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## Lahontan Regional Water Quality Control Board

April 27, 2026

WDID No. 6B368050006

TO: ATTACHED MAILING LIST

### **Closure and Post-Closure Waste Discharge Requirements for Solar Electric Generating Systems (SEGS) VIII-IX, Hinkley, San Bernardino County**

Enclosed are tentative Waste Discharge Requirements for the subject line facility, located in San Bernardino County. The Lahontan Regional Water Quality Control Board (Water Board) requests that you review the enclosed documents and provide us with your written comments no later than **May 27, 2026**. Please send your comments to the Water Board's email address at [Lahontan@waterboards.ca.gov](mailto:Lahontan@waterboards.ca.gov) and include **SEGS VIII-IX WDID No. 6B368050006 Comments** in the subject line text. If you do not have access to the internet, you may mail your comments to the Water Board's Victorville office at the address shown on this letter to the attention of Todd Battey.

The Water Board will consider adopting the Closure and Post-Closure Waste Discharge Requirements at its regular meeting scheduled for August 5-6, 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 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) 241-7340.

If you need further information regarding this agenda item, please contact me at (760) 241-7340 or at [todd.battey@waterboards.ca.gov](mailto:todd.battey@waterboards.ca.gov).

Todd Battey, PG  
Engineering Geologist

Enc: Closure and Post-Closure Waste Discharge Requirements and Monitoring and Reporting Program for SEGS VIII-IX

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JEFF LOUX, CHAIR | BEN LETTON, EXECUTIVE OFFICER

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

**BOARD ORDER NO. R6-2026-TENTATIVE  
WDID NO. 6B368050006**

**CLOSURE AND POST-CLOSURE WASTE DISCHARGE REQUIREMENTS**

**FOR**

**TERRA-GEN OPERATING COMPANY, LLC**

**SOLAR ELECTRIC GENERATING SYSTEMS (SEGS) VIII AND IX, THREE  
SURFACE IMPOUNDMENTS, ONE LAND TREATMENT UNIT, AND SEGS IX  
LANDFILL**

San Bernardino County

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

1. Discharger

Terra-Gen, LLC (Terra-Gen) submitted the Final Closure and Post-Closure Maintenance Plan (FCPCMP) for the Solar Electric Generating Systems (SEGS) VIII and IX on September 9, 2025 (Revised February 4, 2026).

Luz Solar Partners Ltd., VIII was the original developer of SEGS VIII and is the owner and operator of that facility. Luz Solar Partners Ltd., IX was the original developer of SEGS IX and is the owner and operator of that facility. Lockhart Land Holdings owns the land underlying the surface impoundments, the Land Treatment Unit (LTU), and the SEGS VIII and IX facilities. All three entities (Luz Solar Partners Ltd., VIII; Luz Solar Partners Ltd., IX; and Lockhart Land Holdings) are wholly owned subsidiaries of Terra-Gen. For the purposes of this Order, Luz Solar Partners Ltd., VIII; Luz Solar Partners Ltd., IX; Lockhart Land Holdings; and Terra-Gen are referred to as the "Dischargers."

2. Facility

The Facility currently includes the following Waste Management Units (referred to as WMUs or Units hereafter):

- a. Three Class II surface impoundments totaling 31 acres received wastewater from SEGS VIII-IX operations. The FCPCMP referred to the impoundments as SEGS VIII West Surface Impoundment, SEGS VIII East Surface Impoundment, and SEGS IX North Surface Impoundment. For the purposes of this Order, they are referred to as the West Surface Impoundment, the East Surface Impoundment, and the North Surface Impoundment, respectively.

- b. The Land Treatment Unit (LTU, also known as the Landfarm) bioremediated soil contaminated by releases of heat transfer fluid (HTF) from Facility operations. The LTU does not contain any waste and was clean closed. HTF-impacted soil has not been added to the LTU in over 15 years, and final soil sampling was conducted in 2024. HTF constituents were not detected in any of the soil samples. The Lahontan Water Board is documenting clean closure of the LTU as part of these WDRs.

A map of the Facility location with the layout of the former solar thermal generating facilities is included as Attachment A, which is made part of this Order.

