

ORDER R5-2018-XXXX
EL DORADO COUNTY
UNION MINE LANDFILL
CLASS II LANDFILL, CLOSED CLASS III LANDFILL AND CLASS II SURFACE IMPOUNDMENT
OPERATION, MAINTENANCE, CLOSURE, AND POST-CLOSURE MAINTENANCE
EL DORADO COUNTY

INFORMATION SHEET

In Order No. R5-2018-XXXX and its associated Monitoring and Reporting Program (MRP), the Central Valley Regional Water Quality Control Board prescribes updated waste discharge requirements (WDRs) for the Union Mine Landfill (Facility) in El Dorado County, situated approximately 3 miles south of the town of El Dorado. The Facility is owned and operated by El Dorado County (Discharger) and is not open to the general public.

The Facility is comprised of three Waste Management Units (WMUs) in all—two separate units for municipal solid waste (MSW Units), 6 and 36 acres in size, and a single 0.8-acre Surface Impoundment with a capacity of 2 million gallons. The Facility was assessed with an overall Threat to Water Quality (TTWQ) and Complexity (CPLX) rating of 2B. At the same Facility site, the Discharger owns and operates a septage/leachate wastewater treatment plant (WWTP) and spray fields, which are regulated under separate WDRs, to primarily treat the liquid stored in the Surface Impoundment.

The MSW Units have been designated by the Discharger as “Old landfill” for the partially closed landfill WMU and “Expansion area” for the active landfill WMU. Pursuant to Title 27 of the California Code of Regulations (Title 27), the Old landfill has been classified as a “Class III” unit, whereas Expansion area has been classified as “Class II” unit. The surface impoundment has been classified as “Class II”. The instant order incorporates this designation and calls out the landfill WMUs as “Class III Old” and “Class II Expansion”.

The 36.3-acre Class III Old landfill WMU is unlined, constructed over native materials and sited above-grade over some of the mine’s interconnected stopes, shafts and tunnels. This unit no longer accepts wastes and was partially closed in portions since 1997 in accordance with the regulatory requirements at the time of closure. 34.1-acres of this unit was previously closed and 2.2-acres has an interim cover and has not been closed.

- 4.9 acres were closed in 1997 in accordance with CCR Title 23
- 14.6 acres were closed in 1998 in accordance with CCR Title 14
- 13.6 acres were close in 2007 in accordance with CCR Title 27.

The leachate collection and removal system (LCRS) of the Class III Old landfill WMU consists of toe drains consisting of a gravel- filled trench that runs the length of north and northeast perimeter of the Class III Old landfill WMU and the junction (southwest of the Class III old landfill WMU) between the Class III Old and Class II Expansion landfill WMUs. The purpose of the drain is to collect leachate generated at the toe of the Class III landfill and transfer the leachate to the Class II surface impoundment. The LFG extraction system at the closed portion of the Class III Old landfill WMU consists of 23 vertical landfill gas extraction wells, designated EW-1 through EW-23, and the landfill gas piping system. The

extraction landfill gas reports to an enclosed flare and/or to three 70 kilowatt microturbines. The condensate from the landfill gas extraction is discharged to the Class II surface impoundment.

The 6.0-acre Class II Expansion landfill WMU constructed in 1996, is lined with a composite liner system. The Class II Expansion landfill WMU has a LCRS which discharges leachate collected from base of the WMU to its sump, to where the toe drain along the junction between Class II Expansion and Class III Old landfill WMUs discharges leachate collected from the Class III Old landfill WMU toe. This unit was constructed with an underdrain system to maintain the minimum 5 feet separation from waste to the highest anticipated elevation to underlying groundwater and the underdrain discharges to the unnamed tributary at the site. The Class II landfill Expansion WMU accepts the following wastes: non-hazardous, treated and dewatered sludge from the WWTP and municipal solid waste from onsite facilities.

The two million gallon capacity Class II surface impoundment was constructed in 1992 with a liner system consisting of, top to bottom, geomembrane, two-foot clay liner and two gravel filled leachate collection trenches running the length of the Class II surface impoundment. The leachate collection trenches in the geonet leak detection and collection layer function as leak detection to the Class II surface impoundment liner system. This WMU accepts liquid wastes from following sources:

- Leachate collected from the partially closed Class III Old landfill WMU toe drains,
- Leachate collected from the active Class II Expansion landfill WMU LCRS,
- LFG condensate collected from the LFG recovery system on the partially closed Class III Old landfill WMU,
- Liquid collected from the Class II surface impoundment leak detection and collection layer,
- Runoff from the septage truck washout area, and
- Direct rainfall.

The liquid stored in the Class II surface impoundment is pumped to the onsite WWTP for treatment and the final effluent is land applied at the spray fields.

Surface water drainage is to Martinez Creek. Martinez Creek is tributary to the North Fork Cosumnes River, which is tributary to the Cosumnes River, thence to the Sacramento-San Joaquin Delta.

This Order implements operation and maintenance requirements for the Class II Expansion landfill WMU and the Class II surface impoundment, closure requirements for the Class II Expansion landfill WMU and remaining Class III Old landfill WMU, and post-closure maintenance requirements for partially closed Class III landfill WMU. Notable revisions to the Facility's WDRs include:

- a) Updated requirements for operation and maintenance of the Class II Expansion Landfill WMU and Class II surface impoundment;
- b) Updated closure requirements for the remaining Class III Old landfill WMU and Class II Expansion landfill WMU,

- c) Updated post-closure maintenance requirements for the partially closed Class III Old landfill WMU,
- d) Revisions to the Facility's Detection Monitoring Program (DMP),
- e) Monitoring requirements for surface discharges from historic mining related features, and
- f) Updates to financial assurances reporting.

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