



## Lahontan Regional Water Quality Control Board

October 27, 2025

WDID No. 6B150303011

TO: ATTACHED MAILING LIST

### **Revised Waste Discharge Requirements for Mojave/Rosamond Landfill, Kern County**

Enclosed are tentative Revised Waste Discharge Requirements for the subject line facility, located in Kern County. The Lahontan Regional Water Quality Control Board (Lahontan Water Board) requests that you review the enclosed documents and provide us with your written comments no later than **November 26, 2025**.

Please send your comments to the Lahontan Water Board's email address at [Lahontan@waterboards.ca.gov](mailto:Lahontan@waterboards.ca.gov) and include ***Mojave/Rosamond Landfill WDID No. 6B150303011 Comments*** in the subject line text. If you do not have access to the internet, you may mail your comments to the Lahontan Water Board's Victorville office at the address shown on this letter to the attention of Tiara Crucius.

The Lahontan Water Board will consider adopting the Revised Waste Discharge Requirements at its regular meeting scheduled for February 11, 2026. As required by the California Code of Regulations, title 27, section 21730, notice of the meeting and the enclosed documents are circulated not less than 45 days before the scheduled meeting. You can view the Lahontan Water Board's meeting agenda 10 days before the meeting on our web site at: [www.waterboards.ca.gov/lahontan](http://www.waterboards.ca.gov/lahontan) (click on Agenda). If you need further information regarding this meeting, please contact our office at (760) 241-6583.

If you need further information regarding this agenda item, please contact Tiara Crucius, Engineering Geologist at (760) 243-2355 or at ([tiara.crucius@waterboards.ca.gov](mailto:tiara.crucius@waterboards.ca.gov)) or Christina Guerra, Senior Engineering Geologist at (760) 241-7333 or ([christina.guerra@waterboards.ca.gov](mailto:christina.guerra@waterboards.ca.gov)).

Enc: Revised Waste Discharge Requirements and Monitoring and Reporting Program for Mojave/Rosamond Class III Landfill

ROBERT PEARCE, ACTING CHAIR | BEN LETTON, EXECUTIVE OFFICER

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION**

**BOARD ORDER NO. R6-2026-TENTATIVE  
WDID NO. 6B150303011**

**REVISED WASTE DISCHARGE REQUIREMENTS**

**FOR**

**CONTINUED OPERATION AND CORRECTIVE ACTION AT MOJAVE-  
ROSAMOND RECYCLING AND SANITARY LANDFILL**

Kern County

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The California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) finds:

1. Discharger

The County of Kern, Solid Waste Management Division, owns and operates the Mojave-Rosamond Recycling and Sanitary Landfill, and is referred to as the "Discharger." On August 8, 2025, the Discharger submitted a revised Joint Technical Document (JTD) and a final design plan for an expansion of the existing landfill, Phase 2A Design Plan. The information in the JTD and Phase 2A Design Plan constitute a complete Report of Waste Discharge (ROWD). The ROWD/JTD contains the applicable information required in California Code of Regulations (CCR), title 27.

2. Location

The landfill is located in the western portion of the Mojave Desert on Silver Queen Road approximately four miles south of the Community of Mojave and about one mile east from State Route 14 in Kern County, within Section 3, T10N, R12W. Refer to Attachment A, which is made part of this Order, for vicinity and site location.

3. Facility

The Mojave-Rosamond Recycling and Sanitary Landfill is an active Class III municipal solid waste landfill (Facility). The existing waste management unit (WMU) is an unlined landfill cell (Phase 1) sited on approximately 27 acres, as shown on Attachment B which is made part of this Order. The Discharger proposes to construct lined WMUs cells (Phase 2A, Phase 2B, and Phase 2C) on approximately 55.9 acres northeast of Phase 1, as shown on Attachment C which is made part of this Order, and increase the Facility boundary from 40

acres to 253 acres. For this Order, Phase 1, Phase 2A, Phase 2B, and Phase 2C, are collectively referred to as the "Landfill."

4. Reason for Action

The Water Board is revising the Waste Discharge Requirements (WDRs) and the Monitoring and Reporting Program (MRP) to: (1) prescribe requirements for construction of Phase 2A and future phases; (2) adopt an engineered alternative liner system for Phase 2A and future phases; (3) establish monitoring requirements for Phase 2A; (4) increase the Facility boundary from 40 acres to 253 acres; (5) increase the permitted waste footprint from 27 acres to 55.9 acres; (6) establish a Corrective Action Program (CAP) to remediate the effects of a known release to groundwater; and (7) provide general updates to the WDR and MRP based on current site conditions.

5. Order History

- a. *Board Order No. 6-72-100*, Adopted October 26, 1972  
Established WDRs for the Landfill.
- b. *Board Order No. 6-84-50*, Adopted May 11, 1984  
Revised WDRs to incorporate general updates.
- c. *Board Order No. 6-93-10025*, Adopted September 9, 1993  
Amended the WDRs to incorporate the requirements of Title 40, Code of Federal Regulations, Parts 257 and 258 (Subtitle D) as implemented in the State of California under State Water Resources Control Board (State Water Board) Resolution No. 93-62.
- d. *Board Order No. 6-84-50A1*, Adopted June 8, 1995  
Amended the WDRs to incorporate a time schedule for compliance with specific requirements of Subtitle D and Chapter 15, Title 23, CCR.
- e. *Board Order No. 6-95-117*, Adopted November 9, 1995  
Revised the WDRs to require the Discharger to achieve compliance with the revised requirements of Article 5, Chapter 15, Title 23, CCR (Chapter 15), to incorporate requirements of previously adopted Board Orders No. 6-93-10025 and 6-84-50A1, and to incorporate a time schedule submitted by the Discharger for compliance with State and Federal regulations.
- f. *Board Order No. R6V-2007-0035*, Adopted November 29, 2007  
Revised the WDRs to include the Discharger's existing Evaluation Monitoring Program (EMP), provide updated site information, and to incorporate a time

schedule that required the Discharger to submit work plans necessary to update the EMP.

6. Verified Release to Groundwater

Volatile Organic Compounds (VOCs) were initially detected in groundwater beneath Phase 1, in 1996, confirmed by monitoring data. The most commonly detected VOCs in groundwater are tetrachloroethene (PCE) and dichlorodifluoromethane (Freon-12). The Discharger has conducted several landfill gas (LFG) feasibility studies that evaluated the source of groundwater impacts beneath Phase 1.

Since the release was verified, the Discharger has implemented an Evaluation Monitoring Program (EMP) and Corrective Action Program (CAP) and has shown that the sources of the release are LFG migration. The Discharger has been implementing interim corrective action measures, including LFG monitoring, since 2009, LFG source controls, and groundwater monitoring since, 1996.

The Discharger proposes a CAP that includes LFG source controls with Monitored Natural Attenuation (MNA), drainage controls, and diversion programs. The CAP and more information on the source of release is more specifically defined in Finding 29.

7. Climate

The climate of the area is a semi-arid climate characterized by low rainfall, cold winters, and hot, dry summers, large seasonal and diurnal temperature ranges, gusty winds, and low relative humidity. The average annual rainfall is approximately 6.0 inches. The average temperature is 75.8 degrees Fahrenheit (°F) and ranges to an average high temperature in the summer of 98°F. The estimated 100-year/24-hour precipitation event for the Facility is approximately 4.04 inches. The estimated 1000-year/24-hour precipitation event is 5.39 inches. The average annual pan evaporation rate is approximately 111.59 inches.

8. Land Uses

The Facility is located within the Mojave Specific Plan area in Kern County. Land near the Facility is zoned for limited agricultural and heavy industrial uses. Surrounding property is primarily vacant land with some industrial use. Residential and commercial land uses are in the communities of Mojave and Rosamond, north and west of the Facility.



9. Site Topography

The Facility is located in the Antelope Valley of the eastern portion of Kern County and situated on a north sloping alluvial plain at an elevation of approximately 2,600 to 2,700 feet above mean sea level.

10. Site Geology

The Facility is located in the western portion of the Mojave Desert geomorphic province of California. The Mojave Desert is bordered along its northeast boundary by the Garlock fault, Tehachapi Mountains, and the Basin and Range province, and to the southwest by the San Andreas fault and Transverse Ranges. The closest active faults to the site include the northeast-trending Garlock fault, located about 11 miles northeast of the Facility, and the San Andreas fault located approximately 27 miles southwest of the site. The Gloster fault, which strikes northwest, is about two miles south of the Facility. Numerous minor faults have been noted in the area.

The Facility is underlain by Quaternary sedimentary deposits of sand, silt, and clay, that unconformably overlie Tertiary (Cenozoic) volcanic rocks from Bobtail quartz laterite member of the Gem Hill Formation, which crops out at the bedrock ridge south of the Facility. As a result of the alluvium resting on a bedrock surface, the alluvium thickness ranges from zero at the southern end of Phase 1 to over 200 feet in the north. Just east of the Facility are volcanic bedrock outcrops of Tertiary porphyritic felsite and Tertiary tuff-breccia. West of the Facility are volcanic bedrock outcrops of porphyritic felsite, Tertiary porphyry, and quartz monzonite of probable Tertiary age. Immediately south of the landfill are volcanic buttes, outcrops of the Gem Hill Formation, and consist of Tertiary age porphyry. North and south of the Facility consist of the Gem Hill Formation and is predominantly poorly sorted sand with a discontinuous layer of clayey gravel and a 12-foot layer of clay. The southern portion of Phase 1 is adjacent to a volcanic outcrop with slopes of 25 percent and elevations up to 2,810 feet mean sea level.

11. Regional Hydrology

The Facility is located within the Chafee Hydrologic Area of the Antelope Hydrologic Unit. The Antelope Valley is a topographic enclosed basin. All water that enters the Antelope Valley either infiltrates into the groundwater basin, evaporates, or flows towards Rosamond Lake, Buckhorn Lake, and Rogers Lake. There is no perennial surface water flow at or in the vicinity of the site. There is a natural floodplain channel along the northern and eastern perimeters of the site.

12. Hydrogeology and Groundwater Quality

The Facility overlies the Fremont Valley Groundwater Basin. Groundwater beneath the Facility is present in both the alluvial deposits and bedrock fractures and flows east-northeast towards Rogers Dry Lake. Ground water monitoring indicates the depth to ground water ranges between 175 to 181 feet bgs.

Regional groundwater flows towards the northeast and the groundwater beneath the Facility is generally consistent with regional gradient. The elevation of groundwater in MR1-08 is slightly higher than the wells at the site, which may indicate that the water bearing unit in which the well is completed may be semi-confined. The southern boundary of the Facility is marked by igneous intrusions, which may disrupt groundwater flow locally.

The Discharger has been monitoring groundwater quality beneath the Facility since 1989. Trend analysis performed on background well MR1-06, using historical data, shows a number of constituents with increasing and decreasing trends. Total dissolved solids concentrations have continued to increase, while chloride, nitrogen, and sulfate concentrations show decreasing trends. The examination of historical background data for dissolved metal concentrations indicates a decreasing trend in vanadium, and an increasing trend in arsenic, barium, copper and zinc concentrations.

Groundwater beneath Phase 1 (the unlined WMU) has been impacted with VOCs. The effected groundwater is being remediated with a corrective action program and current VOC concentrations are showing a stable trend over time. Historical and current VOC concentrations in groundwater are more specifically described in Finding 29.

13. Waste Management Unit Classification and Authorized Disposal Sites

Pursuant to CCR, title 27, section 20260, the Landfill is classified as a Class III WMU and authorized to accept nonhazardous and inert solid wastes including municipal solid waste (MSW). The Landfill is defined as an MSW landfill in Subtitle D.

The footprint for Phase 1 is approximately 27 acres as shown on Attachment B. This Order expands the footprint of the authorized Landfill disposal site to include the 55.9 acres of Phase 2A, Phase 2B, and Phase 2C, as shown on Attachment C of this Order. The only authorized disposal site for leachate generated at the Facility are lined portions of the Landfill or other authorized off-site disposal facilities. The Discharger is required to submit a Revised Report of Waste Discharge if the Discharger proposes to discharge waste outside of the footprint area.

14. Waste Classification

The waste discharged to the Landfill is defined in CCR, title 27, sections 20220 and 20230, a non-hazardous and inert solid waste, respectively. The Landfill receives waste from the communities of Mojave, Rosamond, California City, and Tehachapi. The site is permitted to receive municipal solid waste, agricultural waste, construction/demolition waste, and dead animals. The Discharger proposes to receive treated wood waste for Phase 2A.

15. Treated Wood Waste

The Health and Safety Code, section 25230.1, defines “treated wood” to mean wood that has been treated with a chemical preservative for purposes of protecting the wood against attacks from insects, microorganisms, fungi, and other environmental conditions that can lead to decay of the wood and the chemical preservative is registered pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.Code, section 136 and following). Chemicals used to treat wood may include chromated copper arsenate, ammoniacal copper zinc arsenic, or chromated zinc chloride. Treated wood waste means wood waste that meets the requirements of Health and Safety Code section 25230.2.

Health and Safety Code, section 25230.11, provides that treated wood waste may specifically be authorized by WDRs for disposal at composite-lined Class II or Class III landfills (compliant with all Subtitle D regulations effective October 9, 1993). Landfills that accept treated wood waste are required to comply with all applicable provisions of Health and Safety Code, section 25230.11, subdivision (b).

16. Treated Wood Waste Disposal

Health and Safety Code, section 25230.11, allows treated wood waste to be disposed in a composite-lined portion of an MSW landfill, provided that it is managed and disposed of in accordance with the conditions and requirements, which are:

- a. Manage the treated wood waste to prevent scavenging.
- b. Ensure that any management of the treated wood waste at the Landfill before disposal, or in lieu of disposal, complies with the applicable requirements of Health and Safety Code, section 25230.11, including prohibitions in section 25230.3, for handling treated wood waste.

- c. Handle treated wood waste in a manner consistent with all applicable requirements of the Health and Safety Act of 1973, Part 1, commencing with section 6300, of Division 5 of the Labor Code, including all rules, regulations, and orders relating to hazardous waste.

This Order authorizes the discharge of treated wood waste to the composite lined portions of the Landfill. If monitoring at the composite-lined portion of the Landfill, at which treated wood waste has been disposed of indicates a verified release, disposal of treated wood waste shall immediately cease until corrective action, implementing the requirements of CCR, title 27, section 20385, results in cessation of the release.

17. Subtitle D Status

40 CFR Subtitle D requirements became effective for this Landfill on September 9, 1993. Board Order Nos. 6-93-10025, 6-84-50A1, 6-95-117, and R6V-2007-0035 required the submittal of several items in order to comply with Subtitle D for the Landfill. The Discharger submitted complete information regarding the acceptance of liquids, the existing waste footprint, the distance from the Facility to the nearest drinking water source, whether the Facility is in a 100-year floodplain or wetland, and Water Quality Protection Standard (WQPS). These items fulfilled the submittal requirements of Subtitle D, as implemented by State Water Board Resolution No. 93-62.

18. Description of Waste Management Units

a. Unlined Landfill

The unlined portion of the Landfill, a 27-acre refuse disposal footprint, began operations in 1973 and is still currently active. The Phase 1 cell will continue to accept waste until capacity is reached. This Order continues to permit the unlined Landfill footprint, shown on Attachment B.

b. Lined Landfill and Proposed Liner System

The proposed Landfill expansion would occur into Phase 2A, and future Phases 2B and Phase 2C, an area of approximately 55.9 acres, located north of the existing Phase 1 area as shown on Attachment C which is made part of this Order.

The bottom liner and side slope liner system for Phase 2A, and future Phases 2B and 2C, as shown in Attachment C, must be constructed in accordance with the following composite liner designs.

The bottom liner system design, the flat bottom portion of the landfill cell, is to be constructed with the following, from top to bottom:

1. 24 inches (minimum) of protective cover soil (1-inch maximum particle size);
2. Drainage geocomposite (LCRS);
3. A primary 60-mil high-density polyethylene (HDPE) geomembrane (textured on both sides);
4. A double non-woven geotextile backed GCL
5. A secondary 40-mil HDPE geomembrane (textured both sides) to encapsulate the geosynthetic clay liner (GCL); and
6. 12- inch-thick prepared subgrade.

The slope liner system design, liner sections with gradients greater than 3:1 (majority), and 2:1 (southern toe berm) are to be constructed with the following, from top to bottom:

1. A minimum 24-inches of protective cover soil (1/2-inch maximum particle size);
2. A primary 60-mil HDPE geomembrane (single sided texture, textured side down);
3. A double non-woven geotextile backed GCL;
4. A secondary 40-mil HDPE geomembrane (textured both sides) to encapsulate the GCL liner; and
5. 12-inch- thick prepared Subgrade.

The pan lysimeter design, encompassing approximately a 50-foot by 50-foot sump area, from top to bottom:

1. 12-ounce non-woven geotextile filter fabric;
2. 24-inch thick of 3/8 inch minus pea gravel;
3. 12-ounce non-woven geotextile cushion;

4. 60-mil HDPE geomembrane (textured both sides);
5. A double non-woven geotextile backed GCL;
6. 40-mil HDPE geomembrane (textured both side); and
7. 12-inch-thick prepared subgrade.

Pursuant to CCR, title 27, section 21760, the Discharger has submitted a final design plan for Phase 2A that is consistent with alternative liner specifications described in this Order. This Order requires the Discharger to submit a Final Design Plan for future phases that are compliant with the liner requirements specified in this Order.

19. Engineered Alternative to Prescriptive Standard for the Landfill Liner System

CCR, title 27, includes prescriptive standards for WMU construction and allows for engineered alternatives to such standards. CCR, title 27, section 20080, subdivision (b), requires that alternatives shall only be approved where the Discharger demonstrates that: (1) the construction or prescriptive standard is not feasible because it unreasonably and unnecessarily burdensome and will cost substantially more than alternatives, which meet the criteria, or is impractical and will not promote attainment of applicable performance standards; and (2) there is a specific engineered alternative that is consistent with the performance goal of the prescriptive standard and affords equivalent protection against water quality impairment. The Discharger submitted an alternative liner proposal in their Design Plan, dated April 8, 2025, and revised July 28, 2025, and demonstrated that the alternative liner system is consistent with the performance goal of the prescriptive standard. This Order approves the engineered alternative liner systems described in Finding No. 18.b.

20. Landfill Gas Monitoring System

The Discharger has installed eight multi-level landfill gas (LFG) monitoring wells around the perimeter of Phase 1 in 2008 and 2009, to comply with changes in CCR, title 27, section 20925, perimeter monitoring requirements. The probes have three isolated screened intervals at various depths. A deep multi-level LFG monitoring well was installed to monitor gas concentrations at various depths, up to approximately 160 feet.