SEGS VIII and IX began operating as concentrating solar thermal generating facilities in 1989 and 1990, respectively. Terra-Gen obtained a Conditional Use Permit from the County of San Bernardino in 2019 to convert the Facility to improved photovoltaic (PV) panels, which do not generate operational wastewater or use HTF. SEGS VIII was decommissioned in 2022 and converted to PV solar in 2023. Decommissioning of SEGS IX began in 2024 and the conversion to PV panels is under way with completion planned in the fourth quarter of 2026.

The FCPCMP proposes to consolidate wastes from all three surface impoundments in the North Surface Impoundment, which will become a Class II landfill named the SEGS IX Landfill. The West and East Surface Impoundments will be clean closed by removing all waste materials from these WMUs. The LTU was previously clean closed. The Dischargers will close the North Surface Impoundment as a landfill that will contain all remaining solid wastes from all three surface impoundments as well as liner materials and leachate collection and removal system (LCRS) sand from the West and East Surface Impoundments.

3. Location

SEGS VIII and IX, including the three surface impoundments and the LTU, are in unincorporated San Bernardino County approximately 7 miles north of the intersection of State Route 58 and Harper Lake Road, and west of Harper Dry Lake. The address is 43880 Harper Lake Road, Hinkley, California, 92347. The Facility is located in multiple Sections: Township 11 North, Range 5 West, Sections 13 and 24; and Township 11 North, Range 4 West, Sections 18 and 19; San Bernardino Meridian. Attachment A shows the location of the Facility.

4. Reason for Action

The WMUs are eligible for closure since wastewater and HTF-contaminated soils are no longer generated or discharged because the Facility is being converted to

a PV solar facility. The Dischargers submitted the FCPCMP, which describes the manner of closure and the proposed maintenance of the Facility during the post-closure period. The Lahontan Water Board is rescinding Board Order No. 6-98-74; issuing these new Waste Discharge Requirements (WDRs); and updating the Monitoring and Reporting Program (MRP) to: (1) establish the closure and post-closure maintenance and monitoring period and requirements for the Facility; (2) incorporate Facility-specific storm water management, monitoring, and reporting requirements; and (3) provide updated MRP based on the revised Facility conditions and in compliance with the requirements of California Code of Regulations (CCR), title 27.

5. Order History

- a. Board Order No. 6-95-003, adopted on January 12, 1995, established WDRs for SEGS VIII.
- b. Board Order No. 6-95-004, adopted on January 12, 1995, established WDRs for SEGS IX.
- c. Board Order No. 6-98-74, adopted on November 5, 1998, revised the WDRs for SEGS VIII, SEGS IX, and the LTU. This Board Order revised the WDRs to: (a) combine requirements for the SEGS VIII and SEGS IX facilities; (b) revise the list of constituents of concern (COCs) for ground water in the MRP; (c) add Rapid and Large Leakage Rate requirements for the surface impoundments; and (d) add requirements for the new LTU. This Board Order also rescinded Board Order Nos. 6-95-003 and 6-95-004.

6. Final Closure and Post-Closure Maintenance Plan

This Order approves the revised FCPCMP dated February 2026, which describes the proposed manner of closure for the West and East Surface Impoundments and the LTU; closure of the North Surface Impoundment as a Class II landfill (i.e., the SEGS IX Landfill); and the proposed maintenance of the landfill during the post-closure period.

The LTU was clean closed. Annual soil sampling at the LTU was conducted until December 2024, when the SEGS were decommissioned. HTF constituents were not detected during these annual soil sampling events.

The clean closure of the West and East Surface Impoundments will be in accordance with CCR, title 27, section 21400(b)(1). Wastes and contaminated materials (including liners) from the West and East Surface Impoundments will be removed and transferred to the SEGS IX Landfill. No other waste will be discharged to the North Surface Impoundment. The North Surface Impoundment will be closed as a landfill in accordance with CCR, title 27, section 21400(b)(2)(A), which specifies:

“...that all residual wastes, including sludges, precipitates, settled solids, and liner materials, must be compacted, and the Unit must be closed as a landfill pursuant to [section] 21090, provided that the closed Unit meets applicable standards waste classification and siting requirements for landfill Units in Articles 3 and 4 of Subchapter 2, Chapter 3, Subdivision 1 of this division ([section] 20240 et seq.), and further provided that the moisture content of residual wastes, including sludges, does not exceed the moisture-holding capacity of the waste either before or after closure...”

