A 60-mil HDPE liner overlies the clay liner. The composite liner was overlain by a one foot thick blanket LCRS.

For the Phase II-A expansion, the Discharger petitioned the Board to allow the use of the geosynthetic clay liner (GCL) material in the composite liner system as an engineered alternative to the prescriptive standard (2-foot compacted clay with a maximum permeability of 1×10^{-7} cm/s). The Discharger's petition demonstrated that the proposed design would provide equivalent protection and that application of the prescriptive standard was unnecessarily burdensome.

The engineered alternative proposed by the Discharger for the base liner of Phase II-B consists of a double liner system comprised of, in ascending order: 12-inch thick prepared subgrade (constructed of select fine grain materials which shall be compacted in lifts of six inches or less to 90% of the maximum dry density and at 0% to 4% wet of optimum moisture content, in accordance with the approved construction quality assurance plan, and compacted to attain a hydraulic conductivity of 1×10^{-5} cm/sec or less, or meet gradation criteria of a maximum of 3/8 inch particle size and at least 30% passing #200 sieve), 60-mil HDPE geomembrane, geocomposite drainage layer, GCL, 60-mil HDPE geomembrane, 9-inch thick gravel drainage layer, 8 oz/sy nonwoven geotextile and a 15-inch thick operations layer.

Site drainage is to Rock Creek which flows into Littlejohns Creek, a tributary of the San Joaquin River.

MMW: 6/9/2005