21. Alternative Daily Cover

The Discharger is proposing to use various nonhazardous and designated wastes as alternative daily cover (ADC) on the Landfill, including tarps, compost

and compost materials, such as overs, chipped wood, crushed inerts (e.g. concrete), wood-overs, and clean soil or soil containing small amounts of natural organic material. These WDRs require that for each type of waste proposed as ADC, the Discharger must first demonstrate that it does not pose a threat to water quality and meets the requirements under CCR, title 27, section 20705.

22. Hazardous Waste Management

Solid waste is screened for household, commercial, and industrial hazardous waste. The Discharger implements measures to prevent the acceptance and disposal of hazardous wastes at the Landfill and has developed a hazardous waste screening program. Load screenings by the gate and at the active face involve verbal confirmations of waste constituency with the customer, as well as visual inspection of incoming waste material. All hazardous waste identified from the inspection are placed in portable hazardous waste containers, labeled, and moved temporarily to the permitted hazardous waste storage locker for off-site disposal at an appropriate facility. The Landfill has an active diversion program for inert materials, cathode ray tubes, used automotive oil, drained used oil filters, tires, food and vegetive food material, white goods, scrap metal, grass and leaves, mobile homes, campers, travel trailers, wood, electronic devices and appliances. These items are collected and stockpiled in designated areas until a sufficient quantity has been accumulated for recycling offsite.

23. Site Stormwater Management

The Discharger has prepared a site-specific Stormwater Pollution Control Plan (SWPCP). The SWPCP uses and implements Best Management Practices (BMPs) to mitigate potential pollution of stormwater discharges. Stormwater protection at the Facility is primarily accomplished through drainage control based on the following objectives: protection from run-on; minimize infiltration of precipitation into the waste; minimize exposure of precipitation to pollutants; manage run-off to minimize erosion and sedimentation; and minimize off-site migration of stormwater. The Discharger implements structural and non-structural BMPs and performs site compliance inspections to evaluate the effectiveness of the BMPs. The Discharger will implement the SWPCP throughout the life of the Landfill.

The following minimum BMPs must be implemented and maintained to reduce or prevent pollutants in industrial stormwater discharges: good housekeeping; preventative maintenance; spill and leak prevention response; material handling and waste management; erosion and sediment controls; an employee training program; and quality assurance and record keeping.

Advanced BMPs may be necessary to reduce or prevent discharges of pollutants in stormwater discharges in a manner that reflects best industry practice considering technological availability and economic practicability and achievability. Advanced BMPs may include: exposure minimization BMPs; stormwater containment and discharge reduction BMPs; treatment control BMPs; or other advanced BMPs based on site-specific criteria.

This Order requires prohibitions, limitations, and provisions for stormwater and non-stormwater discharges to protect both groundwater and surface water quality.

24. Statistical and Non-Statistical Methods

Statistical and non-statistical analyses of monitoring data are necessary for the earliest possible detection of measurably significant evidence of a release of waste from the WMUs. CCR, title 27, section 20415, subdivision (e)(7), requires data analyses to determine when there is "measurably significant" evidence of a release from the WMU. CCR, title 27, section 20415, subdivision (e)(8) allows non-statistical data analysis methods that can achieve the goal of the monitoring program at least as well as the most appropriate statistical method. The monitoring parameters listed in MRP No. R6-2026-TENTATIVE are used as indicators of a release from the Facility.

During EMP monitoring, the Discharger will conduct non-statistical analysis of data to determine if any new release occurs during the EMP. The groundwater beneath Phase 1 has been impacted by VOCs (see Finding 14). Since VOCs are not naturally occurring and thus have no background value, these organic constituents are not amenable to the statistical procedures contained in Title 27 for determination of a release of waste from the Landfill. Therefore, it is appropriate to apply non-statistical data analysis of data for non-naturally occurring constituents present in groundwater.

25. Water Quality Protection Standard

The WQPS consists of constituents of concern (COCs), concentration limits, monitoring points, and the point of compliance. The COCs, monitoring points, and point of compliance for groundwater and unsaturated zone monitoring are described in MRP No. R6-2026-TENTATIVE, which is made part of this order. The WQPS applies over the active life of the Facility, closure and post-closure maintenance period, and the compliance period of the Facility in accordance with CCR, title 27, section 20410(a).



26. Compliance Period

For MSW landfills, the compliance period is the number of years equal to the active life of the WMU plus a minimum of 30 years during the post-closure period in accordance with CFR, title 40, Part 258.61. The compliance period is the minimum period during which the Discharger must conduct a water quality monitoring program subsequent to a release from the Facility. The compliance period must begin anew each time the Discharger initiates an EMP. The compliance period must extend as long as waste poses a threat to water quality pursuant to CCR, title 27, section 20950(a)(1), and CFR, title 40, Part 258.61(b)(2). If the Discharger is engaged in a corrective action plan at the scheduled end of the compliance period, the compliance period shall be extended until the Discharger can demonstrate that the WMU has been in continuous compliance with its WQPS for a period of three consecutive years as specified in CCR, title 27, section 20410(c).

27. Detection Monitoring Program

Pursuant to CCR, title 27, section 20420, the Discharger has proposed a DMP for the Facility. The DMP monitors groundwater and the unsaturated zone for evidence of waste constituent migration that may threaten groundwater quality. The DMP is specified in MRP No. R6-2026-TENTATIVE. The DMP successfully detected a release from the Landfill, and EMP monitoring was initiated thereafter. The Discharger will continue to implement a DMP that will incorporate verification procedures to detect any new release.

28. Evaluation Monitoring Program

An EMP may be required, pursuant to CCR, title 27, section 20385 and section 20420, subdivision (k)(5-6), whenever there is "measurably significant" evidence of a release during a DMP or wherever there is significant physical evidence of a release. The Discharger must delineate the nature and extent of the release and develop a suite of proposed corrective action measures within 90 days of initiating an EMP, unless the Discharger proposes and substantiates a longer time period for implementing the EMP. If the EMP confirms measurably significant evidence and/or significant physical evidence of a release, then the Discharger must submit an Engineering Feasibility Study report proposing corrective action measures pursuant to CCR, title 27, section 20420 (k)(6), and MRP No. R6-2025-TENTATIVE.

In January 1996, the Discharger notified the Water Board of a release of VOCs at the Facility, the existing unlined Phase 1. In accordance with CCR, title 27, section 20385, the Discharger proposed a Work Plan for EMP and Engineering

Feasibility Study in May 1996. The Lahontan Water Board accepted the EMP work plan, and the Discharger began implementing the EMP in July 1996.

In 2007, the Water Board established new WDRs for the Facility and requested an extensive characterization of the site's hydrogeology, an updated EMP, and new soil gas probe installations to comply with unsaturated zone LFG monitoring requirements. The well installations and revised EMP were completed in accordance with the time schedule. In 2009, the Discharger installed additional LFG monitoring wells on the buffer properties south of the Phase 1. In 2010, a Landfill Gas Assessment was conducted to evaluate the extent that LFG contributes to VOCs and to model the migration of impacted groundwater. The assessment shows that Freon 12 and PCE are transferring from landfill gas to groundwater beneath the landfill. Freon 12 concentrations in groundwater and LFG are decreasing, while PCE levels show a downward trend in LFG but remain stable in groundwater.

The Discharger shall re-establish a revised EMP whenever there is significant evidence of a new release from the Landfill.

29. Corrective Action Program

A corrective action program to remediate releases from the Landfill may be required pursuant to CCR, title 27, section 20385 if results of an EMP confirm measurably significant evidence of a release from the Facility. A discharger required to establish a corrective action program must, at a minimum, comply with the requirements in CCR, title 27, 20430.

Groundwater monitoring has been conducted at the Facility since 1989. In 1996, monitoring data confirmed a release of VOCs to groundwater. The release to groundwater consisted of a few specific VOCs that were detected at concentrations above laboratory detection limits. In the 2012 Evaluation Monitoring Program (EMP) report, the Discharger has shown that Landfill Gas (LFG) is the source of this release. VOC impacted groundwater originates in the eastern and western portion of the Phase 1 cell and extends approximately 500 feet beyond the northern edge of Phase 1 cell. Tetrachloroethene (PCE) and dichlorodifluoromethane (Freon-12) are the primary VOCs detected in groundwater. The Discharger has shown that LFG migration is the source of this release through several LFG feasibility studies that evaluated the source of groundwater impacts beneath Phase 1. Headspace gas sampling from vacuum lysimeters and groundwater monitoring wells near Phase 1 were conducted. Based on the results of the headspace gas sampling, the remedial method selected is monitored natural attenuation (MNA), drainage improvements, and diversion programs. MNA was identified as the remedial method since natural attenuation was known to be occurring at the site, based on vapor sampling from

the unsaturated zone probes and quarterly groundwater sampling and analysis results. The Discharger has continued with MNA as the corrective action program at the Facility.

In May 2017, an Update Engineering Feasibility Study for Corrective Action was submitted. The corrective action program proposed the installation of well MR2-02 and re-designated EMP well MR2-01 as a corrective action program well. VOC concentrations are generally detected in groundwater monitoring well MR1-06, MR1-07, and MR1-08. Soil pore gas samples, from the vadose zone, near monitoring well MR1-08, have been collected and analyzed from multi-level gas probe MR3-01. Historical trends of VOC constituents of concern based on groundwater monitoring data and soil pore gas samples indicate water quality has remained stable throughout the five-year monitoring period. This Order requires the Discharger to continue to implement a corrective action program until groundwater quality has been restored.

Table 1 shows current concentrations and associated maximum contaminant levels (MCL) of VOCs in monitoring wells in and near the Phase 1 cell, which is the primary source of VOCs.

**Table 1. VOCs in Groundwater**

| Sample Point | Sample Date | Analyte                            | Results Units (µg/L) | PQL Units (µg/L) | MDL Units (µg/L) | MCL Units (µg/L) |
|--------------|-------------|------------------------------------|----------------------|------------------|------------------|------------------|
| MR1-06       | 09/04/24    | Dichlorodifluoromethane (Freon-12) | 0.14                 | 0.5              | 0.099            | N/A <sup>1</sup> |
| MR1-07       | 09/05/24    |                                    | 0.53                 |                  |                  |                  |
| MR1-08       | 09/05/24    |                                    | 0.43                 |                  |                  |                  |
| MR1-06       | 09/04/24    | Tetrachloroethene (PCE)            | 0.25                 | 0.5              | 0.13             | 5                |
| MR1-07       | 09/05/24    |                                    | 0.53                 |                  |                  |                  |
| MR1-08       | 09/05/24    |                                    | 0.56                 |                  |                  |                  |

Notes:

<sup>1</sup> There is no established MCL for Freon-12. The Discharger uses the method detection limit as the concentration limit for Freon-12.

PQL – practical quantitation limit

MDL – method detection limit

µg/L – micrograms per liter

In 1995, ash from baghouse waste was found in a 30 by 70-foot area of the landfill's western half. Board Order No. 6-95-117 required a technical report on the water quality threat posed by the baghouse waste. A 1996 report confirmed that metals, furans, and dioxins in the waste do not threaten groundwater, if no additional waste is added. The Discharger covered the waste with soil and implemented erosion control, fencing, and signs. In 1998, a plan was accepted to

add another waste lift over the top deck of the 14-acre site. In 2000, further management included a buffer and demarcation layer and a foot of soil cover. Final closure plans for the landfill will require Water Board approval and may include more stringent measures for the baghouse waste areas. The baghouse waste is not an identified waste source for the detections of VOCs in the groundwater.

30. Unsaturated Zone Monitoring

For Phase 1, the unsaturated zone monitoring system consists of five vacuum pressure lysimeters (installed in 1989). A gypsum block moisture sensor was installed in 1989. No liquid samples have been collected from the five lysimeters. In 2008 and 2009, the Discharger installed eight multi-level landfill gas (LFG) monitoring wells around the perimeter of Phase 1.

For Phase 2A, 2B, and 2C, the unsaturated zone monitoring system will consist of a pan lysimeter located beneath the LCRS sump portion of the lined cell.

31. Discharge of Monitoring Well Purge Water

As part of regularly scheduled ground water sampling events, ground water monitoring wells are purged until parameters of electrical conductivity, pH, and temperature are sufficiently stabilized to ensure collection of a representative sample. The Discharger employs a low-flow purge technique which reduces the amount of fluid volume generated from purging a monitoring well prior to sampling. Common practice is to discharge the purge water at the landfill, which may include use of the water for dust control. Because VOCs have degraded the aquifer beneath the Facility, the purge water also contains these constituents at trace concentrations. Purge water may be discharged to the ground only after groundwater sample analysis demonstrates that concentrations of VOCs do not exceed drinking water MCLs. Purge water may be used as dust control over the lined cell, Phase 2A.

32. Preliminary Closure and Post-Closure Maintenance Plan for the Landfill

The Discharger has submitted an amended Preliminary Closure and Post-Closure Maintenance Plan (PCPCMP), in 2021, as required by CCR, title 27, section 21769(b). A Final Closure and Post-Closure Maintenance Plan must be submitted for acceptance two years prior to the anticipated closure date for the entire Landfill or any portion thereof. The PCPCMP proposes in-place closure of the Landfill, the proposed final covers will be evapotranspirative covers and an extended period of site monitoring. The monitoring media will include the unsaturated zone, groundwater, and final cover materials.

### Financial Assurances

The Discharger has provided documentation that a financial assurance fund has been developed for closure, post-closure maintenance, and potential future corrective action requirements. This Order requires that the Discharger demonstrate in an annual report that the amount of financial assurance (for Closure, Post-Closure, and Corrective Action Monitoring) is adequate or increase the amount of financial assurance, as appropriate, for inflation. This Order requires the Discharger to report the amount of money available in the fund as part of the annual self-monitoring report.

### 33. Basin Plan

The Water Board adopted a *Water Quality Control Plan for the Lahontan Region* (Basin Plan) that became effective on March 31, 1995. This Order implements the Basin Plan, as amended.

### 34. Receiving Waters

The receiving waters are the ground waters of the Fremont Valley Groundwater Basin (Department of Water Resources Basin No. 6-46; Basin Plan, Plate 2B) and minor surface waters of the Chafee Hydrologic Area (626.10, Basin Plan, Plate 1B) of the Antelope Hydrologic Unit (626.00).

### 35. Beneficial Uses

The present and probable beneficial uses of the ground waters of Fremont Valley Groundwater Basin as set forth and defined in the Basin Plan are:

- a. Municipal and Domestic Supply (MUN);
- b. Agricultural Supply (AGR);
- c. Industrial Service (IND), and
- d. Freshwater Replenishment (FRSH).

The present and probable beneficial uses of minor surface waters of the Chafee Hydrologic Area, as set forth and defined in the Basin Plan are:

- a. Municipal and Domestic Supply (MUN);
- b. Agricultural Supply (AGR);
- c. Groundwater Recharge (GWR);
- d. Water Contact Recreation (REC-1);
- e. Non-contact Water Recreation (REC-2);
- f. Commercial and Sportfishing (COMM);

- g. Warm Freshwater Habitat (WARM);
- h. Cold Water Habitat (COLD); and
- i. Wildlife Habitat (WILD).

36. Waste Management Strategy

The Water Board has determined that the proposed waste discharges to the Phase 2 WMUs are consistent with a waste management strategy that prevents the pollution or contamination of waters of the state during the active life and after closure of the WMUs.

37. California Water Code, Section 13241 Considerations

Pursuant to the California Water Code (CWC), section 13241, the requirements of this Order take into consideration:

- a. Past, present, and probable future beneficial uses of water. This Order identifies existing groundwater quality and past, present, and probable future beneficial uses of water, as described in Finding Nos. 13 and 40, respectively. The proposed discharge to Phase 2A, 2B, and 2C will not adversely affect present or probable future beneficial uses of water including municipal and domestic supply, agricultural supply, industrial service supply, and freshwater replenishment. Phase 1 has an indication of a release of VOCs, however, the Discharger has implemented an EMP and corrective action program to continuously assess water quality.
- b. Environmental characteristics of the hydrographic unit under consideration including the quality of water available thereto. Finding No. 13 describes the environmental characteristics and quality of water available.
- c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area. Compliance with the requirements of this Order will protect groundwater quality. The Water Board will use its existing authority and these WDRs to ensure protection of water quality from these discharges.
- d. Economic considerations. Water Quality Objectives established in the Basin Plan for the Lower Mojave River Valley Groundwater Basin do not subject the Discharger to economic disadvantage as compared to other similar discharges in the Region. This Order will require the Discharger to submit proposals compliant with the requirements of CCR, title 27, and is reasonable.

- e. The need for developing housing within the region. The Discharger is not responsible for developing housing within the region.
- f. The need to develop and use recycled water. The Discharger does not propose the use of recycled water at this Landfill.

38. Human Right to Safe, Clean, Affordable, and Accessible Water

Water Code section 106.3 establishes a state policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes and directs state agencies to consider this policy when adopting regulations pertinent to those uses of water. This Order promotes that policy by requiring storm water and drainage controls, monitoring to assess water quality, and corrective action to address impacts to water quality.

39. California Environmental Quality Act

On October 2, 2012, Kern County, as the California Environmental Quality Act (CEQA) Lead Agency, certified the Final Environmental Impact Report (EIR) for the Mojave/Rosamond Sanitary Landfill Expansion Project, which addressed all phases of the Facility expansion, pursuant to provisions of the California Environmental Quality Act.

As described in the EIR, the Project would be expanding the permitted facility boundary, disposal area, capacity and lifespan of the landfill, vertically into lined waste management units. Expansion would occur in phases, which would encompass Phases 2-6, 253 acres to 1729.90 acres, to include the landfill expansion, buffer areas, and access routes. The permitted waste footprint would be increased from 27 acres to 544 acres and increase the site life of the Facility an additional 106 years, or projected closure date of 2123.

The Water Board, acting as a CEQA Responsible Agency in compliance with CCR, title 14, section 15096, subdivision (g)(2), evaluated the potentially significant impacts to water quality identified in the EIR.

The Water Board's CEQA findings are as follows:

The Project could cause significant impacts to groundwater and surface water quality. The Water Board has reviewed the EIR and finds the mitigation measures listed below and the monitoring effectiveness of the mitigation measures, as specified in this Order, are adequate to reduce water quality impacts related to the discharge of waste to less than significant. These mitigation measures have been made requirements of this Order.