The liner system of the North Surface Impoundment will remain intact and will serve as the liner system of the landfill (hydraulic conductivity of  $1 \times 10^{-6}$  centimeters per second [cm/s]). The liner system consists of the following:

- a. An upper primary liner consisting of 60 mil (0.06-inch thick) high density polyethylene (HDPE).
- b. A lower secondary liner consisting of 60 mil HDPE.
- c. Between the liners is a synthetic drainage net that is used as part of the leachate collection and removal system (LCRS). In the lowest drain-line portions of the LCRS there is a sand layer with perforated drainage pipes.

A final cover will be constructed over the SEGS IX Landfill to isolate the waste from precipitation and minimize the potential to generate leachate. The final cover for the landfill will be the primary containment system for the closed WMU in accordance with CCR, title 27, sections 21090 and 20950. Attachment B of this Order is a plan view of the Landfill location and Attachment C is a schematic of the proposed closed WMU showing the base liner and final cover systems.

The FCPCMP also conforms with Class II siting requirements of CCR, title 27, section 20250 and section 21750.

#### 7. Closure as a Landfill

Pursuant to CCR, title 27, section 21400(b)(1), a discharger must clean close a surface impoundment unless they demonstrate, and the Lahontan Water Board finds, that it is infeasible to attempt clean closure. In cases where clean closure is infeasible, CCR, title 27, section 21400(b)(2) allows closure as a landfill provided that (1) closure is carried out pursuant to the requirements of CCR, title 27, section 21090; (2) the closed unit meets the applicable construction standards for landfills pursuant to CCR, title 27, 20240 et seq.; and (3) the moisture content of the residual wastes does not exceed the moisture holding capacity of the waste either before or after closure. The Lahontan Water Board finds that clean closure of all three surface impoundments is infeasible, and that waste consolidation onsite and closure of the North Surface Impoundment as a landfill is appropriate pursuant to CCR, title 27, section 21400(b)(2), as detailed below.

a. Demonstration of Infeasibility of Clean Closure of All Wastewater Impoundments

The evaporite wastes remaining in the three surface impoundments are designated Class II wastes. To clean close all the surface impoundments, the evaporite wastes would be removed and hauled to a Class II landfill. The evaporite waste from the three impoundments comprise approximately 168,214 tons (approximately 5,260 truckloads) as well as a total of six liner systems. The nearest facility capable of accepting the evaporite material is the Kettleman Hills Landfill in Kings County, California (approximately 400 miles round trip).

If the material is transported and disposed of at the Class II Kettleman Hills Landfill, potential air emissions, both criteria pollutants (e.g., nitrogen oxides, hydrocarbons, particulate matter) and greenhouse gases (carbon dioxide), will be regionally significant due to on-road diesel emissions. Cost estimates for clean closure of all units ranges from approximately \$43,182,512 (assuming the waste is hazardous) to \$31,298,712 (assuming the waste is non-hazardous). The cost to consolidate the wastes from the West and East Surface Impoundments in the North Surface Impoundment, clean close the West and East Surface Impoundments, and close the North Surface Impoundment as a landfill is estimated at \$1,945,577. Based on this information, the Lahontan Water Board finds the potential air pollution impacts and the cited high financial costs associated with offsite disposal demonstrate that clean closure of all three surface impoundments is impractical and, therefore, infeasible.

b. Closed Unit Will Meet Applicable Standards of Title 27

The SEGS IX Landfill (also referred to herein as the closed unit) will be closed and maintained during the post-closure period in accordance with the requirements of CCR, title 27, as described in the revised FCPCMP and as required by this Order. Additionally, the closed WMU will meet the applicable siting and construction standards for a new Class II non-municipal solid waste landfill pursuant to CCR, title 27, 20240 et seq., as outlined below.

