

Regional Water Quality Control Board
North Coast Region
Executive Officer's Summary Report
June 17, 2021

ITEM: 7

SUBJECT: Public Hearing on Order No. R1-2021-0024 to consider adoption of proposed Waste Discharge Requirements (WDRs) for the County of Mendocino, South Coast Class III Solid Waste Disposal Site, WDID No. 1B77023OMEN (Terri Cia)

BOARD ACTION: The Board will consider adoption of Waste Discharge Requirements Order No. R1-2021-0024 (Proposed Order).

BACKGROUND: The Proposed Order updates and replaces Waste Discharge Requirements Order No. 77-023 as amended by Super Order State Water Board Resolution 93-62, General Waste Discharge Requirement Order No. 93-83, and Cleanup and Abatement Order No. 87-44.

The County of Mendocino (hereinafter Discharger) owns and operates the South Coast Class III Solid Waste Disposal Site (Site) located at 40855 Fish Rock Road near the town of Gualala in Mendocino County as shown on Attachments A, B, and C in the Proposed Order. Surrounded by heavily forested lands, the landfill occupies six acres within the 47.65-acre parcel. The Site was constructed in 1970 to provide waste disposal service for the areas of southern coastal Mendocino County along the State Route 1 corridor including the towns of Elk, Manchester, Point Arena and Gualala. A low volume transfer station was constructed on site, adjacent to the waste footprint, after the landfill ceased accepting waste in 2000. The inactive landfill was then provided "intermediate cover" consisting of several feet of suitable soil, compacted to provide stability, graded to provide for positive drainage, and seeded for erosion protection. Transfer station operations are currently contracted out to Solid Waste of Willits and regulated by the Regional Water Board under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Facilities (NPDES No. CAS000001, WDID 123I005730).

The existing refuse management facilities (Facility) consist of a waste transfer building, recycling areas, and site attendant building alongside the intermediate cover closed landfill, with a perimeter surface seep collection system, 2 leachate storage tank farms, drainage and sedimentation basins with stormwater conveyances routed to the Little North Fork of the Gualala River. The Facility also includes groundwater monitoring wells and landfill gas probes for environmental compliance monitoring.

The Discharger submitted a Report of Waste Discharge (ROWD) in December 2016 with supplemental information submitted through December 2019. Waste Discharge Requirements Order No. 77-023, and as amended by the General Waste Discharge Requirements Super Order No. 93-83, are currently in effect for the Facility.

DISCUSSION: The Proposed Order provides for the transition from intermediate cover closure to final construction closure of the landfill surface (capping) in accordance with the California Code of Regulations, title 27. The project also includes site improvements for the final access road, collection systems, landfill gas venting, surface

water control basins and drainage ways. To meet the landfill closure construction requirements, California Code of Regulations, title 27 provides for a minimum prescriptive requirement of an earthen cover system consisting of two feet of compacted foundation soils, one foot of compacted clay liner and one foot of vegetative cover soils to protect the clay liner. California Code of Regulations, title 27 also provides for the use of an engineered alternative design, provided the alternative is an equivalent design affording equivalent protection. The Discharger has proposed utilizing an engineered alternative design for the landfill cap, by use of a ClosureTurf® system which includes construction of a synthetic turf cap covered by sand ballast infill which overlies a plastic liner system to cover the foundation soils. The Discharger chose the use of the engineered alternative design, finding that a viable cover soil source was not available and undertook a design change in lieu of a clay liner, vegetative soils and sod.

ClosureTurf® is a system consisting of a 60 mil-geomembrane plastic liner (linear low-density polyethylene or LLDPE, Super Grip Net geomembrane) placed over the two-foot-thick prepared foundation subgrade, which is then overlain by closure turf geotextile and sand infill ballast. The 60 mil LLDPE Super Grip Net has integrated spikes on the bottom side of the geomembrane with integrated drainage studs on the top of the geomembrane. The bottom spikes provide enhanced stability of the geomembrane cover and the drainage studs provide a path for stormwater run-off when overlain by the closure turf geotextile. The ClosureTurf® material serves as a separator geotextile to hold the sand infill ballast material on top of the geosynthetic liner. A one-half-inch layer of sand is placed on top of the turf to weight it down and protect it from exposure and degradation. There is no vegetative soil layer in a turf cap system. Because the surface soil layer is eliminated, soil erosion from the cap surface does not occur and stormwater run-off is far less turbid than compared to a prescriptive landfill cover system.