- a. MM 4.9-1: The Project proponent will comply with the requirements of the Regional Water Quality Control Board to mitigate the existing groundwater impact from Phase 1. Groundwater monitoring and perimeter landfill gas monitoring are continuing. Following the Regional Water Quality Control Board's approval of a Corrective Action Program for the release from Phase 1, the Corrective Action Program will be implemented to mitigate existing impacts to groundwater.
- b. MM 4.9-2: In addition to the Corrective Action Program for Phase 1, the Project proponent will proactively implement robust vadose zone and groundwater monitoring programs and utilize accepted engineering practices, such as low conductivity liners, to mitigate future releases from the new Phases 2-6. These programs will be designed and implemented to provide assurance of the earliest possible detection of a release. Contingent upon environmental monitoring results, additional measures, such as a landfill gas collection and management system, may be implemented.
- c. MM 4.9-3: A perimeter berm/road will be constructed to protect the landfill facilities from the 100-year and greater flood. The elevation of the perimeter berm/road will be constructed above the surrounding grades along the northeastern edge of the landfill and outside the Federal Emergency Management Agency delineated floodplain and constructed to meet federal, State and local regulations. The length of the floodplain channel which will rely on the perimeter berm/road for flood protection is shown on Figure 3-9, in the EIR.

Therefore, changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

40. Antidegradation Analysis

State Water Board Resolution No. 68-16 ("Statement of Policy with Respect to Maintenance of High-Quality Waters in California") requires that whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality must be maintained. Any change in the existing high quality is allowed by that policy only if it has been demonstrated to the Regional Water Board that any change will be consistent with maximum benefit to the people of the state, will not unreasonably affect present and anticipated beneficial use of such water, and will not result in water quality less than that prescribed in the policies. The policy further requires that Dischargers meet the WDR which will result in the best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not



occur and that the highest water quality consistent with maximum benefit to the people of the state will be maintained.

There is a detected release to groundwater as a result of waste discharges to the Landfill. This WDR requires the Discharger to implement a corrective action program to restore water quality and to continue to implement a DMP in order to monitor for significant evidence of any new releases from the Landfill. The corrective action program is designed to address the effects of a known release to groundwater and this WDR is expected to lead to an improvement of water quality with a robust monitoring and maintenance program to ensure that wastes remain contained at the Facility. As a result, degradation is not expected.

Any limited degradation that may occur till the corrective action program is completed is consistent with the maximum benefit to the people of the State as it will result in a remedy that ensures water quality is protected. The WDRs also reflect best practicable treatment or control of wastes, and the Discharger has demonstrated that source control with MNA is the most technically and economically feasible corrective action to remediate the release from the Landfill. This best practical treatment or control is expected to assure that pollution or nuisance will not occur and that the highest water quality consistent with the maximum benefit to the people of the state will be maintained. The corrective action program will not unreasonably affect present and anticipated beneficial uses of such water because it will lead to an improvement of water quality.

In regard to the proposed expansion, adequate liner systems, which comply with CCR, title 27 requirements, are required to prevent an unauthorized release to groundwater and this WDR is expected to prevent degradation of water quality as a result of waste discharges. A monitoring and maintenance program is required to ensure that waste discharges are contained within the WMUs at the Landfill. As a result, degradation is not expected.

41. Technical and Monitoring Reports

CWC, section 13267(b) provides that: "In conducting an investigation specified in subdivision (a), the Regional Board may require that any person who has discharged, discharges, or is suspected of having discharge or discharging, or who proposed to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who had discharged, discharges, or is suspected of having discharged or discharging, or who proposed to discharge waste outside of its region that could affect the quality of the waters of the state within its region must furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, must bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports."

Technical reports are necessary to assure compliance with this Order and to assess any water quality impacts due to discharges from the Landfill. Therefore, the burden, including costs, of these reports, bears a reasonable relationship to the need for the report and the benefits to be obtained from the reports.

42. Right to Petition

Any person aggrieved by this action of the Water Board may petition the State Water Board to review the action in accordance with CWC, section 13320, and CCR, title 23, sections 2050 et. seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality), or will be provided in hard copy or electronic format upon request.

43. Notification of Interested Parties

The Water Board notified the Discharger and interested agencies and persons of its intent to adopt revised WDRs for the authorized discharge of waste to the WMUs and has provided the public with an opportunity to submit written comments.

44. Consideration of Interested Parties

The Water Board, in a public meeting held February 11 or 12, 2026, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED**, pursuant to CWC, sections 13263 and 13267, that the Discharger must comply with the following:

I. RECEIVING WATER LIMITATIONS

- A. The Discharger must not cause the presence of the following substances or conditions in groundwaters of the Antelope Groundwater Basin.
  - 1. Bacteria – Groundwaters designated as MUN, the median concentration of coliform organisms, over any seven-day period, must be less than 1.1 Most Probable Number per 100 milliliters (MPN/100 mL).

2. Chemical Constituents – Groundwaters designated as MUN must not contain concentrations of chemical constituents in excess of the Primary Maximum Contaminant Level (MCL) or Secondary MCL based upon drinking water standards specified in the following provisions of CCR, title 22: Table 64431-A of section 64431 (Inorganic Chemicals), Table 64444-A of section 64444 (Organic Chemicals), Table 64449-A of section 64449 (Secondary MCLs – Consumer Acceptance Contaminant Levels), and Table 64449-B of section 64449 (Secondary MCLs – Consumer Acceptance Contaminant Level Ranges). This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

Groundwaters must not contain concentrations of chemical constituents that adversely affect the water for beneficial uses.

3. Radioactivity – Radionuclides must not be present in concentrations that are deleterious to human, plant, animal, or aquatic life, or that result in the accumulation of radionuclides in the food chain to an extent that it presents a hazard to human, plant, animal, or aquatic life. Groundwater designated MUN must not contain concentrations of radionuclides in excess of limits specified in CCR, title 22, section 64442, Table 64442, and section 64443, Table 64443, including future changes as the changes take effect.
4. Taste and Odors – Groundwaters must not contain taste or odor-producing substances in concentrations that cause a nuisance or that adversely affect beneficial uses. For groundwaters designated as MUN, at a minimum, concentrations must not exceed adopted Secondary MCLs as specified in CCR, title 22, section 64449, Table 64449-A (Secondary MCLs – Consumer Acceptance Contaminant Level) and Table 64449-B (Secondary MCLs – Consumer Acceptance Contaminant Levels Ranges) including future changes as the changes take effect.
5. Toxic Substances – Any presence of toxic substances in concentrations that individually, collectively, or cumulatively cause a detrimental physiological response in humans, plants, animals, or aquatic life is prohibited.

- B. The Discharger must not cause the presence of the following substances or conditions in surface waters of the Chafee Hydrologic Area.

1. Ammonia – The neutral, un-ionized ammonia species (NH<sub>3</sub>) is highly toxic to freshwater fish. The fraction of toxic NH<sub>3</sub> to total ammonia

species ( $\text{NH}_4^+ + \text{NH}_3$ ) is a function of temperature and pH. Tables 3-1 to 3-4 from the Basin Plan were derived from USEPA ammonia criteria for freshwater. Ammonia concentrations must not exceed the values listed for the corresponding conditions in these tables. For temperature and pH values not explicitly in these tables, the most conservative value neighboring the actual value may be used or criteria can be calculated from numerical formulas available on page 3-4 of the Basin Plan.

2. Bacteria – *E. coli*. The bacteria water quality objective for all waters where the salinity is equal to or less than 1 part per thousand (ppt) 95 percent or more of the time during the CALENDAR YEAR is: a six-week rolling GEOMETRIC MEAN of *Escherichia coli* (*E. coli*) not to exceed 100 colony forming units (cfu) per 100 milliliters (mL), calculated weekly, and a STATISTICAL THRESHOLD VALUE (STV) of 320 cfu/100 mL not be exceeded by more than 10 percent of the samples collected in a CALENDAR MONTH, calculated in a static manner.

United States Environmental Protection Agency (U.S. EPA) recommends using U.S. EPA Method 1603 or other equivalent method to measure culturable *E. coli*.

For additional information: *State Water Resources Control Board California Environmental Protection Agency, Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California, Bacteria Provisions and a Water Quality Standards Variance Policy* [2019 ISWEBE Bacteria Provisions](#).

3. Biostimulatory Substances – Waters must not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses.
4. Chemical Constituents – Waters designated as MUN must not contain concentrations of chemical constituents in excess of the MCL or secondary MCL based upon drinking water standards specified in CCR, title 22, chapter 15, article 1, section 64400 et. seq. Waters designated as AGR must not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses (i.e., agricultural purposes). Waters must not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses.

5. Chlorine, Total Residual – For the protection of aquatic life, total chlorine residual must not exceed either a median value of 0.002 mg/L or a maximum value of 0.003 mg/L. Median values must be based on daily measurements taken within any six-month period.
6. Color – Waters must be free of coloration that causes nuisance or adversely affects the water for beneficial uses.
7. Dissolved Oxygen – The dissolved oxygen concentration, as percent saturation, must not be depressed by more than 10 percent, nor shall the minimum dissolved oxygen concentration be less than 80 percent of saturation. The minimum dissolved oxygen concentration must not be less than 4.0 mg/L as a daily minimum, 5.0 mg/L as a 7-day mean, and 6.5 mg/L as a 30-day mean.
8. Floating Materials – Waters must not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect the water for beneficial uses. For natural high-quality waters, the concentrations of floating material must not be altered to the extent that such alterations are discernible at the 10 percent significance level.
9. Oil and Grease – Waters must not contain oils, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect the water for beneficial uses. For natural high-quality waters, the concentration of oils, greases, or other film or coat generating substances must not be altered.
10. Nondegradation of Aquatic Communities and Populations – All wetlands must be free from substances attributable to wastewater or other discharges that produce adverse physiological responses in humans, animals, or plants; or which lead to the presence of undesirable or nuisance aquatic life. All wetlands must be free from activities that would substantially impair the biological community as it naturally occurs due to physical, chemical and hydrologic processes.
11. pH – Changes in normal ambient pH levels must not exceed 0.5 pH units. The pH must not be depressed below 6.5 nor raised above 8.5.
12. Radioactivity – Radionuclides must not be present in concentrations which are deleterious to human, plant, animal, or aquatic life nor which result in the accumulation of radionuclides in the food web to an extent

which presents a hazard to human, plant, animal, or aquatic life. Waters designated as MUN must not contain concentrations of radionuclides in excess of the limits specified in CCR, title 22.

13. Sediment – The suspended sediment load and suspended sediment discharge rate of surface waters must not be altered in such a manner as to cause nuisance or adversely affect the water for beneficial uses.
14. Settleable Materials – Waters must not contain substances in concentrations that result in deposition of material that causes nuisance or that adversely affects the water for beneficial uses. For natural high-quality waters, the concentration of settleable materials must not be raised by more than 0.1 milliliter per liter.
15. Suspended Materials – Waters must not contain suspended materials in concentrations that cause nuisance or that adversely affect the water for beneficial uses. For natural high-quality waters, the concentration of total suspended materials must not be altered to the extent that such alterations are discernible at the 10 percent significance level.
16. Taste and Odor – Waters must not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish or other edible products of aquatic origin, that cause nuisance, or that adversely affect the water for beneficial uses. For naturally high-quality waters, the taste and odor must not be altered.
17. Temperature – The natural receiving water temperature of all waters must not be altered unless it can be demonstrated to the satisfaction of the Water Board that such an alteration in temperature does not adversely affect the water for beneficial uses. For waters designated WARM, water temperature must not be altered by more than five degrees Fahrenheit (5°F) above or below the natural temperature. For waters designated COLD, the temperature must not be altered.
18. Toxicity – All waters must be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration and/or other appropriate methods as specified by the Water Board (or the Executive Officer or his/her designee).

19. Turbidity – Waters must be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. Increases in turbidity must not exceed natural levels by more than 10 percent.
20. Chronic Aquatic Toxicity – Aquatic toxicity is the adverse response of aquatic organisms from exposure to chemical or physical agents, or their synergistic effects in effluent or ambient water. Chronic aquatic toxicity generally refers to longer exposure duration and measures of both lethal and sub-lethal adverse response.

Ceriodaphnia dubia testing must follow the method for chronic toxicity, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition (EPA-821-R-02-013).

21. Chronic Toxicity – The chronic aquatic toxicity water quality objective is expressed as a null hypothesis and an alternative hypothesis with a regulatory management decision (RMD) of 0.75, where the following null hypothesis,  $H_0$ , shall be used:

$H_0$ : Mean response (ambient water)  $\leq 0.75 \cdot$  mean response (control)

And where the following alternative hypothesis,  $H_a$ , shall be used:

$H_a$ : Mean response (ambient water)  $> 0.75 \cdot$  mean response (control)

Attainment of the water quality objective is demonstrated by conducting chronic aquatic toxicity testing for Ceriodaphnia dubia and rejecting this null hypothesis in accordance with the Test of Significant Toxicity (TST) statistical approach described in the Statewide Toxicity Provisions Section III.B. When the null hypothesis is rejected, the alternative hypothesis is accepted in its place, and there is no exceedance of the chronic aquatic toxicity water quality objective. Failing to reject the null hypothesis (referred to as a “fail”) is equivalent to an exceedance of the chronic aquatic toxicity water quality objective.

## II. REQUIREMENTS AND PROHIBITIONS

### A. General

1. The discharge must not cause or threaten to cause a condition of pollution or nuisance as defined in CWC, section 13050.

2. The discharge of waste, as defined in CWC, section 13050, subdivision (d), must not cause an exceedance of any Water Quality Objective (WQO) contained in the Basin Plan.
3. Where any numeric or narrative WQO contained in the Basin Plan is already being exceeded, any discharge which causes further degradation or pollution is prohibited.
4. The discharge of waste except to the authorized disposal site is prohibited.
5. The discharge of treated wood waste to unlined areas of the Landfill is prohibited.
6. The Discharger must manage any treated wood waste so as to prevent scavenging. The Discharger must manage any treated wood waste prior to disposal, or in lieu of disposal, in compliance with the applicable Health and Safety Code requirements. If monitoring at the composite lined portion of the landfill unit at which treated wood waste has been disposed of indicates a verified release, treated wood waste disposal must be discontinued until corrective action results in cessation of the release.
7. The discharge of pesticides to surface waters or groundwater is prohibited.
8. Best management practices must be used when applying water for dust control during disposal site operation. Water used for dust control must be limited to a minimal amount. A "minimal amount" is defined as that amount that will not result in run-off.
9. The discharge of solid or liquid waste, leachate, or any other deleterious material to surface waters or groundwater is prohibited.
10. The Discharger must maintain in good working order any control system or monitoring device installed to achieve compliance with these WDRs.
11. The Discharger must implement a periodic load-checking program accepted by the Lahontan Water Board and the California Department of Resources and Recovery (CalRecycle) as required in CCR, title 27, section 20220.



12. The WMUs must be protected from inundation, washout, or erosion of wastes and erosion of covering materials resulting from a 24-hour, 100-year storm or a flood having a 100-year return period. The surface impoundments must be adequately protected against overflow (must maintain a 2-foot freeboard), washout, inundation, structural damage, or a significant reduction in efficiency resulting from a storm or flood having a reoccurrence interval of once in 1,000 years.
13. The exterior surfaces of the WMUs must be graded to promote lateral run-off of precipitation and to prevent ponding. Ponding of any liquid on the Landfill is prohibited.
14. The Discharger must notify the Water Board within one business day of any flooding, slope failure or other change in site conditions that could impair the integrity of a WMU or of precipitation and drainage control structures. The Discharger must correct any failure that threatens the integrity of the WMU, after approval of the method, in accordance with a schedule established by the Lahontan Water Board as specified in CCR, title 27, section 21710, subdivision (c)(2).
15. The Discharger must at all times maintain adequate and viable financial assurances acceptable to the Lahontan Water Board for costs associated with closure, post-closure maintenance and monitoring, and for corrective action for all known or reasonably foreseeable releases for all WMUs.

B. Landfill

1. The discharge of waste that contains liquid in excess of the moisture-holding capacity of the Landfill, or which contains liquid in excess of the moisture-holding capacity as a result of waste management operations, compaction, or settlement, is prohibited.
2. Except as otherwise specified in this Order, Finding 21, no hazardous or designated waste can be discharged to or used as ADC at the Landfill as defined in CCR, title 27, section 20210, respectively.
3. The Discharger must remove and relocate any waste which is or has been discharged at the Landfill in violation of these requirements. The waste must be relocated to a site which is permitted to receive such wastes. All removal and relocation projects must be coordinated with regulatory agencies, including but not limited to the County of Kern Division of Environmental Health Services.

4. Surface drainage from offsite areas and internal site drainage from surface or subsurface sources, must not contact or percolate through solid wastes discharged at the Landfill.
5. During periods of precipitation, the Landfill disposal activity must be confined to the smallest area possible based on the anticipated quantity of wastes.
6. Stormwater contacting wastes used as ADC or intermediate cover must be handled and disposed of as leachate, except as allowed under Requirements and Prohibitions, Section II.B.10, of this Order.
7. Leachate may be recirculated back into or utilized for dust control over the lined units of the Landfill from which it was generated, consistent with CCR, title 27, section 20340, subdivision (g). Leachate used for dust control on lined portions of the Landfill must not contain constituents in concentrations that exhibit characteristics of toxicity.
8. All purge water discharged to the ground at the Landfill is prohibited from containing concentrations of COCs and monitoring parameters that exceed the WQPS, except when used in the lined Landfill only for dust control or similar uses that do not result in ponding.
9. For each type of waste proposed as ADC, the Discharger must first demonstrate that it does not pose a threat to water quality and meets the requirements under CCR, title 27, section 20200 and 20705. ADC previously approved by the local enforcement agency includes green waste material, shredded tires, solidified waste with an approved extender, processed construction and demolition material, and/or a geo-synthetic blanket.

C. Landfill Construction Requirements

1. The Discharger proposes to construct the Phase 2A expansion, and future Phases 2B and 2C, with an engineered alternative composite liner system, as described in Finding 18.b. The Discharger must construct the liner system as described in Finding 18.b. and in accordance with the construction details contained in a Design Plan and engineered drawings submitted to and accepted by the Lahontan Water Board.
2. The Design Plan must contain a Construction Quality Assurance (CQA) Plan, as well as detailed engineered drawings and specifications for each major design element, including, at a minimum,

the accepted elements of the liner system and LCRS as described in the JTD/ROWD dated August 8, 2025, and any proposed revisions to the detection or corrective action monitoring programs, including plans and specifications for the installation of additional groundwater point of compliance and/or unsaturated zone monitoring points, and an updated WQPS. The Design Plan must be submitted a minimum of **120 days prior to the construction** of a new lined Landfill unit, and must be prepared, signed, and sealed by a California professional civil engineer or a California certified engineering geologist. CQA Plans must conform to all of the requirements specified in CCR, title 27, section 20323 and 20324.