1. There will be at least a 5-foot separation between the bottom of the closed WMU and highest anticipation elevation of underlying groundwater [CCR, title 27, section 20240(c)].
2. The base liner system of the closed WMU will have a hydraulic conductivity of not more than  $1 \times 10^{-6}$  centimeters/second (cm/s) (CCR, title 27, section 20250(b)[3]).
3. The closed WMU will not be located within a known 100-year floodplain, therefore design considerations to prevent inundation or washout due to

- floods with a 100-year return period are not applicable (CCR, title 27, section 20250[c]).
4. The closed WMU is not located within 200 feet of a known Holocene-active fault (CCR, title 27, section 20250[d]).
  5. Slope stability and liquefaction analyses were performed, and the closed WMU has been designed and will be constructed and maintained to preclude containment failure due to due rapid geologic change (CCR, title 27, section 20250[e]).
  6. CCR, title 27, section 20250(c) specifies that clay liners for a Class II WMU be a minimum of 2-feet thick, unless an engineered alternative is approved by the Regional Board in accordance with CCR, title 27, section 20080(b). Board Order No. 6-95-003 and 6-95-004 approved the following engineered alternative base liner system for the SEGS VIII and IX surface impoundments: an upper liner consisting of 60-mil high-density polyethylene (HDPE), a lower liner consisting of 60mil HDPE, and between the two liners, a synthetic drainage net for the leachate collection and removal system (LCRS).
  7. The engineered alternative liner system was sufficient to contain the liquid wastes during active life of the surface impoundments and is expected to perform similarly to contain the SEGS IX Landfill's solid waste and any potential leachate during the post-closure period.
  8. For Class II landfills, an LCRS is required unless the discharger demonstrates, based on climatic and hydrogeologic conditions, that leachate will not be formed in, or migrate from the unit (CCR, title 27, section 20340[a]). Waste discharged to the SEGS IX Landfill will be solid wastes, which are not expected to decompose and generate leachate post-closure. Also, the final cover system is designed to prevent precipitation from infiltrating the waste and generating leachate. Additionally, the engineered alternative base liner system was sufficient to contain the liquid wastes during active life of the surface impoundments and is expected to perform similarly to contain solid wastes in the landfill during the post-closure period. It has been demonstrated that leachate will likely not be formed in or migrate from the closed WMU. An LCRS is already present at the proposed SEGS IX Landfill location and these WDRs require the LCRS be maintained in working order.
  9. The closed WMU precipitation and drainage control facilities will be designed to manage the 100-year, 24-hour precipitation event (CCR, title 27, section 20250[c]).
  10. The closed WMU has been designed to withstand the maximum credible earthquake without damage to the foundation or to the structures which

control leachate, surface drainage, or erosion, or gas (CCR, title 27, sections 20365 and 20370[a]).

c. Moisture Content Not to Exceed Moisture Holding Capacity

Prior to clean closure, liquids in the surface impoundments will be evaporated such that no free liquids are present. Wastes generated during clean closure and discharged to the Landfill are not expected to exceed 50 percent moisture content. The moisture holding capacity of the wastes is relatively high given their fine-grained texture, and the consolidated waste in the closed SEGS IX Landfill is not expected to exceed moisture holding capacity after closure. Also, the final cover system is designed to store precipitation and release the stored precipitation to the vegetated cover and is not expected to allow precipitation to infiltrate the cover system and contact the waste.

8. Engineered Alternative to Prescriptive Landfill Cover Design

The prescriptive final cover standards for landfills are contained in CCR, title 27, section 21090. In accordance with section 21090(a), the FCPCMP proposes an engineered alternative to the prescriptive landfill cover. The proposed engineered alternative evapotranspirative (ET) cover will consist of a 2.5-foot-thick engineered monolithic soil layer placed over a minimum 1-foot-thick foundation layer placed over the evaporite waste materials.

The Lahontan Water Board finds the proposed engineered alternative provides equivalent or better protection than the prescriptive standard cover design for protection against infiltration of precipitation (and potential irrigation water) into the Landfill waste materials and potential related water quality impairment.

