INFORMATION SHEET

ORDER R5-2016-XXXX
RECOLOGY HAY ROAD
RECOLOGY HAY ROAD, DBA JEPSON PRAIRIE ORGANICS
RECOLOGY HAY ROAD LANDFILL
SOLANO COUNTY

Background

The Recology Hay Road Landfill is an active, Class II, municipal solid waste (MSW) landfill along Hay Road near Highway 113 approximately 8 miles southeast of Vacaville in Solano County. The landfill has been in operation since 1964, accepting household, commercial, industrial, construction and demolition, and other designated, nonhazardous or inert wastes requiring special handling (e.g., treated wood wastes, Title 22 special wastes, asbestos). A site previously operated as a burn dump from 1967 to 1972. In addition to landfill units, the facility also includes a de-watered sewage sludge storage unit, a sludge drying area, and an onsite compost facility.

Geology

The northeast part of the site is underlain by Younger Alluvium (sandy silts), while the remainder of the site is underlain by Older Alluvium (silts and clays with sand and gravel lenses) up to 130 feet thick. The Tehama formation (primarily of silts and clays) underlies the Older Alluvium.

Unit Classifications

There are five landfill units at the facility as follows:

1. LF-1 -- An existing Class III unit (44.5 acres);
2. LF-2 -- Class III unit (14.7 acres);
3. LF-3 -- Class II unit (26.4-acres) with full build out to 89.1 acres; and
4. LF-4 -- Class II unit (77.9-acres) with full build out to 118.9 acres.

The facility also includes a 7-acre, Class II waste pile unit (WP-9.1) and a 3.2-acre, Class II Land Treatment Unit (LTU). WP-9.1 is used for storing the de-watered sludge during the wet season, while the LTU was historically used for drying the sludge during the dry season. The LTU and the eastern half of WP-9.1 are no longer in operation and are currently in the process of being clean closed per Title 27 regulations. The remainder (i.e., west half) of WP-9.1 and all of the landfill units at the facility remain active.

Groundwater

Site-wide, the depth to groundwater varies from about 5 to 36 feet bgs, averaging about 10 feet bgs (10 feet MSL). The Discharger must de-water units on the western half of the site to meet Title 27 requirements for minimum separation between wastes and groundwater (5 feet). De-watering is accomplished by pumping groundwater from the bottom of a large borrow pit immediately west of the facility. The pumping creates a cone of depression in the water table extending across the western half of the site. On the eastern half of the site, groundwater resumes its natural course to the southeast. The pump gradient is about 10 times steeper (0.013 ft/ft) than the natural gradient (0.0013) ft/ft. There are currently 10 LF-1 monitoring wells, nine LF-2/LF-3 monitoring wells, and 10 LF-4 monitoring wells.

Corrective Action

VOCs have been historically detected in groundwater at the site, including alcohols & ethers (e.g., tert-Butyl Alcohol and MTBE), ketones (e.g., acetone), Freon compounds (e.g., Freon 12), and halogenated VOCs and other VOCs at average concentrations up to 40 µg/L, 10 µg/L, 7 µg/L, 3 µg/L, and 5 µg/L, respectively. In 2010, the Discharger installed a landfill gas extraction system at the site that presently includes 66 LFG extraction wells in the landfill units. Extracted LFG is routed to a gas-to-energy plant in the northeast part of the site. Since implementation of LFG controls, the concentrations of VOCs in most of the wells have been reduced to non-detect levels, indicating LFG a likely source of VOC impacts at the site. Other corrective action measures implemented at the site include groundwater extraction to address an historical leachate release from WP-9.1 and bioremediation of historical nitrate-N plumes on the east and west sides under a general remediation order.

Revised WDRs

These revised WDRs include a compliance schedule for closure of LF-1, requiring that the Discharger submit a Final Closure and Postclosure Maintenance Plan (FC/PCMP) for LF-1 by **15 October 2019** and complete closure of LF-1 by **15 October 2021**.

Construction Specifications in the revised WDRs specify prescriptive standard and authorized EADs for closure of landfill units and construction of new LF-3 and LF-4 modules/phases. Such designs include landfill cover, base liner, side slopes, LCRS sumps, and areas of overlap between landfill units. The LCRS sumps are also required to be double-compositely lined. The Discharger is also required to operate all existing classified units and DM-7.2, except for LF-1 and the LTU, in accordance with the EAD/Ss approved for those units/modules under previous WDRs. LF-1, the LTU and all new landfill modules/units are required to be operated in accordance with Title 27 prescriptive standards (i.e., 5 feet minimum separation).

The WDRs also require submission of operations and maintenance (O&M) Plans for various landfill systems/operations (e.g., LFG controls, LCRS sump, liquids management, waste/materials reuse, site winterization) to help ensure that such systems/operations are in compliance with the WDRs and applicable sections of Title 27 and Subtitle D. Corrective action specifications in the WDRs require that the Discharger develop sample analysis profiles of all fluids that could potentially be detected in a leak detection device and/or pan lysimeter at the site to assist in identification of any such fluid(s), in the event of a leak or release, and incorporate any applicable O&M plans into required responses.

The WDRs also require that the Discharger submit an updated Water Quality Protection Standard (WQPS) Report reflecting the revised landfill unit designations of this Order and adequately demonstrate that the use of intrawell monitoring is consistent with Title 27, Section 2008(b) and (c), and if not consistent with Title 27, propose to change the detection groundwater monitoring to interwell comparisons using hydraulically upgradient wells as background.

Other Units

The WDRs also include requirements for the onsite waste pile (WP-9.1), land treatment unit (LTU) and composting facility. Both WP-9.1 and the LTU are required to be clean closed in accordance with an approved clean closure plan prior to construction of new landfill modules

in that area. Requirements for the composting facility are generally consistent with those under the General Composting Order.

Legal Effect of Rescission of Prior WDRs or Orders on Existing Violations

Previous WDR R5-2008-0188 is rescinded by this Order. The Board's rescission of prior waste discharge requirements and/or monitoring and reporting orders does not extinguish any violations that may have occurred during the time those waste discharge requirements or orders were in effect. The Central Valley Water Board reserves the right to take enforcement actions to address violations of prior prohibitions, limitations, specifications, requirements, or provisions of rescinded waste discharge requirements or orders as allowed by law.

WMH