3. All ongoing and future phases of construction must be in accordance with the applicable provisions of Title 27 and this Order and approved by the Lahontan Water Board prior to operation.
4. The Discharger must adhere to the accepted engineering Design Plan prepared pursuant to CCR, title 27, section 21760, including specifications, and technical reports submitted and the JTD/ROWD and all requirements contained within this Order.

D. Stormwater Discharges

Waste in discharges of stormwater must be reduced or prevented to achieve the best practicable treatment level using controls, structures, and management practices. The Discharger shall comply with all stormwater monitoring, response, and reporting requirements in MRP No. R6-2026-TENT.

E. Extreme Weather Event

After an extreme weather event<sup>1</sup> at or near the Facility, if erosion, cracking, or depressed areas are identified, the Discharger must make repairs to those areas within **30 days** from the date of the extreme weather event, and notify Lahontan Water Board within 48 hours.

F. Storm Events

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<sup>1</sup> An extreme weather event refers to a weather phenomenon with enough intensity to cause physical damage to the Facility or any of its infrastructure including containment features or groundwater and/or unsaturated zone monitoring systems or disruption in wastewater conveyance or treatment systems. Extreme weather refers to unusual, severe, or unseasonal weather conditions, and can include extreme heat, excessive or unusual precipitation and flooding, wildfires, severe wind, and extended droughts.

Following a major storm event, the Discharger must inspect all precipitation, diversion, and drainage facilities for damage. The inspection must assess damage to the intermediate cover, drainage control system, ground monitoring equipment (including wells, etc.). Any necessary construction, maintenance, or repairs must be completed within **30 days** of the inspection.

G. Significant Earthquake Event

Following a significant earthquake event, if cracking or depressed areas are identified, the Discharger must make repairs to those areas within **30 days** from the date of the earthquake event, and notify Lahontan Water Board within 48 hours.

H. Electronic Submittal of Information

Pursuant to CCR, title 23, section 3890, the Discharger must submit all reports, including soil, soil vapor, and water data, prepared for the purpose of subsurface investigation or remediation of a discharge of waste to land subject to CCR, title 27, Division 2, electronically over the internet to the State Water Board's GeoTracker system. This requirement is in addition to, and not superseded by, any other applicable reporting requirement.

III. WATER QUALITY MONITORING AND RESPONSE PROGRAMS

A. Detection Monitoring Program

The Discharger must maintain a DMP as required in CCR, title 27, section 20420.

B. Evaluation Monitoring Program

The Discharger must re-establish a revised EMP whenever there is measurably significant evidence and/or significant physical evidence of a new release from the Facility as required in CCR, title 27, section 20385(a)(2) and section 20425. Within 90 days of initiating an EMP, unless the Discharger proposes and substantiates a longer time period for implementing the EMP, the Discharger must delineate the nature and extent of the release, as well as develop, propose, and support corrective action measures to be implemented in a corrective action program.

C. Corrective Action Program

The Discharger must implement the corrective action program as specified in CCR, title 27, section 20385(a)(4) and 20430(c). The Discharger must continue implementing the corrective action program until it can be demonstrated to the satisfaction of the Water Board that the concentrations of all COCs are reduced to levels below their respective concentration limits throughout the entire zone affected by the release. Any modifications to the corrective action program shall be submitted to the Water Board for approval prior to implementation.

D. Water Quality Protection Standard

1. The WQPS consists of COCs, concentration limits, monitoring points, and the point of compliance. The COCs, concentration limits, monitoring points, and point of compliance for groundwater and unsaturated zone monitoring are described in MRP No. R6-2026-TENTATIVE.
2. The Discharger must propose to the Water Board any new constituents of concern proposed for discharge to the Facility at least 180 days before discharge. Before a new discharge commences, the Discharger must estimate the concentrations for such constituents within the waste stream and submit written statistical method(s) in order to detect a release of such constituents.
3. If the Discharger or Water Board Executive Officer determines that concentration limits were or are exceeded, the Discharger must immediately institute verification procedures upon such determination as specified in Section III. F of this Order or, within 90 days of such determination, submit a technical report pursuant CWC, section 13267, subdivision (b), proposing an EMP meeting the provisions of CCR, title 27. Within 90 days of the Water Board authorizing the EMP, the Discharger must complete the delineation, develop a suite of proposed corrective action measures, and submit a revised ROWD with a proposed corrective action program for adoption by the Water Board.
4. Monitoring of the groundwater and unsaturated zone must be conducted to obtain background data and to provide the best assurance of the early detection of any new releases from the WMUs.

E. Data Analysis

Within 45 days after completion of sampling, the Discharger must determine at each Monitoring Point whether there is measurably significant evidence and/or significant physical evidence of a release from

the Facility. The analysis must consider all monitoring parameters and COCs. The Lahontan Water Board Executive Officer may also make an independent finding that there is measurably significant evidence and/or significant physical evidence of a release.

1. To determine whether there is "measurably significant" (as defined in CCR, title 27, section 20164) evidence of a release from the Facility, the Discharger must use approved statistical data analysis methods to evaluate point of compliance groundwater data, as required by CCR, title 27, section 20415, subdivision (e).
2. To determine whether there is significant physical evidence of a release from the Facility, the Discharger must also use non-statistical methods. Significant physical evidence may include, but is not limited to, unexplained volumetric changes in the WMUs, unexplained stress in biological communities, unexplained changes in soil characteristics, visible signs of leachate migration, unexplained water table mounding beneath or adjacent to the WMUs, and/or any other change in the environment that could be reasonably be expected to be the result of a new release from the WMUs. Other non-statistical evidence of a release may include trends of increasing concentrations of one or more constituents over time.
3. If there is measurably significant evidence and/or significant physical evidence of a release, the Discharger must immediately notify the Water Board by telephone as to the monitoring points and constituent(s) or parameters involved followed by written notification sent certified mail within seven days (see "Unscheduled Reports to be Filed With the Water Board," MRP No. R6-2026-TENTATIVE. The Discharger must initiate the verification procedures, as specified in this Order, Section III.F.

F. Verification Procedures

Whenever there is a determination by the Discharger or Lahontan Water Board Executive Officer that there is measurably significant evidence or significant physical evidence of a release, the Discharger must initiate verification procedures as specified below.

1. The Discharger must either conduct a composite retest using data from the initial sampling event with all data obtained from the resampling event or must conduct a discrete retest in which only data obtained from the resampling event must be analyzed to verify evidence of a release. Alternatively, the Discharger may perform a pass 1-of-3

retesting approach using quarterly samples, as an engineered alternative.

2. The verification procedure need only be performed for the constituent(s) that has shown a measurably significant evidence of a release and must be performed for those monitoring points at which a release is indicated.
3. Within seven days of receiving the results of the last laboratory analyses for the retest, the Discharger must report to the Water Board, by certified mail, the results of the verification procedure, as well as all data collected for use in the retest.
4. If the Discharger or Lahontan Water Board Executive Officer verifies that there is or was evidence of a release, the Discharger is required to submit a technical report to the Water Board within 90 days of such a determination, pursuant to CWC, section 13267, subdivision (b). The report must propose an EMP (see Section III.B above) or make a demonstration to the Water Board that there is a source other than the Facility that caused evidence of a release (see "Unscheduled Reports to be Filed With the Water Board," MRP No. R6-2026-TENTATIVE).
5. If the Discharger declines to conduct verification procedures, the Discharger must submit a technical report, as specified in this Order, Section III.G.

G. Technical Report Without Verification Procedures

If the Discharger chooses not to initiate verification procedures after there has been a determination made for evidence of a release, a technical report must be submitted pursuant to CWC, section 13267(b). The report must propose an EMP or attempt to demonstrate that the release did not originate from the Landfill.

H. Monitoring and Reporting

1. Pursuant to CWC, section 13267, subdivision (b), the Discharger must comply with the monitoring and reporting requirements as established in the attached MRP No. R6-2026-TENTATIVE and as specified by the Executive Officer. The MRP may be modified by the Water Board Executive Officer.

2. The Discharger must comply with the "General Provisions for Monitoring and Reporting," which is attached to and made part of MRP No. R6-2026-TENTATIVE.

#### IV. PROVISIONS

##### A. Rescission of Waste Discharge Requirements

Board Order No. R6-2007-0035 and MRP No. R6-2007-0035 are hereby rescinded.

##### B. Standard Provisions

The Discharger must comply with the "Standard Provisions for Waste Discharge Requirements," which is attached to and made part of this Order, Attachment D.

##### C. Preliminary Closure and Post-Closure Maintenance Plan

The preliminary closure and post-closure maintenance plan must be updated if there is a substantial change in operations or costs for closure. The Discharger must submit a report to the Water Board on or before **March 30** every year thereafter, indicating that the preliminary closure and post-closure maintenance plan is in conformance with existing Landfill operations. This report may be included in the annual monitoring report as required in MRP No. R6-2026-TENTATIVE.

##### D. Final Closure and Post-Closure Maintenance Plan

A final closure plan and revised ROWD must be submitted to the Water Board for review and acceptance **at least 180 days prior** to beginning any partial or final closure activities, or prior to discontinuing the use of the Landfill for waste treatment, storage, or disposal pursuant to CCR, title 27, section 21710(c)(5)(B). The final closure plan must be prepared by or under the supervision of either a California professional civil engineer or a California certified engineering geologist and be in compliance with CCR, title 27, sections 20950 and 21769.

##### E. Financial Assurances

The Discharger must at all times maintain adequate and viable financial assurances acceptable to the Water Board for costs associated with post-closure, maintenance and monitoring, and for corrective action for all known or reasonably foreseeable releases for the WMUs. The Discharger



must submit to the Water Board a financial assurance report on or before **March 30, 2027**, and by **March 30** every year thereafter, providing evidence that adequate financial assurances has been provided for closure, post-closure maintenance, and for corrective action of all known and reasonably foreseeable releases. Evidence must include the total amount of money available in the fund developed by the Discharger. In addition, the Discharger must either provide evidence that the amount of financial assurance is still adequate or increase the amount of financial assurance by an appropriate amount. An increase may be necessary due to inflation, change(s) in regulatory requirements, change(s) in the approved closure plan, or other unforeseen events. For a new WMU, at least 60 days prior to discharge and by March 30 every year thereafter, the Discharger must submit updated instruments of financial assurance acceptable to the Water Board.

F. Modifications to the Landfill

If the Discharger intends to expand the Landfill or the capacity of the WMUs, as described in Finding 14, a report must be filed with the Lahontan Water Board no later than 120 days prior to the anticipated change, containing a detailed plan for Facility expansion. This plan must include but is not limited to, a time schedule for studies, design, and other information needed to document the proposed expansion of the Landfill. Pursuant to CWC, section 13260(k), a report is required on the physical and chemical characteristics of the waste that could affect its potential to cause pollution or contamination, and a report is required to evaluate the potential of the discharge of the designated wastes or the release of hazardous substances.

G. Acceptance and Approvals by the Executive Officer

All references to the Lahontan Water Board include the Lahontan Water Board Executive Officer, who may act for the Lahontan Water Board in carrying out this Order, including but not limited to, accepting and approving plan submittals (Water Code §13223).

V. ADDITIONAL REPORTING

A. Final Design Plan

At least 120 days prior to the construction of any new or expanded WMU, the Discharger must submit design plans for the WMU in accordance with the requirements of CCR, title 27, section 21760, including accepted engineered alternatives with, but not limited to, design

capacity, excavation, grading, liner system and LCRS, precipitation and drainage control, the unsaturated zone monitoring system, and the groundwater monitoring well locations. The Final Design Plan must include the CQA Plan, pursuant to CCR, title 27, sections 20323 and 20324.

B. Final Construction Quality Assurance Report

**No later than 180 days** following the construction completion of a WMU, and **at least 60 days prior** to discharge onto the WMU, a Final CQA Report, required by CCR, title 27, section 20324, subdivision (d)(1)(C), must be submitted to the Lahontan Water Board for review and acceptance. The report must be certified by a California professional civil engineer or a California certified engineering geologist. It must contain sufficient information and test results to verify specifications and with the accepted engineered alternative to the prescriptive standards and performance goals of CCR, title 27.

C. Monitoring Systems Installation Report

**No later than 90 days** following the construction completion of a monitoring system or monitoring system component, and at least 60 days prior to discharging to a new WMU, the Discharger must submit a technical report discussing the installation of the monitoring systems or monitoring system component for the WMU. The report must summarize all work activities associated with the installation of the groundwater and vadose zone monitoring systems. The report must be certified by a California professional civil engineer or a California professional geologist. It must contain sufficient information to verify that the construction was in accordance with State and/or County standards.

D. Sampling and Analysis Plan

**No later than May 1, 2026**, the Discharger must submit for Lahontan Water Board review and acceptance a revised Sampling and Analysis Plan for the existing WMUs, including procedures for monitoring, sampling, and analysis of the Facility (LCRS, leachate), unsaturated zone (soil-gas and soil-moisture probes), and groundwater.

E. Monitoring Systems Installation Work Plan

**No later than 60 days** following the adoption of this Order or as part of the Design Plan for the construction of a new WMU, the Discharger must submit for Lahontan Water Board review and acceptance a work plan for

the installation of monitoring wells, establishing a groundwater monitoring network to adequately monitor the point of compliance downgradient of the WMUs. The work plan must propose the installation of an adequate number of monitoring wells to monitor groundwater downgradient of Phase 2A. The work plan must be certified by a California professional civil engineer or a California professional geologist.

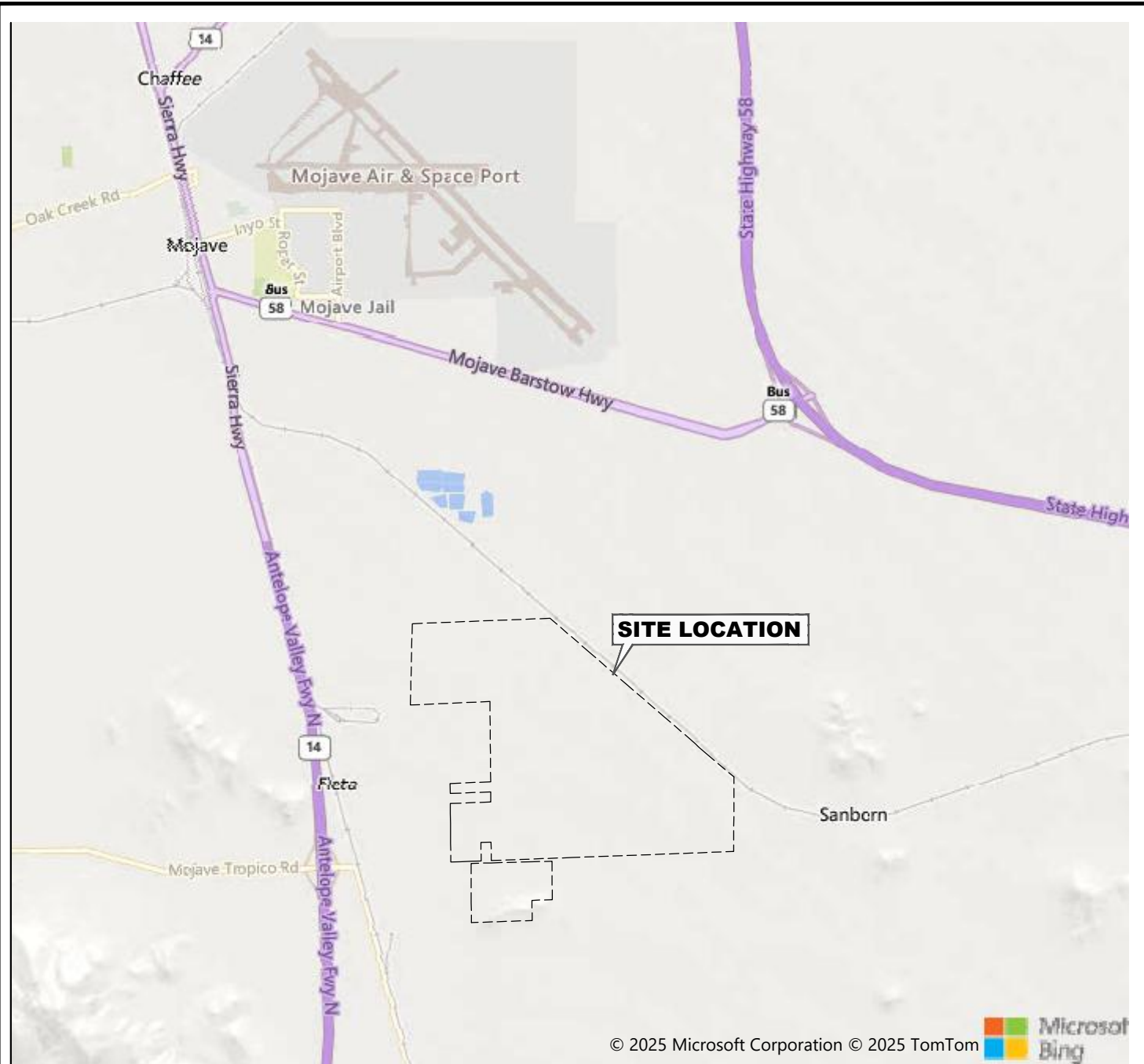
I, Ben Letton, Executive Officer, do hereby certify that the foregoing is full, true, and correct copy of an Order adopted by California Regional Water Quality Control Board, Lahontan Region, on February 11 or 12, 2026.