This Order approves the engineered alternative final cover system proposed in the FCPCMP.

9. Waste Classification

Most of the wastewater formerly discharged to the impoundments consisted of cooling tower and steam generator blowdown, which contained concentrated salts. Other wastewaters were from the demineralizer unit, reverse osmosis unit, clarifier, closed cooling water system at the Power Block, condensate systems, plant drains, and containment structures. The wastewater was routed through neutralization tanks where the pH was balanced prior to discharge to the impoundments.

The wastewater discharged to the surface impoundments was classified as a liquid designated waste (i.e., Class II waste). The residual solids or "evaporite material" remaining after evaporation of wastewater in the ponds are classified as a solid designated waste (i.e., Class II waste). The evaporite material includes

wind-blown sediments that settled in the surface impoundments over the life of the units. HTF-contaminated soil is classified as a solid designated waste (i.e., Class II waste), though the bioremediated soil from the LTU has been disposed of offsite. The proposed Landfill is a Class II landfill since it will contain dry Class II wastes from the surface impoundments.

10. Waste Management Unit Classification and Authorized Disposal Sites

Pursuant to CCR, title 27, section 20250, the proposed Landfill is classified as a Class II WMU and is the only authorized waste disposal site within the Facility boundary for Class II residual solid wastes from the three surface impoundments.

11. Post-Closure Maintenance Period

The FCPCMP proposes to close the North Surface Impoundment/SEGS IX Landfill as a landfill pursuant to CCR, title 27, section 21400(b)(2)(a). The Waste Discharge Requirements for the landfill require a post-closure period for monitoring and maintenance of the SEGS IX Landfill pursuant to State Water Resources Control Board (SWRCB) and Regional Water Quality Control Board (RWQCB) requirements in CCR title 27. CCR, title 27, section 20950 (a)(1) states: "Relative to the applicable SWRCB-promulgated requirements of this title, the post closure maintenance period must extend as long as the wastes pose a threat to water quality...the RWQCB's finding that the waste in the Unit no longer poses a threat to water quality must release the discharger only from the need to comply with the SWRCB-promulgated portions of this title, for that Unit." The SEGS IX Landfill is scheduled to be certified closed by April 2027; therefore, the post-closure period is expected to end in 2057 for planning purposes, but may be extended if measurably significant evidence of release is detected from the Facility or shortened if the Dischargers demonstrate and the Lahontan Water Board finds that the waste in SEGS IX Landfill no longer poses a threat to water quality.

The FCPCMP proposes to clean close the West and East Surface Impoundments by removing all remaining wastes and contaminated material from these waste management units (WMUs) and placing the remaining wastes in the North Surface Impoundment/SEGS IX Landfill. CCR, title 27, section 21400(b)(1) states: "For surface impoundments that are successfully clean closed, as herein described, the RWQCB must declare the Unit no longer subject to the SWRCB-promulgated requirements of this title." Therefore, a Lahontan Water Board declaration that the surface impoundments have been successfully clean closed eliminates the requirement for a post-closure period for the surface impoundments.

The FCPCMP proposes to clean close the Land Treatment Unit/Landfarm for the HTF-contaminated soil such that the waste in the Unit no longer poses a threat to

water quality pursuant to CCR title 27, section 20950(a)(2)(B). Successful completion of clean closure eliminates the need for any post-closure maintenance period and removes the Unit from being subject to the SWRCB-promulgated requirements of this subdivision..." Therefore, a Lahontan Water Board finding that the Land Treatment Unit has been successfully clean closed eliminates the requirement for a post-closure period for the Land Treatment Unit.

12. Land Uses

The Facility formerly contained two independent thermal solar units, SEGS VIII and SEGS IX, each occupying approximately 500 acres. Land uses surrounding the Facility consist of formerly irrigated parcels containing an abandoned drainage pond, currently irrigated agricultural parcels, various maintained residences and buildings, scattered grazing lands, open desert land, and riparian and wildlife habitat at Harper Lake. Adjacent to the Facility is the Desert Breeze Solar Project, located to the east is the Lockhart Solar PV Project, and to the South is the Abengoa Mojave Solar Project.