The Proposed Order requires groundwater monitoring, leachate removal and collection, and landfill gas monitoring and evaluation of the potential impacts to surface waters to ensure protection of both groundwater objectives and the beneficial uses of the Little North Fork River, tributary of the Gualala River. Also, the Proposed Order requires the Discharger to acquire and maintain financial assurances for the long-term maintenance and integrity of the turf cap system for the life of the site or until the site no longer poses a threat to water quality. The Proposed Order also requires the Discharger to inspect, maintain and repair the cap throughout the wet weather season in accordance with the construction specifications, including those for the sand ballast infill. The Proposed Order includes prohibitions for any discharge of cap materials including plastics, plastic fibers or microfibers to receiving waters, and adds surface water inspection, and monitoring and reporting requirements.

A copy of the Draft Order was posted on the Regional Water Board website and was available for public comment from February 18, 2021, through April 6, 2021. The Discharger submitted timely comments on the Draft Order including supporting information from consultants and manufacturer representatives. No other written comments were received during the public comment period.

The Discharger's Comment Package contains various suggested changes to accommodate their construction project, long term operations and post closure monitoring and financial assurances. Staff have reviewed these proposed changes and found them reasonable, and staff are in support of amending the Draft Order accordingly for:

WDR: Tabular changes, map labelling updates, clarifying information, updated nomenclature, table and typographical errors.

Attachments: Updates for site maps: Attachment B and C for labelling locations, Replacement Attachment F with updated construction details.

MRP: Discharger comments addressing and clarifying surface water sampling locations, observation locations, reporting periods for groundwater, unsaturated zone and 5-year Constituents of Concern, typographical changes for tables and labels.

Staff reviewed the comments and additional clarifying information and then amended the WDR, Attachments and MRP to resolve and address the requested clarifications.

On April 23, 2021, Regional Water Board staff met by conference call with the Discharger's staff and representatives to discuss their comment letter and submittal package, wherein we received updated information potentially affecting the long-term management of the site.

On April 29, 2021, following further review and in response, Regional Water Board Staff discussed with the Discharger outstanding concerns regarding long term management of the site. Specifically, financial assurance provisions inclusive of the stated sole-source manufacturer performance plan coverages have been amended to allow for submittal of an equivalent plan or alternative subject to approval by the Executive Officer. These specific changes to the Order include the following amendments:

FINDINGS: CLOSURE AND FINANCIAL ASSURANCES

- # 50. In its Report of Waste Discharge application, and again following release of the draft Order, the Discharger identified and agreed to purchase and maintain a Watershed Geosynthetics LLC ClosureTurf® Performance Assurance Policy for the first 5 years of the 30 years required to satisfy applicable post closure maintenance requirements in title 27, section 21769, and engineered alternative design requirements pursuant to title 27, section 20080 (b). If the Discharger cannot maintain a Watershed Geosynthetics LLC ClosureTurf® Performance Assurance Policy, the Discharger may implement an equivalent policy subject to Executive Officer approval. The equivalent policy shall have sufficient detail and specifications to meet title 27, section 21769 requirements pertaining to long term maintenance and related costs including but not limited to: inspection, monitoring, performance, integrity, repair, and possible replacement throughout the 30 year post closure period. Any approved policy must also meet title 27, section 20080 (b) requirements to ensure

the engineered alternative design offers an equivalent level of water quality protection.

REQUIREMENTS: CLOSURE SPECIFICATIONS

- #10. The Discharger shall maintain Post Closure Maintenance Plans and Post Closure Financial Assurances for a minimum of 30 years for the facility. The Discharger agreed to purchase and maintain a Watershed Geosynthetics LLC ClosureTurf® Performance Assurance Policy for the first 5 years of the required 30-year post closure period. If the Discharger cannot maintain a Watershed Geosynthetics LLC ClosureTurf® Performance Assurance Policy, the Discharger may implement an equivalent policy subject to Executive Officer approval. The equivalent policy shall have sufficient detail and specifications to meet title 27, section 21769 requirements pertaining to long term maintenance and related costs including but not limited to: inspection, monitoring, performance, integrity, repair and possible replacement. Any approved policy must also meet title 27, section 20080 (b) requirements to ensure the engineered design alternative offers an equivalent level of water quality protection.

A full explanation of all comments and Staff responses are provided in the attached Response to Written Comments document. Staff anticipates that the Proposed Order will be contested.

RECOMMENDATION: Adopt Order No. R1-2021-0024, as proposed.

SUPPORTING DOCUMENTS:

1. Proposed Order R1-2021-0024 WDR
2. Proposed Order R1-2021-0024 MRP
3. Comments Received for Order R1-2021-0024
Provided to Board Members
(Provided to the public upon request, please email Northcoast@waterboards.ca.gov)
4. Staff Response to Written Comments
5. Notice of Public Hearing