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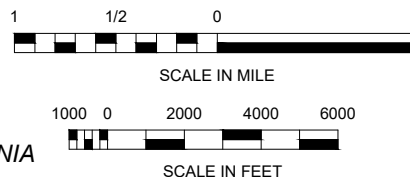
BEN LETTON  
EXECUTIVE OFFICER

Attachments:

- A. Facility Location, Mojave/ Rosamond Class III Landfill
- B. Existing Facility, Phase 1, Mojave/ Rosamond Class III Landfill
- C. Facility, Phase 2A, and Future Phases 2B-2C, Mojave/ Rosamond Class III Landfill
- D. Standard Provisions for Waste Discharge Requirements

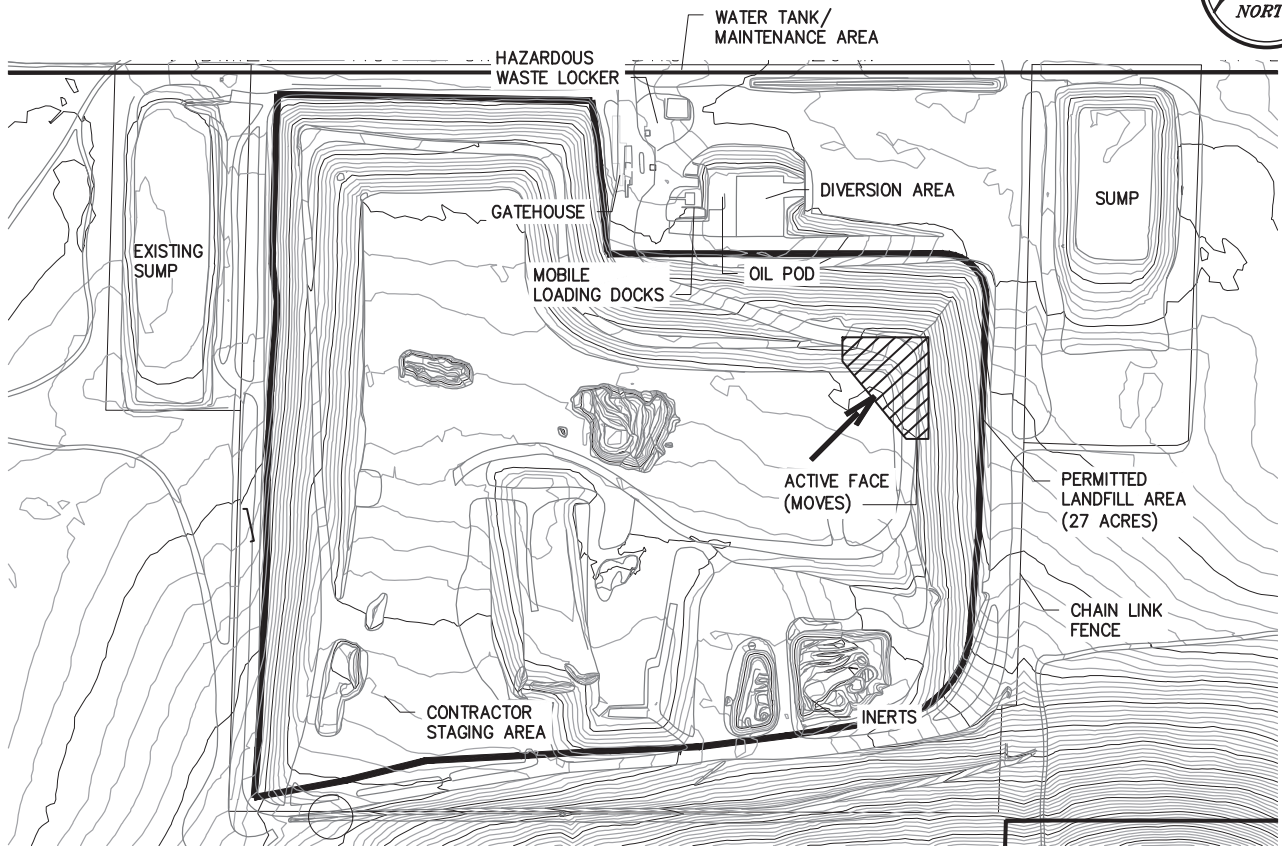


CALIFORNIA



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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|--------------------|-------------------------|
|  <b>Stantec</b><br><br>3475 WEST SHAW AVENUE, SUITE 104<br>FRESNO, CALIFORNIA<br>PHONE: (559) 271-2650 FAX: (559) 271-5108 | FOR:<br><br>KERN COUNTY WASTE MANAGEMENT<br>MOJAVE-ROSAMOND SANITARY LANDFILL<br>400 SILVER QUEEN ROAD<br>MOJAVE, CALIFORNIA |                  | SITE LOCATION MAP |                    | FIGURE:<br><br><b>1</b> |
|                                                                                                                                                                                                               | JOB NUMBER:<br>185705618                                                                                                     | DRAWN BY:<br>JBL | CHECKED BY:<br>PS | APPROVED BY:<br>PS | DATE:<br>08/08/25       |

# Existing Phase 1, Mojave Class III Landfill - Attachment B



COUNTY OF KERN - PUBLIC WORKS DEPARTMENT

## MOJAVE-ROSAMOND SLF FACILITY MAP

SHEET 1  
OF 1

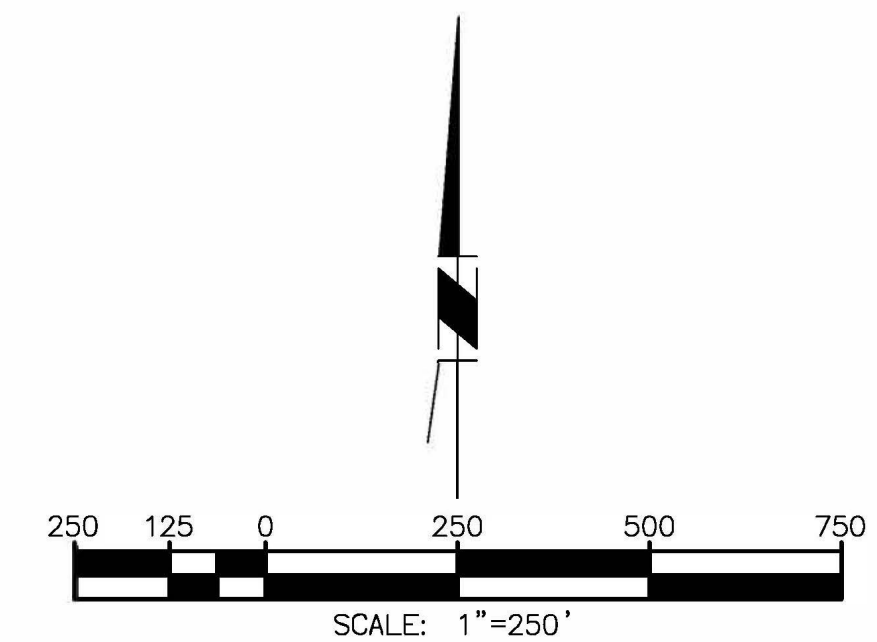
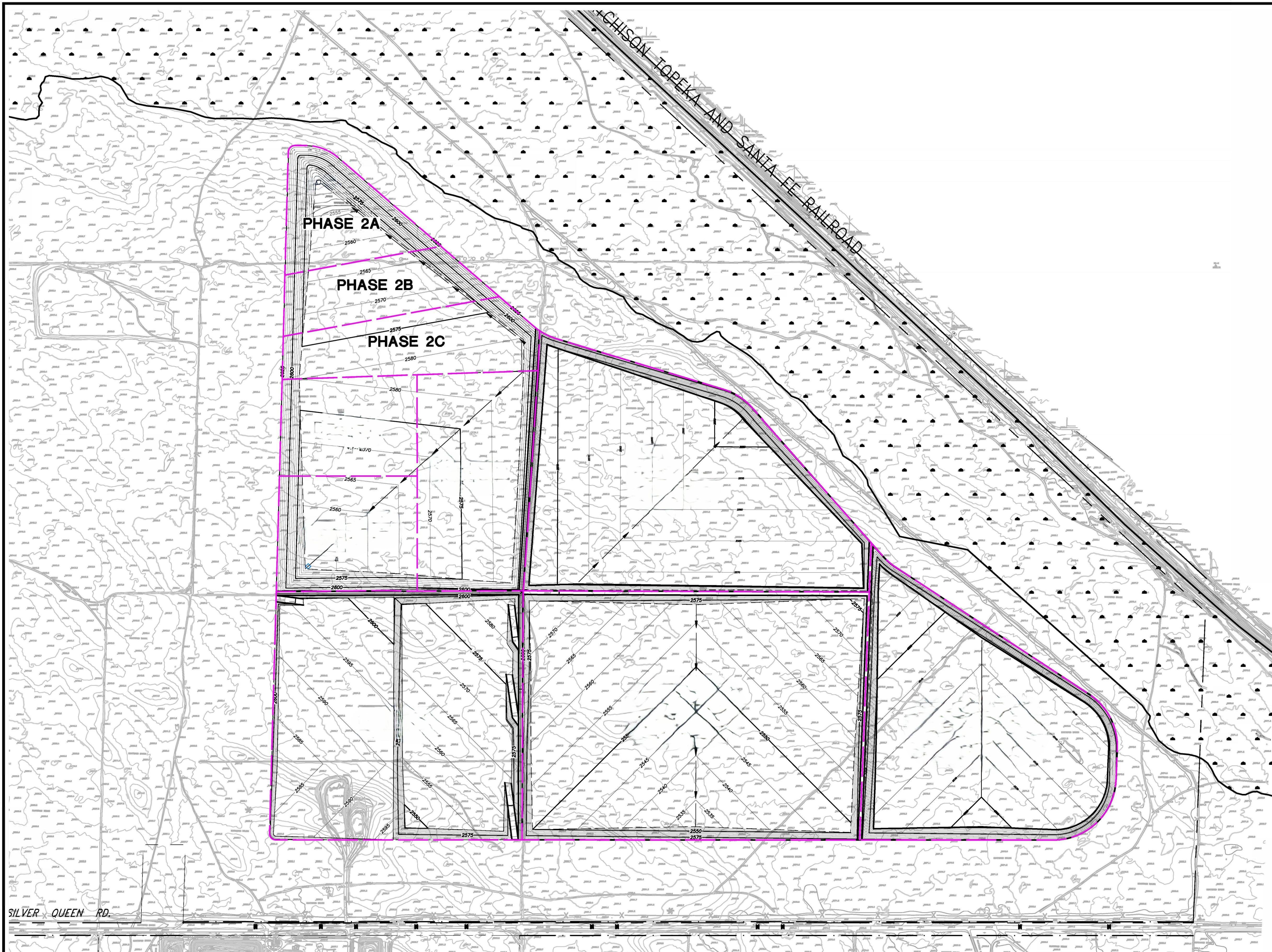
SCALE: 1"=250'

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| SCALE<br>IN INCHES         | 0          | 1            | 2          | 3 |
| CALCULATED-<br>DESIGNED BY | M. ROWLAND | DRAFTED BY   | M. ROWLAND |   |
| CHECKED BY                 | A. PASCUAL | DATE DRAFTED | 7/15/2021  |   |

DWG FILE: k:\opsmaint\waste operations\ops\01 eastern landfills\matt\drawings

USERNAME: ROWLANDM





**LEGEND**

- APPROXIMATE PROPERTY BOUNDARY/RIGHT OF WAY
- APPROXIMATE LIMIT OF FLOODPLAIN
- FLOOD (100 YEAR) FEMA ZONE
- 3068 EXISTING GRADE CONTOUR
- 3070 PROPOSED GRADE CONTOUR
- PROPOSED PHASING LIMITS



**ATTACHMENT D**  
**STANDARD PROVISIONS**  
**FOR WASTE DISCHARGE REQUIREMENTS**

1. Inspection and Entry

The Discharger must allow Lahontan Water Board staff, upon presentation of credentials, to:

- a. Enter upon premises in which a waste management unit (WMU) or former WMU is located or in which any required records are kept;
- b. Copy any records relating to the discharge or relating to compliance with the waste discharge requirements;
- c. Inspect monitoring and control equipment, practices, or operations regulated or required under this Order; and
- d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at this location.

2. Reporting Requirements

- a. Pursuant to California Water Code 13267(b), the Discharger must report any noncompliance that may endanger human health or the environment. The Discharger must immediately notify the Lahontan Water Board after becoming aware of when an adverse condition occurred as a result of this discharge; a written report shall be provided within ten days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. A final certified report must be submitted through the online GeoTracker system. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, sanitary sewer overflows, damage to liners, damage to the final cover, nuisance erosion or damage to control facilities that could affect compliance.
- b. Pursuant to California Water Code Section 13260 (c), any proposed material changes in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Lahontan Water Board at least 120 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant soil disturbances.

- c. The owner(s) of, and Discharger upon, property subject to waste discharge requirements shall be considered to have a continuing responsibility for ensuring compliance with applicable waste discharge requirements in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the waste discharge requirements shall be reported to the Lahontan Water Board.
- d. If a Discharger becomes aware that any information submitted to the Lahontan Water Board is incorrect, the Discharger shall immediately notify the Lahontan Water Board, in writing, and correct that information.
- e. Reports required by the waste discharge requirements, and other information requested by the Lahontan Water Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1000) for each day of violation.

3. Right to Revise Waste Discharge Requirements

The Lahontan Water Board reserves the privilege of changing all or any portion of the waste discharge requirements upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the waste discharge requirements may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and reissuance, or modification.

5. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the waste discharge requirements which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of waste isolation and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the waste discharge requirements. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the waste discharge requirements.



7. Waste Discharge Requirement Actions

The waste discharge requirements may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the waste discharge requirements conditions.

8. Property Rights

The waste discharge requirements do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the waste discharge requirements including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the waste discharge requirements, monitoring and reporting requirements, and sampling and analysis plan shall be kept and maintained by the Discharger and always be available to operating personnel.

11. Severability

Provisions of the waste discharge requirements are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION**

**MONITORING AND REPORTING PROGRAM  
NO. R6-2026-TENTATIVE  
WDID NO. 6B150303011**

**FOR**

**KERN COUNTY WASTE MANAGEMENT DEPARTMENT  
MOJAVE-ROSAMOND RECYCLING AND SANITARY LANDFILL**

Kern County

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This Monitoring and Reporting Program (MRP) No. R6-2026-TENTATIVE is issued to Kern County Public Works Department, Solid Waste Management Division (Discharger) for the Mojave-Rosamond III Landfill (Landfill), pursuant to California Water Code (CWC), section 13267 and incorporates requirements for groundwater and unsaturated zone monitoring and reporting; facility monitoring, maintenance, and reporting; and financial assurances reporting contained in California Code of Regulations (CCR), title 27, section 20005, et seq. The technical reports required by Board Order No. R6-2026-TENTATIVE and MRP No. R6-2026-TENTATIVE are necessary to assure compliance with the Waste Discharge Requirements. Therefore, the burden, including costs of these reports, bears a reasonable relationship to the need for the report and the benefits to be obtained from the reports.

**I. WATER QUALITY PROTECTION STANDARD**

A Water Quality Protection Standard (WQPS) is required by CCR, title 27, sections 20390 through 20410, to provide the earliest possible detection of a release from a waste management unit (WMU) to the underlying soil and/or groundwater. The WQPS consists of all constituents of concern (COCs), the concentration limits for each COC, the point of compliance, and all water quality monitoring points. The Water Board must review and approve the WQPS, or any modification thereto, for each monitored medium.

The Discharger submitted an updated WQPS report for the Mojave- Rosamond Class III Landfill in 2023. The Discharger is currently implementing a detection monitoring program (DMP) to monitor groundwater and the unsaturated zone at the Facility. A WQPS is necessary to provide the earliest detection of any releases from the Landfill. A release to groundwater has been verified and the Discharger is currently implementing a Corrective Action Program (CAP) to remediate the release from the Landfill. The WQPS evaluates the effectiveness of the CAP in determining if a new release has occurred from the Landfill.

**A. Constituents of Concern**

The COCs include all the waste constituents, their reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in a waste management unit. The COCs for each monitored medium are listed in Attachment A, which is made part of this MRP. The Discharger must monitor all COCs at the sampling frequency and reporting frequency listed in Attachment A.

B. Monitoring Parameters

Monitoring parameters are those COCs that provide a reliable indication of a release from the Landfill. The monitoring parameters for each monitored medium are listed in this MRP, Attachment A. The Discharger must monitor all monitoring parameters at the sampling frequency and reporting frequency listed in Attachment A.

C. Concentration Limits

Concentration limits are established for each COC and are intended to reflect background ambient conditions of surface and subsurface media that are unaffected by a release from the waste management units. At any given time, the concentration limit for each COC must be equal to the background data set of that constituent unless a concentration limit greater than background has been established. CCR, title 27, section 20415 allows for various options to determine concentration limits including statistical interwell and intrawell methods and non-statistical methods.

1. The Discharger is using the following methodologies to determine concentration limits for the groundwater monitoring program.
  - a. Interwell Comparisons – The Discharger is using historical water quality data from the site background well MR1-06 for Phase 1 of the Landfill. The groundwater has been affected by a release from the landfill and there is no significant spatial variation in water quality among the wells. The background well for Phase 2A is MR1-12.
  - b. Non-Statistical Comparisons – For inorganic COCs either not detected in the background well or only detected at trace concentrations and for man-made organic COCs, the concentration limit is set at either the respective practical quantitation limit (PQL) or the method detection limit (MDL) for the analytical method used. For inorganic COCs that were not detected in monitoring wells or were only detected at trace concentrations, the PQL was set as the Concentration Limit (CL) because this is the lowest concentration (or value) that can be reliably

achieved and used to determine a statistically significant or measurable increase. For non-naturally occurring COCs, the background concentrations are assumed to be non-detect (ND), and the CL was set as the MDL, and is selected as the CL because this will allow for early detection of any future or new release from the Landfill.

If subsequent sampling of the background monitoring point indicates significant water quality changes due to either seasonal fluctuations or other reasons unrelated to waste management activities at the Landfill, the Discharger may request modification of the WQPS CLs to provide season-specific concentration limits (background data sets) for each COC at each monitoring point.

2. The Discharger is not required to have concentration limits for soil-pore gas methane, carbon dioxide, nitrogen, and oxygen COCs. These COCs exist naturally in soil with a high degree of variability such that development of background concentrations would be technically infeasible. While VOCs are not naturally occurring in the soil, establishing concentration limits for VOCs in the unsaturated zone is technically infeasible at this time because few studies have evaluated the relationship between soil-pore gas VOC concentrations and the potential threat to water quality. The Discharger will collect soil-pore gas data in the unsaturated zone and use that data to characterize the relationship, if any, between landfill gas (LFG) migration, soil-pore gas VOC concentrations, and the potential threat to water quality at the soil-groundwater interface.
3. Concentration limits greater than background for corrective action may be proposed by the Discharger in accordance with CCR, title 27, section 20430, after proposed corrective action measures reveal that it is technically and economically infeasible to achieve background water quality levels. The Discharger has not proposed concentration limits greater than background for this Landfill.

#### D. Point of Compliance and Monitoring Points

The point of compliance and monitoring points for the groundwater and unsaturated zone are shown in Attachment B of this MRP. The Discharger may add monitoring points, as needed, to comply with the DMP, evaluation monitoring program (EMP), and CAP requirements contained in Board Order No. R6-2026-TENTATIVE and this MRP, and as approved by the Water Board. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the WMUs that extends through the uppermost aquifer underlying the Facility. An adequate monitoring network

that includes a sufficient number of monitoring points at appropriate locations will need to be established for the Phase 2A expansion and future phases to monitor the point of compliance downgradient of the Landfill. Board Order No. R6-2026-TENTATIVE, Section V.G., requires the Discharger to submit a work plan(s) for the installation of additional groundwater monitoring wells to monitor the point of compliance.