All SEGS units are shut down and being transitioned to PV solar arrays. The existing Facility is on a cleared, graded, and leveled site. The PV modules will produce electricity directly from sunlight. No HTF will be used, and no wastewater will be generated. No construction is planned or reasonably foreseen that could affect the final cover of the SEGS IX Landfill.

13. Site Topography

The Facility is located in the Harper Valley basin in west-central San Bernardino County at an elevation of approximately 2030 to 2105 feet above mean sea level. The Facility is situated on a northeast sloping alluvial plain along the western edge of Harper Dry Lake.

14. Climatology

The western Mojave Desert, where the Facility is located, has an arid, high desert climate characterized by infrequent rainfall and relatively low humidity. Summers are hot and dry with occasionally intense desert thunderstorms. Winters are by cool and dry. High winds and blowing dust are frequent occurrences in the area.

The mean annual temperature is 64 degrees (°) Fahrenheit (F). Typical temperature ranges from an average annual high of 98° F to an average annual low of 32° F. Precipitation averages 4.15 inches annually. The expected precipitation for the 100-year, 24-hour storm event for the Facility is less than 3 inches (2.911 inches).

15. Site Hydrology

The Facility is located in the western Mojave Hydrologic Unit and the Harper Valley Subunit. The site is relatively flat, with a storm water flow direction to the northeast toward the lowest point in the basin, Harper Dry Lake. The ground surface across the 2.1-mile-long northeast transect from the high point to the low point of the Facility loses approximately 73 feet of elevation (0.0066 feet/foot).

16. Site Storm Water Management

The proposed drainage and erosion control for the SEGS IX Landfill is designed to direct flow away from the Landfill and to the northeastern boundary of the Facility. The proposed final cover will be graded to promote effective storm water drainage. Total discharges after the installation of the cover are not anticipated to be greater than current flows. The hydrologic natural runoff conditions are not expected to change. The erosion potential for the design storm is small but selected erosion best management practices (BMPs) are included in the Construction Stormwater Pollution Protection Plan (SWPPP) and post closure maintenance plan. After the vegetative cover is established, it will offer additional protection during the design storm event.

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

17. Site Geology

The Facility is located in the Mojave Desert geomorphic province of California. The Harper Valley basin is a depression containing a thick accumulation of material eroded from the surrounding upland areas of bedrock outcrops. The basin is surrounded by mountains, granitic highlands, and fault structures that restrict groundwater flow into the basin. The basin geology consists of pre-Tertiary granitic, volcanic, and metamorphic bedrock overlain by Tertiary and Quaternary alluvial sediments in addition to some Quaternary volcanic deposits. Quaternary alluvium comprises most of the basin floor to a depth of at least 452 feet (CDWR, 1964). The Quaternary alluvium comprises most of the exposed soil in the basin and is comprised of complex interlaced layers of playa deposits including clay deposits that range from 104 to 118 feet thick based on boreholes drilled at the Facility. The top of the clay deposits at the Facility ranges from 45 to 105 feet below grade (Northstar, 2024).

The nearest fault zone is the Lockhart fault located about one quarter mile northeast of the Facility. The closest active faults to the site include the Garlock fault, located about 32 miles northwest of the Facility, and the San Andreas fault located approximately 49 miles southwest of the Facility.

18. Site Hydrogeology

The Site is situated within the Harper Valley Groundwater Basin, and protection of groundwater quality in the area is under the authority of the Lahontan Water Board. The depth to groundwater in on-site monitoring wells ranged from 53 to 62 feet below ground surface (bgs) in December 2025.

Groundwater generally flows towards the lowest point in the basin, Harper Lake, but was historically disrupted by significant groundwater extraction for agricultural irrigation. This localized pumping resulted in a large cone of depression in the shallowest aquifer centered on the Lockhart Ranch, west-southwest of Harper Dry Lake in an area currently occupied by the Facility.

19. Site Groundwater Quality

Based on 2025 groundwater monitoring data, the quality of groundwater beneath the Facility contains relatively high concentrations of total dissolved solids (TDS), chloride and sulfate. TDS concentrations in the three monitoring wells ranged from 3,600 to 4,700 milligrams/liter (mg/L). The secondary maximum contaminant level (MCL) for TDS is 500 mg/L. Chloride concentrations ranged from 1,400 to 2,100 mg/L, relative to the secondary MCL of 250 mg/L. Sulfate concentrations ranged from 610 to 980 mg/L, relative to the secondary MCL of 250 mg/L. Additionally, concentrations above the primary MCLs for nitrate and fluoride were detected in 2025. Nitrate concentrations range from 7.5 to 21 mg/L, relative to the primary MCL of 10 mg/L. Fluoride concentrations range from 0.7 to 4.6 mg/L, relative to the primary MCL of 2 mg/L. Groundwater levels and concentrations of these constituents have been relatively consistent over time, indicating the wastewater impoundments have not impacted groundwater quality.

The Dischargers have been monitoring groundwater quality beneath the Facility since 1990, but many of the groundwater monitoring wells have gone dry because of declining groundwater levels. Of the 13 groundwater monitoring wells that were drilled to monitor groundwater at the Facility, only three downgradient wells were usable prior to March 2026. The remaining wells are MW-7, MW-10, and MW 12, which were installed in 1990, 1995, and 2025, respectively. In March 2026, the Dischargers installed additional groundwater monitoring wells as proposed in the *Revised Groundwater Investigation and Well Installation Report* (Northstar, 2025). One upgradient well and additional downgradient wells were installed. Groundwater levels and constituent concentrations in wells MW-7 and MW-10 have been relatively consistent over time, indicating the wastewater impoundments have not impacted groundwater quality. Well MW-12 is too new to provide additional insight into concentration trends, with only a single sampling and analysis event in 2025.

20. Basin Plan

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

21. Receiving Waters

The receiving waters of the Facility are the groundwaters of the Harper Valley Groundwater Basin (Department of Water Resources [DWR], Groundwater Basin No. 6-40; Basin Plan, Plate 2B) in addition to Harper Lake and minor surface waters of the Harper Valley Hydrologic Subunit (DWR Hydrologic Subunit 628.42). The surface water of Harper Lake, northeast of the Facility, is ephemeral: Harper Lake contains surface water during relatively wet years and is otherwise dry. The minor surface waters of the Harper Valley Hydrologic Subunit consist of ephemeral flow, associated with storm water, in drainage channels. According to the Basin Plan, the receiving water of minor surface waters is the Harper Valley Groundwater Basin, and the receiving water of Harper Lake is itself since it is an internally drained alkali lake.

22. Beneficial Uses

The present and probable future beneficial uses of groundwater in the Harper Valley Groundwater Basin (DWR No. 6-47), as set forth and defined in the Basin Plan are:

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

The present and probable future beneficial uses of Harper Lake and minor surface waters of the Harper Valley Hydrologic Subunit, 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-Water Contact Recreation (REC-2)
- f. Warm Freshwater Habitat (WRM)
- g. Cold Freshwater Habitat (COLD)
- h. Wildlife Habitat (WILD)

23. Water Quality Protection Standard (WQPS)

The WQPS consists of constituents of concern (COCs), concentrations limits, monitoring points, and the point of compliance. The COCs, monitoring points, and point of compliance for groundwater monitoring are described in MRP No. R6-2026-TENT, which is made part of this Order.

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 SEGS IX Landfill. CCR, title 27, section 20415, subdivision (e)(7), requires statistical 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-TENT are believed to be the best indicators of a release from the Facility.

25. Monitoring Points and Points of Compliance

The monitoring network for the SEGS IX Landfill will be designed to monitor the uppermost aquifer as required by CCR, title 27, section 20405. The Point of Compliance is a vertical surface located at the hydraulically downgradient limit of the SEGS IX Landfill that extends through the uppermost aquifer underlying the Landfill. The MRP must include Monitoring Points (as defined in section 20164) along the Point of Compliance, and additional Monitoring Points at locations determined pursuant to section 20415(b-d) at which the Water Standard under section 20390 applies and at which monitoring must be conducted.