E. Compliance Period

The compliance period for municipal solid waste landfills is the number of years equal to the active life of the Landfill plus any post-closure monitoring and maintenance period (a minimum of 30 years during the Facility post-closure period). The compliance period is the minimum period during which the Discharger must conduct a water quality monitoring program subsequent to a release. The compliance period must begin anew each time the Discharger initiates an EMP. The compliance period must extend as long as waste poses a threat to water quality pursuant to CCR, title 27, section 20950(a)(1), and CFR, title 40, Part 258.61(b)(2). If the Discharger is engaged in a corrective action plan at the scheduled end of the compliance period, the compliance period shall be extended until the Discharger can demonstrate that the Landfill has been in continuous compliance with its WQPS for a period of three consecutive years as specified in CCR, title 27, section 20410(c).

II. MONITORING

The Discharger must comply with the monitoring requirements outlined below. All monitoring and inspection activities must be documented, and all sampling must be conducted in accordance with an accepted Sampling and Analysis Plan (SAP) that includes quality assurance and quality control standards and procedures, as described in the General Provisions for Monitoring and Reporting (Attachment C of this MRP).

The Discharger must operate and maintain a detection monitoring system that complies with the DMP monitoring provisions contained in CCR, title 27, sections 20380 through 20435. Monitoring of the groundwater and unsaturated zone must be conducted to provide the best assurance of the early detection of any new releases from the Facility. Changes to the existing monitoring system must be designed and certified by a California-licensed professional geologist or professional civil engineer as meeting the requirements of CCR, title 27, section 20415(e)(1). The Discharger must collect, preserve, and transport samples in accordance with the SAP.

All samples collected in accordance with this MRP, except for field parameters, are to be analyzed by a California state-certified laboratory using United States Environmental Protection Agency (USEPA) analytical methods or the most recently approved SW-846 USEPA method or other equivalent USEPA method. An alternate method may be used if acceptable to the Executive Officer.

A. Detection Monitoring and Corrective Action Program

The Discharger must operate and maintain a detection and corrective action monitoring system that complies with the DMP and CAP monitoring provisions contained in CCR, title 27, section 20420 and 20430. Monitoring of the groundwater and unsaturated zone must be conducted to evaluate the effectiveness of the CAP and to provide the best assurance of the early detection of any new releases from the Landfill. The monitoring system must be designed and certified by a California-registered Civil Engineer or Geologist as required by CCR, title 27, section 20415(e)(1). The Discharger must collect, preserve, and transport samples in accordance with and approved sampling analysis plan (SAP).

The monitoring parameters for the CAP are metal surrogates, chloride, sulfate, nitrate as nitrogen, total dissolved solids, and inorganic and organic constituents as defined by Appendix I of 40 CFR, part 258, (Attachment A of this MRP), and other constituents of concern listed in Attachment A.

B. Unsaturated Zone Monitoring

The unsaturated (vadose) zone monitoring program monitors the composition of soil-pore gas and soil-pore liquid beneath and adjacent to the WMUs through the collection of gas and liquid samples for laboratory analyses and field measurements.

1. Monitoring Points

The unsaturated zone for the Landfill is monitored for soil-pore gas using gas probes located around the perimeter of the future lined and unlined units and soil-pore liquids using a pan lysimeter located beneath the LCRS sump portion of the future lined cell Phase 2A, and five vacuum pressure lysimeters around the perimeter of Phase 1. All unsaturated zone monitoring point locations are shown on MRP, Attachment B.



## 2. Monitoring Parameters and Constituents of Concern

The Discharger must monitor soil-pore gas and soil-pore liquid for all COCs and monitoring parameters in accordance with the frequencies listed in Attachment A.

### a. Soil-Pore Gas

Prior to beginning gas collection at the Landfill, the instrument(s) must be calibrated using laboratory-grade calibration gases and procedures according to manufacturer recommendations and the accepted SAP. This must be done each day the instrument is used and whenever an instrument has been transported from one facility to another to ensure that the field calibration is performed at the same atmospheric pressure at which the soil-gas samples are collected.

Prior to sampling, each gas probe must be purged of the gas that has been standing inside the casing until methane, oxygen, and carbon dioxide concentrations have stabilized. These parameters will be considered stable in accordance with procedures specified in the accepted SAP. Atmospheric pressure will also be recorded during the purging process.

### b. Soil-Pore Liquid

Prior to sampling, a vacuum will be applied on the system pressure line for each lysimeter. The lysimeter port is then closed and allowed to remain under vacuum in accordance with the Water Board accepted sampling and analysis plan (SAP). The vacuum draws pore liquid into the ceramic cup for sample collection.

If the liquid volume is limited, the Discharger must attempt to monitor for VOCs first then, if sufficient volume exists, attempt to monitor for the remaining monitoring parameters listed in Attachment A.

If a lysimeter is dry at the time of monitoring, this information must be recorded and reported to the Water Board in accordance with the reporting requirements of MRP, Section IV.B.

3. Field Parameters

The Discharger must monitor soil-pore gas, soil-pore liquid, and soil moisture for all field parameters in accordance with the frequencies listed in Attachment A.

a. Soil-Pore Gas

If methane gas is detected during field monitoring at or above a threshold concentration of 5 percent of methane gas volume in air, then soil-pore gas samples must be taken from that gas monitoring probe (during that monitoring event) and analyzed for the soil-pore gas monitoring parameters listed in Attachment A.

b. Soil-Pore Liquid

If the lysimeter sample volume is limited, the Discharger must monitor for COCs first and then, if sufficient sample volume exists, monitor for the field parameters listed in Attachment A.

4. Calibration Documentation

Annually, the Discharger must submit documentation of instrument calibration and performance checks to verify proper operation of all field monitoring equipment.

C. Leachate Collection and Removal System

The Discharger must monitor the composition of liquids within the leachate collection and removal system (LCRS) through the collection of liquid samples for laboratory analysis. All observations and measurements must be recorded in a permanent logbook kept onsite.

1. Monitoring Points

The lined portions of the Landfill will be equipped with an LCRS. The LCRS monitoring point locations are shown on MRP, Attachment B. If a LCRS is dry at the time of monitoring, this information must be recorded and reported to the Water Board in accordance with the reporting requirements of this MRP, Section IV.B.

2. Monitoring Parameters and Constituents of Concern

The Discharger must monitor LCRS liquids for all COCs and monitoring parameters in accordance with the frequencies listed in Attachment A.

3. Monitoring Field Parameters

The Discharger must monitor the LCRS liquids for all field parameters in accordance with the frequencies listed in Attachment A.

4. Calibration Documentation

Annually, the Discharger must submit documentation of instrument calibration and performance checks to verify proper operation of all field monitoring equipment.

5. Inspections

The Discharger must inspect the landfill LCRS monthly for leachate generation. Upon detection of liquid in a previously dry LCRS, the Discharger must immediately collect a grab sample of the liquid and analyze the sample for all COCs and monitoring parameters listed in Attachment A.

The Discharger must record, in conjunction with the regular LCRS inspection, the total volume of liquid pumped from each LCRS, the pumping rate (in gallons per month), date, and discharge location(s) of liquids pumped from the LCRS.

D. Groundwater

The groundwater monitoring program monitors the quality of groundwater that passes through the point of compliance as well as monitors the quality of groundwater upgradient, cross-gradient, and downgradient of the Landfill through the collection of groundwater samples for laboratory analysis and field measurement of water quality parameters.

1. Monitoring Points

Groundwater monitoring points are shown on MRP, Attachment B.

2. Depth to Groundwater

Prior to purging and sampling, the Discharger must measure and record the depth below the ground surface of the static groundwater elevation (feet below ground surface [bgs]) in all groundwater monitoring wells. The measurements must be accurate to the nearest 0.01 foot.

3. Groundwater Purging and Sampling

Prior to sampling, all groundwater monitoring wells must be purged using either standard or low-flow techniques until dissolved oxygen (DO), electrical conductivity, pH, temperature, and turbidity of extracted well water have stabilized. These parameters will be considered stable in accordance with procedures specified in the accepted SAP.

4. Monitoring Parameters and Constituents of Concern

The Discharger must monitor, at each groundwater monitoring well, all COCs and monitoring parameters in accordance with the frequencies listed in Attachment A. Should any non-monitoring parameter COC exceed their respective concentration limit by a measurably significant amount at any given monitoring point, that non-monitoring parameter COC must become a monitoring parameter at that monitoring point.

5. Field Parameters and Supplemental Parameters

The Discharger must monitor the groundwater for all field parameters and supplemental parameters in accordance with the frequencies listed in Attachment A.

6. Aquifer Characteristics

The Discharger must calculate, and illustrate on a site plan and/or aerial photograph, the following aquifer characteristics: the depth to groundwater (feet bgs) in each groundwater monitoring well; the static water level (feet above mean sea level) in each groundwater monitoring well; the slope of the groundwater gradient (feet/foot); the direction of the groundwater gradient beneath and around the Facility; the velocity of groundwater flow (feet/year); and the current groundwater isocontours for that monitoring period.

7. Calibration Documentation

Annually, the Discharger must submit documentation of instrument calibration and performance checks to verify proper operation of the field monitoring equipment.

E. Facility Monitoring

The following elements must be monitored and reported to the Water Board in accordance with the schedule specified in this MRP, Section IV.B.

1. Annual Inspection

Annually, prior to the anticipated rainy season, but no later than **September 30**, the Discharger must conduct an inspection of the Facility. The inspection must assess damage to the intermediate cover, drainage control system, groundwater monitoring equipment (including wells, etc.), and must include adequate observations to assess the condition of all WMUs. The Discharger must document the inspection and the repair measures implemented, including photographs of the problem and of the repairs.

2. Storm Events

The Discharger must inspect all precipitation, diversion, and drainage facilities for damage **within 10 days** following major storm events. The Discharger must document the inspection(s) and the repair measures implemented, including photographs of the problem and of the repairs.

F. Solid Waste Discharge

The following data must be collected and reported, as specified below, for each semi-annual reporting period specified in MRP, IV.B.

1. The volume of non-hazardous solid waste (in-place and compacted volume in cubic yards) discharged to the Landfill.
2. The percent of the total Landfill volume used for solid waste disposal (remaining capacity of the Landfill units).
3. The volume of designated waste (in gallons and millions of gallons).
4. The location of discharge (on a map).

5. Volume of treated wood waste.
6. An evaluation of the effectiveness of the Facility's load checking program including, but not limited to, total number of vehicles, total number of vehicles checked, the amount rejected and returned to the customer, and the amount transported offsite for coordination of appropriate recycling or disposal.

G. Stormwater Monitoring and Response Program

Waste in discharges of stormwater must be reduced or prevented to achieve the best practicable treatment level using controls, structures, and best management practices (BMPs). At minimum, the Discharger must develop and implement a site-specific stormwater pollution control plan (SWPCP); conduct monitoring including visual observations and periodic collection of samples for analytical analysis; evaluate stormwater monitoring data; implement appropriate response actions when monitoring data indicate non-compliance with the stormwater monitoring program; and provide annual reports to the Water Board.

1. Stormwater Pollution Control Plan

The Discharger must develop and implement a site-specific SWPCP (or equivalent document) that contains, at minimum, the following elements. A copy of the SWPCP (and amendments thereto) must be maintained at the Facility so as to be available to site personnel at all times. The Discharger is required to submit a copy of the SWPCP to the Water Board in accordance with the schedule specified in MRP section IV.E.1.

a. Facility Information

A list of site contacts including those persons responsible for assisting with the implementation of the SWPCP.

b. Site Map

A site map that illustrates: the Facility boundary; all stormwater drainage areas within the Facility and the flow direction of each drainage area; locations of stormwater collection and conveyance systems, including associated discharge locations and directions of flow; locations of stormwater monitoring points; locations of structural control measures that affect run-on; and locations of all industrial

storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, cleaning and material reuse areas, and other areas of industrial activity that may have potential pollutant sources.

c. List of Industrial Materials

A list of industrial materials handled at the Facility, the locations where each material is stored and handled, as well as the typical quantities and handling frequency.

d. Potential Pollutant Sources

A description of all potential pollutant sources including industrial processes, material handling and storage areas, dust and particulate generating activities, non-stormwater discharges, and erodible surfaces.

e. Best Management Practices

A narrative description of each minimum and/or advanced BMP being implemented at the Facility, as well as a summary table that identifies each area of industrial activity, the associated pollutant sources and pollutants, and the specific BMPs being implemented.

f. Stormwater Monitoring Plan

The SWPCP must include a stormwater monitoring plan that meets the requirements outlined in MRP section II.C.2 below.

2. Stormwater Monitoring

a. Monitoring Points

The stormwater discharge monitoring locations must be selected such that samples collected are representative of stormwater discharge leaving each drainage area identified for the Facility. The stormwater discharge monitoring locations must be identified on the site plan in the SWPCP.



b. Stormwater Sampling

The Discharger must collect stormwater samples, from each stormwater discharge monitoring location, and analyze for all monitoring parameters in accordance with the frequencies listed in Attachment A.

All stormwater samples, with the exception of pH, are to be analyzed by a California state-certified laboratory using the USEPA analytical methods listed in Attachment A or the most recently approved SW-846 USEPA method or other equivalent USEPA method. An alternative method may be proposed and used if acceptable to the Executive Officer.

c. Visual Observations

Monthly, the Discharger must visually observe and document, during normal operating hours, each drainage area for the following: the presence or indications of prior, current, or potential non-stormwater discharges and their sources; authorized non-stormwater discharges, their sources, and associated BMPs; and all potential pollutant sources.

Visual observations must also be conducted at the same time that stormwater sampling occurs. At the time a stormwater sample is collected, the Discharger must observe and document the discharge for the following.

- i. Visually observe and record the presence or absence of floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris, and source(s) of any discharged pollutants.
- ii. In the event that a discharge location is not visually observed during the sampling event, the Discharger must record which discharge locations were not observed during sampling or that there was no discharge from the discharge location.

d. Monitoring Parameters

The Discharger must monitor, at each stormwater discharge monitoring location, all parameters and in accordance with the frequencies listed in Attachment A.

e. Water Quality Thresholds

The specific water quality thresholds that apply to the stormwater monitoring parameters are listed in the table below.

| STORMWATER MONITORING |                                                                                                                         |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------|
| Parameter             | Water Quality Thresholds                                                                                                |
| pH                    | Measured pH shall not be lower than 6.0 nor greater than 9.0.                                                           |
| Turbidity             | Stormwater discharges shall not exceed 500 nephelometric turbidity units (NTUs).                                        |
| Oil and Grease, Total | Stormwater discharges shall not contain oils and greases at concentrations in excess of 15 milligrams per liter (mg/L). |
| Iron, Total           | Stormwater discharges shall not contain dissolved iron at concentrations in excess of 1.0 mg/L.                         |

f. Calibration Documentation

Annually, the Discharger must submit documentation of instrument calibration and performance checks to verify proper operation of the field monitoring equipment.

3. Data Evaluation and Response Actions

The stormwater monitoring data (stormwater sampling and analytical data and visual observations) must be evaluated to determine the following: the effectiveness of BMPs in reducing or preventing pollutants in the stormwater discharges; compliance with the monitoring parameter water quality thresholds as described in MRP II.G.2.e; and the need to implement additional BMPs and/or SWPCP revisions.

The results of all stormwater sampling and analytical results from each distinct sample must be directly compared to the water quality threshold for the corresponding monitoring parameter. An exceedance of one or more water quality threshold requires the Discharger to implement the following response actions:

- a. The Discharger must notify the Water Board verbally or via email within 30 days of obtaining laboratory results whenever a determination is made that a water quality threshold is exceeded for one or more stormwater monitoring parameters;
- b. Identify the pollutant sources that may be related to the exceedance and whether the BMPs in the SWPCP have been properly implemented and perform BMP maintenance, if necessary;
- c. Assess the SWPCP and its implementation to determine whether additional BMPs or SWPCP measures are necessary to reduce or prevent pollutants in stormwater discharges; and
- d. Revise or amend the SWPCP, as appropriate, to incorporate the additional BMPs or SWPCP measures necessary to reduce or prevent pollutants in stormwater discharges and implement the revised SWPCP no later than 60 days following the reported exceedance; or
- e. Demonstrate, to the satisfaction of the Executive Officer, that the exceedance(s) is attributed solely to non-industrial pollutant sources and/or to natural background sources.

### III. DATA ANALYSES

All data analyses methods (statistical and non-statistical) must meet the requirements of CCR, title 27, sections 20415, subdivisions (e)(8) and (9).

#### A. Site-Specific Statistical Analysis Method

To determine whether there is "measurably significant" evidence of any new releases from the Landfill, evaluation of data will be conducted using statistical methods. For detection monitoring, the Discharger must use statistical methods to analyze COCs and monitoring parameters that exhibit concentrations that equal or exceed their respective concentration limit. The Discharger may propose and use any data analyses that meets the requirements of CCR, title 27, section 20415, subdivision (e)(7). *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (USEPA, 2009) or subsequent versions may also be used to select

the statistical test to use for comparing detection monitoring data to background monitoring data.

**B. Non-Statistical Analysis Methods**

To determine if any new releases have occurred from the Landfill, evaluation of data will also be conducted using non-statistical methods. Non-statistical analyses are as follows.

**1. Physical Evidence**

Physical evidence can include, but is not limited to, unexplained stress in biological communities such as vegetation loss, soil discoloration, or groundwater mounding. Each semi-annual and annual report must comment on such physical elements.

**2. Time-Series Plots**

Non-statistical evidence of a release may include trends of increasing concentrations of one or more constituents over time, as depicted in time-series plots. Each semi-annual and annual report must include these time-series plots. Time-series plots are not required for parameters that have never been detected above their MDL (as specified by the applicable USEPA method).

**IV. REPORTING REQUIREMENTS**

The Discharger must comply with the following reporting requirements.

**A. Submittal of Electronic Laboratory Data**

All water, soil, and soil-gas laboratory data collected during the corresponding reporting period (Table 1), must be submitted electronically to the Water Board by uploading to the State Water Board's GeoTracker system, per the following schedule. The laboratory data must be uploaded in Electronic Data Format (EDF).

**Table 1. Laboratory Reporting Schedule**

| <b>Sampling and Reporting Period</b> | <b>EDF Upload Due Date</b> |
|--------------------------------------|----------------------------|
| January 1 – June 30                  | August 15                  |
| July 1 – December 31                 | February 15                |

**B. Scheduled Reports to be Filed with the Water Board**

The following periodic reports, including all water, soil, soil vapor, solid waste monitoring data collected during the corresponding reporting period, must be submitted electronically to the Water Board by uploading to the State Water Board's GeoTracker system, per the schedule presented in Table 2. The laboratory data must be uploaded in Electronic Deliverable Format (EDF).

**Table 2. Monitoring and Reporting Schedule**

| <b>MONITORING REPORTING SCHEDULE</b>                 |                                      |                                    |
|------------------------------------------------------|--------------------------------------|------------------------------------|
| <b>Report Name</b>                                   | <b>Sampling and Reporting Period</b> | <b>Report Due Date<sup>1</sup></b> |
| First Semi-Annual Monitoring Report                  | Jan 1 – Jun 30                       | Aug 15                             |
| Second Semi-Annual Monitoring Report                 | Jul 1 – Dec 31                       | Feb 15                             |
| Annual Report                                        | Jan 1 – Dec 31                       | Feb 15                             |
| Annual Stormwater Report                             | July 1 – Jun 30                      | August 15                          |
| Five-year Corrective Action Program Report           | Jan 1 – Dec 31                       | Feb 15                             |
| Five-Year Constituent of Concern Report <sup>2</sup> | Jan 1 – Jun 30<br>July 1 – Dec 31    | August 15<br>Feb 15                |

Notes:

<sup>1</sup>Reports with same due dates may be combined.

<sup>2</sup>Sampling and reporting period will alternate between January 1 through June 30 for one five-year sampling event and July 1 through December 31 for the next five-year sampling event. The August 15 report due date corresponds to the January 1 through June 30 sampling and reporting period; the February 15 report due date corresponds to the July 1 through December 31 sampling and reporting period. The next five-year report is due August 15, 2029.

**1. Semi-Annual Monitoring Reports**

Each semi-annual report must include, but not be limited to, the following information.

- a. All data collected during the reporting period in accordance with the accepted SAP for the monitoring systems described in MRP Section II.A through II.F.
- b. Tabulated results of sampling and laboratory analyses for each groundwater monitoring point, including historical (last five years at

minimum) and current reporting period data, as well as the concentration limit for each monitoring parameter and an identification of each sample that exceeds its respective concentration limit by a measurably significant amount at any given monitoring point.

- c. Tabulated results of sampling and laboratory analyses for each unsaturated zone monitoring point, including historical (last five years at minimum) and current reporting period data.
- d. A map and/or aerial photograph showing the Landfill's perimeter and ancillary facilities as well as locations of all monitoring points, observation stations, and the surface trace of the point of compliance.
- e. Separate maps depicting each VOC detected in groundwater. Label each isoconcentration contour depicted and associated groundwater sampling locations. Concentrations of VOCs used to draw the isoconcentration contours must be notated next to each monitoring point.
- f. A composite map showing maximum isoconcentration contours for each VOC plume detected in groundwater. Concentrations of VOCs used to draw each maximum isoconcentration contour must be notated next to each monitoring point.
- g. Separate maps depicting VOC soil gas isoconcentration contours and associated soil gas sampling locations. Concentrations of VOCs used to draw the isoconcentration contours must be notated next to each monitoring point.
- h. Calculate and illustrate on a map and/or aerial photograph the static groundwater surface elevation (feet above mean sea level) in each groundwater monitoring well, the groundwater gradient (feet/feet) and the direction of the groundwater gradient beneath and around the Landfill, the velocity of groundwater flow (feet/year), and the current groundwater isocontours for that monitoring period.
- i. Report the total volume of leachate collected each month since the previous reporting period, tabulated per leachate sump. Describe how leachate was disposed. Report the depth of liquid recorded since the previous reporting period, tabulated per leachate sump.
- j. Copies of all field monitoring and well sampling data sheets.

- k. Time-series plots of the analytical results from the groundwater and unsaturated zone monitoring at each monitoring point for each COC detected during the monitoring period as well as available historical data (minimum of last ten years of data). Time-series plots must include, as lines, the COCs concentration limit as derived in accordance with the WQPS for the respective COC/monitoring point pair, as well as the PQL and MDL for the analytical method used.
- l. Information on the effectiveness of the load-checking program for the Landfill.
- m. An evaluation of the effectiveness of the runoff/run-on control facilities.
- n. A letter transmitting the essential points of each report, including a discussion of any violations found since the last report was submitted and describing actions taken or planned for correcting those violations.
  - i. If the Discharger has previously submitted a detailed time schedule for correcting violations, a reference to the correspondence transmitting this schedule will suffice.
  - ii. If no violations have occurred since the last submittal, this must be stated in the letter of transmittal.

## 2. Annual Monitoring Reports

Annual Monitoring Reports must be submitted to the Water Board no later than **March 30** of each year and may be combined with the second semi-annual monitoring report for the same reporting year. The report must include the items described in the General Provisions for Monitoring and Reporting (Attachment to this MRP), and the following information.

- a. All data collected in accordance with this MRP, Sections II.A through II.E.
- b. A list of all monitoring point/monitoring parameter pairs (pairs), by medium, which have exhibited a verified measurably significant increase, together with the respective date (for each) when that increase occurred. Any pairs that have shown an increase within that (prior) year must be indicated in the table, such as the use of bold-underlining of the data. In addition, by medium, list any non-monitoring parameter COCs that, during testing that year (tested every five years), have exceeded their respective concentration limit by a measurably

significant amount and, as a result, have become monitoring parameters, together with the date when the transition occurred.

- c. Two maps, one for each semi-annual monitoring period of the last reporting year, showing the groundwater isocontours determined for that monitoring period, the Landfill and all ancillary facilities, all groundwater and unsaturated zone monitoring points, and the surface trace of the point of compliance.
- d. Calibration methods and any discrepancies of any meters used for field parameter evaluations after calibration is performed.
- e. An evaluation of the effectiveness of both the groundwater and unsaturated zone monitoring programs and any proposed modifications necessary to improve the monitoring programs.
- f. A brief chronological summary of dates of any operational problems and maintenance activities that may impact water quality at the site.
- g. The compliance record and the corrective actions taken or planned, which may be needed to bring the Landfill into full compliance with the discharge requirements.
- h. Evidence that adequate financial assurance for closure, post-closure maintenance, and corrective action is still in effect for all WMUs. Evidence may include a copy of the renewed financial instrument or a copy of the receipt for payment of the financial instrument.
- i. Evidence that the financial assurance amount is adequate or increase the amount of financial assurance by an appropriate amount if necessary, due to inflation, a change in the approved closure plan, or other unforeseen events.
- j. The Discharger must review the Preliminary Closure Post-Closure Maintenance Plan annually to determine if significant changes in the operation of the Landfill warrant an update to the plan. Proposed changes to the plan must be outlined in the annual report.
- k. An evaluation of the effectiveness of both the groundwater and unsaturated zone monitoring programs and any proposed modifications necessary to improve the DMP and/or CAP. The evaluation of corrective action activities must also include map(s)



showing changes in VOC isoconcentration contours from the last annual reporting period to the current period.

3. Annual Stormwater Reports

Annual stormwater reports must be submitted to Water Board no later than **August 15** of each year in accordance with the frequencies listed in Attachment A, and may be combined with the first semi-annual DMP/CAP monitoring report. Annual stormwater reports must include, but not be limited to, the following information:

- a. All data collected during the reporting in accordance with the stormwater monitoring plan, as outlined in MRP section II.F.2.
- b. Tabulated results of sampling and laboratory analyses for each stormwater discharge monitoring location, including historical and current reporting period data, as well as the water quality threshold for each monitoring parameter and an identification of each sample that exceeds its respective water quality threshold at any given discharge monitoring location.
- c. A copy of the current site map from the SWPCP.
- d. Copies of all field monitoring, stormwater sampling, and visual observation data sheets. An explanation must be provided in the Annual Report for uncompleted sampling event visual observations.
- e. Calibration methods and any discrepancies of any meters used for field parameter evaluations after calibration is performed.
- f. A summary of the actions taken in response to a water quality threshold exceedance, including monitoring parameter and pollutant source(s) involved, additional BMP and/or SWPCP measures taken, and associated dates and timelines for implementing the response action; or a demonstration that the exceedance (s) is attributed to a non-industrial pollutant source and/or to a natural background source.
- g. A copy of any SWPCP amendments and/or revisions for the reporting period.

- h. A summary of significant spills and/or leaks that occurred at the Facility during the reporting period and the response taken by the Discharger, including dates.
- i. A summary of employee stormwater related trainings performed during the reporting period, including dates and content.

4. Five-Year Constituent of Concern Monitoring and Reporting Program

Pursuant to CCR, title 27, section 20420, subdivision (g), every five years the Discharger must sample for COCs. Groundwater samples must be collected and submitted for laboratory analyses at all monitoring points once every five years for all monitoring parameters and COCs listed in Appendix I and Appendix II, Title 40, Code of Federal Regulations (40 CFR), Part 258 (Attachment A). Successive monitoring efforts must be carried out alternately during January 1 through June 30 of one five-year COC sampling event and July 1 through December 31 of the next five-year COC sampling event, and every fifth year, thereafter. The five-year COC sampling event must be reported no later than 45 days following the monitoring period. The last five-year sampling event occurred in September 2020 and was reported in 2022; therefore, the next five-year sampling event is scheduled to occur in second half of 2026 and reported to the Water Board no later than **January 30, 2027**.

5. Five-Year Corrective Action Program Evaluation Report

During the life of the CAP, the Discharger must submit to the Water Board every five years a Five-Year Corrective Action Program Evaluation Report. This report will be submitted to the Water Board by **March 30<sup>th</sup> beginning with year 2027**, and can be combined with the Annual Monitoring Report for that reporting period. The Five-Year Corrective Action Program Evaluation Report must include the following.

- a. A detailed evaluation of the CAP and recommendations to continue, modify or discontinue the CAP, including recommendations for other remedial alternatives.
- b. Status information regarding CAP progress with supporting evidence collected as part of the groundwater and unsaturated zone monitoring programs.
- c. Review of the WQPS for the Landfill and recommendations regarding any updates to the WQPS including concentration limits.

- d. A chronological summary of any contingency remedies and/or triggers that were identified and the additional corrective actions taken or planned during the previous five years of implementing the CAP.

C. Unscheduled Reports to be Filed with the Water Board

The following reports must be submitted to the Water Board as specified below.

1. Notice of Tentative Release from the Landfill

Should the statistical or non-statistical data analyses indicate, for a given COC, that a new release is tentatively identified, the Discharger must follow these requirements.

a. Physical or Measurably Significant Evidence of a Release from the WMUs

The Discharger must immediately notify the Water Board verbally whenever a determination is made that there is significant physical or “measurably significant” evidence of a release from the Landfill. This verbal notification must be followed by written notification via certified mail within seven days of such determination. Upon such notification, the Discharger may initiate verification procedures or demonstrate that another source other than the WMUs caused evidence of a release in accordance with this MRP, Section IV.B.1.b.

This notification must include the following information:

- i. The potential source of the release;
- ii. General information including the date, time, location, and cause of release;
- iii. An estimate of the flow rate and volume of waste involved;
- iv. A procedure for collecting samples and description of laboratory tests to be conducted;
- v. Identification of any water body or water-bearing media affected or threatened;

- vi. A summary of proposed actions; and
- vii. For a physical evidence of a release – the physical factors that indicated evidence of a release; or
- viii. For a measurably significant evidence of a release – the monitoring parameters and/ or COCs that are involved in the measurably significant evidence of a release from the Landfill.

b. Other Source that May Cause Evidence of a Release from the WMUs

The Discharger may make a demonstration that a source other than the Landfill caused evidence of a release. For this case, the Discharger must notify the Water Board of the intention to make this demonstration. The notification must be sent to the Water Board by certified mail within 7 days of determining physical or measurably significant evidence of a release.

2. Evaluation Monitoring

The Discharger must, within 90 days of verifying a new release, submit a technical report and amended report of waste discharge to establish an EMP pursuant to CWC, section 13267, subdivision (b), proposing an EMP meeting the provisions of CCR, title 27, section 20420, subdivision (k)(5). If the Discharger decides not to conduct verification procedures or decides not to make a demonstration that a source other than the WMUs is responsible for the release, the release will be considered verified. The EMP must include the following information:

- a. COC Concentrations – the maximum concentration of each COC at each monitoring point as determined during the most recent COC sampling event (i.e., under CCR, title 27, section 20420, subdivision (g) or (k)[1]). Any COC that exceeds its concentration limit is to be retested at that monitoring point. Should the results of the retest verify that the COC is above the concentration limit, then that COC will become a monitoring parameter at that monitoring point;
- b. Proposed Monitoring System Changes – any proposed changes to the groundwater and unsaturated zone monitoring systems necessary to meet the provisions of CCR, title 27, section 20425;

Proposed Monitoring Changes – any proposed additions or changes to the monitoring frequency, sampling and analytical procedures or

methods, or statistical methods used at the Landfill necessary to meet the provisions of CCR, title 27, section 20425; and

- c. Proposed Delineation Approach – a detailed description of the measures to be taken by the Discharger to assess the nature and extent of the release from the Landfill.

### 3. Engineering Feasibility Study Report

The Discharger is implementing a CAP for a known release to groundwater. Within 180 days of verifying the existence of any new release, the Discharger must submit a revised Engineering Feasibility Study report meeting CCR, title 27, section 20420, subdivision (k)(6), proposing corrective action measures that could be taken to achieve background concentrations for all COCs involved in the release. This report will be the basis for a later expanded Engineering Feasibility Study submitted under the EMP, as specified in CCR, title 27, section 20425, subdivision (b).

### 4. Monitoring Well Logs

All monitoring wells (including groundwater and unsaturated zone monitoring wells) and all other borings installed to satisfy the requirements of this MRP must be drilled by a licensed drilling contractor and must be logged during drilling under the direct supervision of either a California-licensed professional geologist or civil engineer with expertise in stratigraphic well logging, as indicated in CCR, title 27, section 20415, subdivision (e)(2). Such logs must be submitted to the Water Board within 90 days following completion of fieldwork.

### 5. Significant Earthquake Event

After a significant<sup>1</sup> or greater earthquake event at or near the Facility, the Discharger must notify the Lahontan Water Board within 48 hours, and within 45 days submit to the Lahontan Water Board a detailed written post-earthquake report describing any physical damages to the containment features or groundwater and/or unsaturated zone monitoring systems or to report no damage to the Facility was sustained. The Discharger must closely examine the WMU and appurtenant piping,

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<sup>1</sup> A significant earthquake is a seismic event classified according to the United States Geological Survey (USGS) Earthquake Hazard Program as a moderate earthquake measuring between 5 and 5.9 on the Richter scale, or higher. The Discharger may use the Modified Mercalli Intensity Scale VI or higher for equivalent ground shaking generated by a significant earthquake of Richter magnitude 5.0 or higher as contained with the USGS Earthquake Hazard Program Magnitude/Intensity Comparison chart found at <https://earthquake.usgs.gov>.

inspect the slope conditions, drainage control system, and surface grading for signs of cracking or depressed/settled areas following the earthquake event.

6. Extreme Weather Event

After an extreme weather event<sup>2</sup> at or near the Facility, the Discharger must notify the Lahontan Water Board within 48 hours, and within 45 days submit to the Lahontan Water Board a detailed written post-extreme weather event report describing any physical damages to the containment features or groundwater and/or unsaturated zone monitoring systems or to report no damage to the Facility was sustained. The Discharger must closely examine the WMU and appurtenant piping, inspect the slope conditions, drainage control system, and surface grading for signs of erosion, cracking, or depressed/settled areas following the extreme weather event.

D. Technical Reports

Pursuant to CWC, section 13267, subdivision (b):

1. Monitoring Systems Installation Report

**No later than 90 days** following completion of construction a monitoring system or monitoring system component, the Discharger must submit a technical report summarizing all work activities associated with the installation of the monitoring system or component. The report must be certified by a California professional civil engineer or a California professional geologist. It must contain sufficient information to verify that the construction was in accordance with State and/or County standards.

2. Sampling and Analysis Plan

**At least 60 days prior** to the operation of a new WMU, the Discharger must submit a revised SAP to be accepted by the Water Board, including procedures for monitoring, SAP for the LCRS, unsaturated zone, and groundwater.

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<sup>2</sup> An extreme weather event refers to a weather phenomenon with enough intensity to cause physical damage to the Facility or any of its infrastructure including containment features or groundwater and/or unsaturated zone monitoring systems or disruption in wastewater conveyance or treatment systems. Extreme weather refers to unusual, severe, or unseasonal weather conditions, and can include extreme heat, excessive or unusual precipitation and flooding, wildfires, severe wind, and extended droughts.

3. Water Quality Protection Standards

**No later than 760 days** following construction (8 quarters of monitoring, plus 30 days to generate the Water Quality Protection Standard), the Discharger must propose for acceptance by the Water Board a list of monitoring parameters and constituents of concern for each new monitoring point for which a WQPS has not been established, including a data analysis method, a revised WQPS, which includes concentration limits that define background water quality for all COCs and for each Point of Compliance. The report must be certified by a California professional civil engineer or a California professional geologist.

At any given time, the concentration limit for each COC must be equal to the background data set of that constituent unless a concentration limit greater than background has been established. The background data set for each monitoring point/constituent pair should be comprised of at least eight data points, collected quarterly.

E. General Provisions

The Discharger must comply with Attachment C, "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made part of this MRP.

F. Failure to Furnish Reports

Any person failing or refusing to furnish technical or monitoring reports or falsifying any information provided therein is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation pursuant to CWC, section 13268.

G. Violations

If monitoring data indicate a violation of a specific requirement in these WDRs, the Discharger must report the violation in the scheduled report for the corresponding reporting period and provide information indicating the cause of violation(s) and the action taken or planned to bring the discharge into compliance.

H. Electronic Reporting Requirements

Pursuant to CCR, title 23, section 3890, the Discharger must submit reports, including soil, soil-gas, and water data, prepared for the purpose of subsurface investigation or remediation of a discharge of waste to land subject to CCR, title 27, Division 2, electronically over the internet to the State Water Resources Control Board's GeoTracker system. This requirement is in addition to, and not superseded by, any other applicable reporting requirement. The Discharger must provide the monitoring report to the Water Board, as specified in this MRP, and upload the full monitoring report into GeoTracker, as stipulated by CCR, title 23. For all other types of documents and correspondence, please send to the Water Board's email address at [Lahontan@waterboards.ca.gov](mailto:Lahontan@waterboards.ca.gov) and include the WDID No. and Landfill name in the subject line.

Ordered by: \_\_\_\_\_ Dated: \_\_\_\_\_  
BEN LETTON  
EXECUTIVE OFFICER

Attachments:

- A. Water Quality Monitoring Program
- B. Monitoring Network, Mojave/ Rosamond Class III Landfill
- C. General Provisions for Monitoring and Reporting, September 1, 1994



**ATTACHMENT A – WATER QUALITY MONITORING PROGRAM<sup>1</sup>**

| UNSATURATED ZONE                |                                         |                               |                                                             |                     |
|---------------------------------|-----------------------------------------|-------------------------------|-------------------------------------------------------------|---------------------|
| Parameter                       |                                         | Units                         | Sampling Frequency                                          | Reporting Frequency |
| Soil-Pore Gas                   |                                         |                               |                                                             |                     |
| Field Parameters <sup>2</sup>   |                                         |                               |                                                             |                     |
| Atmospheric Pressure            |                                         | Inches of                     | Semi-Annual                                                 | Semi-Annual         |
| Carbon Dioxide                  |                                         | Percent                       | Semi-Annual                                                 | Semi-Annual         |
| Nitrogen                        |                                         | Percent                       | Semi-Annual                                                 | Semi-Annual         |
| Oxygen                          |                                         | Percent                       | Semi-Annual                                                 | Semi-Annual         |
| Methane                         |                                         | Percent                       | Semi-Annual                                                 | Semi-Annual         |
| Constituents of Concern         |                                         |                               |                                                             |                     |
| Monitoring Parameters           | Carbon Dioxide                          | Parts per billion by volume   | Conditional to methane field parameter results <sup>3</sup> | Semi-Annual         |
|                                 | Methane                                 | Parts per billion by volume   |                                                             | Semi-Annual         |
|                                 | Nitrogen                                | Parts per billion by volume   |                                                             | Semi-Annual         |
|                                 | Oxygen                                  | Parts per billion by volume   |                                                             | Semi-Annual         |
|                                 | Volatile Organic Compounds              | Parts per billion by volume   |                                                             | Semi-Annual         |
| Volatile Organic Compounds      |                                         | Parts per billion by volume   | 5 year                                                      | 5 year              |
| Semi-Volatile Organic Compounds |                                         | Parts per billion by volume   | 5 year                                                      | 5 year              |
| Soil-Pore Liquid <sup>4</sup>   |                                         |                               |                                                             |                     |
| Field Parameters                |                                         |                               |                                                             |                     |
| Dissolved Oxygen (DO)           |                                         | milligrams/Liter              | Quarterly                                                   | Semi-Annual         |
| Electrical Conductivity         |                                         | µmhos/cm                      | Quarterly                                                   | Semi-Annual         |
| pH                              |                                         | pH Units                      | Quarterly                                                   | Semi-Annual         |
| Temperature                     |                                         | degrees Fahrenheit or Celsius | Quarterly                                                   | Semi-Annual         |
| Turbidity                       |                                         | NTU                           | Quarterly                                                   | Semi-Annual         |
| Constituents of Concern         |                                         |                               |                                                             |                     |
| Monitoring Parameters           | Chloride                                | milligrams/Liter              | Semi-Annual                                                 | Semi-Annual         |
|                                 | Nitrate as Nitrogen                     | milligrams/Liter              | Semi-Annual                                                 | Semi-Annual         |
|                                 | Sulfate                                 | milligrams/Liter              | Semi-Annual                                                 | Semi-Annual         |
|                                 | Total Dissolved Solids                  | milligrams/Liter              | Semi-Annual                                                 | Semi-Annual         |
|                                 | Volatile Organic Compounds <sup>5</sup> | micrograms/Liter              | Semi-Annual                                                 | Semi-Annual         |
| Antimony                        |                                         | milligrams/Liter              | 5 year                                                      | 5 year              |
| Arsenic                         |                                         | milligrams/Liter              | 5 year                                                      | 5 year              |
| Barium                          |                                         | milligrams/Liter              | 5 year                                                      | 5 year              |
| Beryllium                       |                                         | milligrams/Liter              | 5 year                                                      | 5 year              |
| Cadmium                         |                                         | milligrams/Liter              | 5 year                                                      | 5 year              |
| Chromium                        |                                         | milligrams/Liter              | 5 year                                                      | 5 year              |

| UNSATURATED ZONE                             |                  |                    |                     |
|----------------------------------------------|------------------|--------------------|---------------------|
| Parameter                                    | Units            | Sampling Frequency | Reporting Frequency |
| Soil-Pore Liquid <sup>4</sup>                |                  |                    |                     |
| Constituents of Concern (Continued)          |                  |                    |                     |
| Cobalt                                       | milligrams/Liter | 5 year             | 5 year              |
| Copper                                       | milligrams/Liter | 5 year             | 5 year              |
| Lead                                         | milligrams/Liter | 5 year             | 5 year              |
| Mercury                                      | milligrams/Liter | 5 year             | 5 year              |
| Molybdenum                                   | milligrams/Liter | 5 year             | 5 year              |
| Nickel                                       | milligrams/Liter | 5 year             | 5 year              |
| Selenium                                     | milligrams/Liter | 5 year             | 5 year              |
| Silver                                       | milligrams/Liter | 5 year             | 5 year              |
| Thallium                                     | milligrams/Liter | 5 year             | 5 year              |
| Vanadium                                     | milligrams/Liter | 5 year             | 5 year              |
| Zinc                                         | milligrams/Liter | 5 year             | 5 year              |
| Total Organic Carbon                         | milligrams/Liter | 5 year             | 5 year              |
| Volatile Organic Compounds <sup>5</sup>      | micrograms/Liter | 5 year             | 5 year              |
| Semi-Volatile Organic Compounds <sup>6</sup> | micrograms/Liter | 5 year             | 5 year              |
| Chlorophenoxy Herbicides <sup>6</sup>        | micrograms/Liter | 5 year             | 5 year              |
| Organophosphorus Compounds <sup>6</sup>      | micrograms/Liter | 5 year             | 5 year              |
| Organochlorine Pesticides <sup>6</sup>       | micrograms/Liter | 5 year             | 5 year              |
| Polychlorinated Biphenyls <sup>6</sup>       | micrograms/Liter | 5 year             | 5 year              |

| LANDFILL LEACHATE COLLECTION AND RECOVERY SYSTEM |                                         |                    |                     |
|--------------------------------------------------|-----------------------------------------|--------------------|---------------------|
| Parameter                                        | Units                                   | Sampling Frequency | Reporting Frequency |
| Field Parameters                                 |                                         |                    |                     |
| Total Flow                                       | gallons                                 | Quarterly          | Semi-Annual         |
| Flow Rate                                        | Gallons per Month                       | Quarterly          | Semi-Annual         |
| Electrical Conductivity                          | µmhos/cm                                | Quarterly          | Semi-Annual         |
| pH                                               | pH units                                | Quarterly          | Semi-Annual         |
| Constituents of Concern                          |                                         |                    |                     |
| Monitoring Parameters                            | Chloride                                | milligrams/Liter   | Annually            |
|                                                  | Nitrate as Nitrogen                     | milligrams/Liter   | Annually            |
|                                                  | Sulfate                                 | milligrams/Liter   | Annually            |
|                                                  | Total Dissolved Solids                  | milligrams/Liter   | Annually            |
|                                                  | Volatile Organic Compounds <sup>2</sup> | micrograms/Liter   | Annually            |
| Antimony                                         | milligrams/Liter                        | 5 year             | 5 year              |
| Arsenic                                          | milligrams/Liter                        | 5 year             | 5 year              |
| Barium                                           | milligrams/Liter                        | 5 year             | 5 year              |
| Beryllium                                        | milligrams/Liter                        | 5 year             | 5 year              |
| Cadmium                                          | milligrams/Liter                        | 5 year             | 5 year              |
| Chromium                                         | milligrams/Liter                        | 5 year             | 5 year              |
| Cobalt                                           | milligrams/Liter                        | 5 year             | 5 year              |
| Copper                                           | milligrams/Liter                        | 5 year             | 5 year              |
| Lead                                             | milligrams/Liter                        | 5 year             | 5 year              |

| LANDFILL LEACHATE COLLECTION AND RECOVERY SYSTEM |                  |                    |                     |
|--------------------------------------------------|------------------|--------------------|---------------------|
| Parameter                                        | Units            | Sampling Frequency | Reporting Frequency |
| <b>Constituents of Concern (Continued)</b>       |                  |                    |                     |
| Mercury                                          | milligrams/Liter | 5 year             | 5 year              |
| Molybdenum                                       | milligrams/Liter | 5 year             | 5 year              |
| Nickel                                           | milligrams/Liter | 5 year             | 5 year              |
| Selenium                                         | milligrams/Liter | 5 year             | 5 year              |
| Silver                                           | milligrams/Liter | 5 year             | 5 year              |
| Thallium                                         | milligrams/Liter | 5 year             | 5 year              |
| Vanadium                                         | milligrams/Liter | 5 year             | 5 year              |
| Zinc                                             | milligrams/Liter | 5 year             | 5 year              |
| Total Organic Carbon                             | milligrams/Liter | 5 year             | 5 year              |
| Volatile Organic Compounds <sup>5</sup>          | micrograms/Liter | 5 year             | 5 year              |
| Semi-Volatile Organic Compounds <sup>6</sup>     | micrograms/Liter | 5 year             | 5 year              |
| Chlorophenoxy Herbicides <sup>6</sup>            | micrograms/Liter | 5 year             | 5 year              |
| Organophosphorus Compounds <sup>6</sup>          | micrograms/Liter | 5 year             | 5 year              |
| Organochlorine Pesticides <sup>6</sup>           | micrograms/Liter | 5 year             | 5 year              |
| Polychlorinated Biphenyls <sup>6</sup>           | micrograms/Liter | 5 year             | 5 year              |

| GROUNDWATER                    |                               |                    |                     |
|--------------------------------|-------------------------------|--------------------|---------------------|
| Parameter                      | Units                         | Sampling Frequency | Reporting Frequency |
| <b>Field Parameters</b>        |                               |                    |                     |
| Depth to Groundwater           | feet below ground surface     | Semi-Annual        | Semi-Annual         |
| Groundwater Elevation          | feet above mean sea level     | Semi-Annual        | Semi-Annual         |
| Dissolved Oxygen               | milligrams/Liter              | Semi-Annual        | Semi-Annual         |
| Electrical Conductivity        | μmhos/cm                      | Semi-Annual        | Semi-Annual         |
| pH                             | pH units                      | Semi-Annual        | Semi-Annual         |
| Temperature                    | degrees Fahrenheit or Celsius | Semi-Annual        | Semi-Annual         |
| Turbidity                      | NTU                           | Semi-Annual        | Semi-Annual         |
| <b>Constituents of Concern</b> |                               |                    |                     |
| <b>Monitoring Parameters</b>   | Chemical Oxygen Demand        | milligrams/Liter   | Semi-Annual         |
|                                | Total Dissolved Solids        | milligrams/Liter   | Semi-Annual         |
|                                | Chloride                      | milligrams/Liter   | Semi-Annual         |
|                                | Biocarbonate                  | milligrams/liter   | Semi-Annual         |
|                                | Carbonate                     | milligrams/liter   | Semi-Annual         |
|                                | Calcium                       | milligrams/liter   | Semi-Annual         |
|                                | Nitrate as Nitrogen           | milligrams/Liter   | Semi-Annual         |
|                                | Sulfate                       | milligrams/Liter   | Semi-Annual         |
|                                | Potassium                     | milligrams/liter   | Semi-Annual         |
|                                | Magnesium                     | milligrams/liter   | Semi-Annual         |

| GROUNDWATER                                  |                                         |                  |                    |                     |
|----------------------------------------------|-----------------------------------------|------------------|--------------------|---------------------|
| Parameter                                    |                                         | Units            | Sampling Frequency | Reporting Frequency |
|                                              | Sodium                                  | milligrams/liter | Semi-Annual        | Semi-Annual         |
|                                              | Volatile Organic Compounds <sup>4</sup> | micrograms/Liter | Semi-Annual        | Semi-Annual         |
| Antimony                                     |                                         | milligrams/Liter | 5 year             | 5 year              |
| Arsenic                                      |                                         | milligrams/Liter | 5 year             | 5 year              |
| Barium                                       |                                         | milligrams/Liter | 5 year             | 5 year              |
| Beryllium                                    |                                         | milligrams/Liter | 5 year             | 5 year              |
| Cadmium                                      |                                         | milligrams/Liter | 5 year             | 5 year              |
| Chromium                                     |                                         | milligrams/Liter | 5 year             | 5 year              |
| Cobalt                                       |                                         | milligrams/Liter | 5 year             | 5 year              |
| Copper                                       |                                         | milligrams/Liter | 5 year             | 5 year              |
| Lead                                         |                                         | milligrams/Liter | 5 year             | 5 year              |
| Mercury                                      |                                         | milligrams/Liter | 5 year             | 5 year              |
| Molybdenum                                   |                                         | milligrams/Liter | 5 year             | 5 year              |
| Nickel                                       |                                         | milligrams/Liter | 5 year             | 5 year              |
| Selenium                                     |                                         | milligrams/Liter | 5 year             | 5 year              |
| Silver                                       |                                         | milligrams/Liter | 5 year             | 5 year              |
| Thallium                                     |                                         | milligrams/Liter | 5 year             | 5 year              |
| Vanadium                                     |                                         | milligrams/Liter | 5 year             | 5 year              |
| Zinc                                         |                                         | milligrams/Liter | 5 year             | 5 year              |
| Volatile Organic Compounds <sup>5</sup>      |                                         | micrograms/Liter | 5 year             | 5 year              |
| Semi-volatile Organic Compounds <sup>6</sup> |                                         | micrograms/Liter | 5 year             | 5 year              |
| Total Organic Carbon                         |                                         | milligrams/Liter | 5 year             | 5 year              |
| Chlorophenoxy Herbicides <sup>6</sup>        |                                         | micrograms/Liter | 5 year             | 5 year              |
| Organophosphorus Compounds <sup>6</sup>      |                                         | micrograms/Liter | 5 year             | 5 year              |
| Organochlorine Pesticides <sup>6</sup>       |                                         | micrograms/Liter | 5 year             | 5 year              |
| Polychlorinated Biphenyls <sup>6</sup>       |                                         | micrograms/Liter | 5 year             | 5 year              |

| STORMWATER MONITORING |                  |                           |                                                    |                     |
|-----------------------|------------------|---------------------------|----------------------------------------------------|---------------------|
| Parameter             | Units            | USEPA Method <sup>7</sup> | Sampling Frequency                                 | Reporting Frequency |
| pH                    | pH Units         | --                        | four qualifying storm events per year <sup>8</sup> | annually            |
| Turbidity             | NTUs             | SM-2130-B                 |                                                    |                     |
| Oil and Grease, Total | milligrams/liter | 1664A                     |                                                    |                     |
| Iron, Total           | milligrams/liter | 200.7                     |                                                    |                     |

Notes:

NTU - Nephelometric Turbidity Units

µmhos/cm - micromhos per centimeter

<sup>1</sup> Laboratory analytical data is uploaded to GeoTracker in accordance with the sampling frequency.

<sup>2</sup> Field screened using a CES-LANDTEC GEM 2000 Gas Analyzer or equivalent field instrument.

<sup>3</sup> If the threshold concentration of methane is detected above five percent by volume in any of the gas monitoring wells, samples will be collected and analyzed for the monitoring parameters listed.

<sup>4</sup> Pan lysimeters, suction lysimeters, soil-moisture probes.

<sup>5</sup> As defined in Appendix I, 40 Code of Federal Regulations (CFR), part 258.

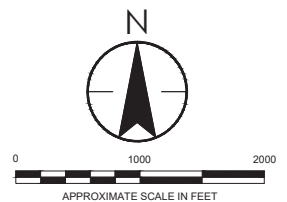
<sup>6</sup> As defined in Appendix II, 40 CFR, part 258.

<sup>7</sup> The Discharger shall analyze for all constituents, with the exception of field parameters, using the United States Environmental Protection Agency (USEPA) analytical methods indicated or the most recently approved SW-846 USEPA method or other equivalent USEPA method. An alternate method may be proposed and used if acceptable to the Executive Officer.

<sup>8</sup> A qualifying storm event is a precipitation event that produces a stormwater discharge for at least one drainage area and is preceded by 48 hours with no discharge from any drainage area. The Discharger shall collect and analyze stormwater samples from two qualifying storm events within the first half of each reporting year (July 1 to December 31) and from two qualifying storm events within the second half of each reporting year (January 1 through June 30). If a sufficient number of qualifying storm events do not occur within a given reporting year, the Discharger must document and report that information in the regularly scheduled Annual Stormwater Report.



- LEGEND:**
- WELLS**
- BACKGROUND
  - PROPOSED BACKGROUND
  - CORRECTIVE ACTION PLAN (CAP)
  - COMPLIANCE
  - PROPOSED COMPLIANCE
  - LYSIMETER
  - MOISTURE BLOCK
  - LFG PERIMETER
  - DESTROYED AGRICULTURAL
  - LOCAL GROUNDWATER FLOW DIRECTION
  - GROUNDWATER CONTOURS



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REFERENCE:  
GROUND CONTOURS FROM KERN COUNTY  
(2025). SITE PLAN PROVIDED BY KERN  
COUNTY.

**Stantec**  
6780 NORTH WEST AVENUE, SUITE 103  
FRESNO, CALIFORNIA 93711  
www.stantec.com

FOR:  
KERN COUNTY WASTE MANAGEMENT  
MOJAVE-ROSAMOND LANDFILL  
400 SILVER QUEEN ROAD  
MOJAVE, CALIFORNIA

JOB NUMBER:  
185705618

DRAWN BY:  
JBL

MOJAVE-ROSAMOND RECYCLING  
AND  
SANITARY LANDFILL

CHECKED BY:  
PS

APPROVED BY:  
PS

FIGURE:  
**2**  
DATE:  
08/08/25



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**GENERAL PROVISIONS**  
FOR MONITORING AND REPORTING

1. **SAMPLING AND ANALYSIS**

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
  - i. Standard Methods for the Examination of Water and Wastewater
  - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed from an Environmental Laboratory Accreditation Program (ELAP) accredited laboratory. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board prior to use.
- d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.
- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

## 2. OPERATIONAL REQUIREMENTS

### a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

### b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

## 3. REPORTING

- a. For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.
- b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.
- d. Monitoring reports shall be signed by:
  - i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
  - ii. In the case of a partnership, by a general partner;
  - iii. In the case of a sole proprietorship, by the proprietor; or



- iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- e. Monitoring reports are to include the following:
  - i. Name and telephone number of individual who can answer questions about the report.
  - ii. The Monitoring and Reporting Program Number.
  - iii. WDID Number.
- f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

#### 4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation under Section 13268 of the Water Code.

x:PROVISIONS WDRS

file: general pro mrp