26. Detection Monitoring Program

Pursuant to CCR, title 27, sections 20385 and 20420, the Dischargers are implementing a Detection Monitoring Program (DMP) for the SEGS IX Landfill.

27. Evaluation Monitoring Program

An Evaluation Monitoring Program (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 from the SEGS IX Landfill during a detection monitoring program or whenever there is significant physical evidence of a release from the Unit. The Dischargers must delineate the nature and extent of the release and develop a suite of proposed corrective action measures within **90 days** of establishing an EMP. If the EMP confirms measurably significant evidence and/or significant physical evidence of a release, then the Dischargers

must submit an Engineering Feasibility Study for corrective action pursuant to CCR, title 27, section 20425, and MRP No. R6-2026-TENT.

28. Corrective Action Program

A Corrective Action Program (CAP) to remediate detected releases from the SEGS IX Landfill may be required pursuant to CCR, title 27, section 20385 and section 20430.

29. Financial Assurance

The Dischargers have provided documentation that a financial assurance fund has been developed for closure and post-closure maintenance and potential future corrective action requirements. This Order requires the Dischargers to report the amount of money available in the fund as part of the annual self-monitoring report. This Order also requires the Dischargers to demonstrate, in an annual report, that the amount of financial assurance is adequate or to increase the amount of financial assurance, as appropriate (e.g., for identified needed corrective actions, or for inflation, etc.).

30. Other Considerations and Requirements for Discharge

Pursuant to California Water Code, 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 No. 22. The proposed discharge will not adversely affect present or probable future beneficial uses of water because the discharge is authorized only to the SEGS IX Landfill, which has been designed and will be constructed to prevent waste discharges to the groundwater and surface water. This Order also requires monitoring to detect any impacts to water quality.
- b. *Environmental characteristics of the hydrographic unit under consideration including the quality of water available thereto.* Finding No. 19 describes the environmental characteristics and quality of available water.
- c. *Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area.* The requirements of this Order will not affect groundwater quality. The Lahontan Water Board will use its existing authority and these Closure and Post-Closure WDRs to ensure protection of water quality from these discharges.
- d. *Economic considerations.* Water Quality Objectives established in the Basin Plan for the Harper Valley Groundwater Basin do not subject the Dischargers

- to economic disadvantage as compared to other similar discharges in the Region. This Order will require the Dischargers to submit proposals compliant with the requirements of CCR, title 27, and is reasonable.
- e. *The need for developing housing within the region.* The Dischargers are not responsible for developing housing within the region.
  - f. *The need to develop and use recycled water.* The Dischargers do not propose the use of recycled water at this Facility.

31. Human Right to Water

California 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. The Discharger supported this policy by converting the SEGS VIII-IX Facility to a photovoltaic-based solar facility, which will reduce water usage from approximately 1,000 acre-feet per year to less than 15 acre-feet per year. This Order further promotes the policy by requiring storm water and drainage controls, monitoring to assess water quality, and corrective action when needed to address any adverse impacts to water quality.

32. California Environmental Quality Act (CEQA)

The Lahontan Water Board has determined that the proposed project is categorically exempt based on CEQA section 15302(c) in that it is a replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity.

33. Antidegradation Analysis

California State Water Resources Control Board (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 Lahontan Water Board that any change will be consistent with maximum benefit to the people of the state, and 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 waste discharge requirements 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 has been no detected release at the Facility and thus no change in the existing water quality is expected as result of these WDRs, and an EMP and possible CAP will ensure water quality protection.

34. Technical and Monitoring Reports

The Dischargers must submit technical and monitoring reports in compliance with this Order and as described in MRP No. R6-2026-TENT.

Water Code 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 propose 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 propose 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."

The technical reports required by this Order and MRP No. R6-2026-TENT are necessary to assure compliance with these WDRs. 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.

35. Notification of Interested Parties

The Lahontan Water Board notified the Dischargers and interested agencies and persons of its intent to prescribe WDRs for closure and post-closure maintenance and monitoring and has provided them with an opportunity to submit their written views and recommendations.

36. Right to Petition

Any person aggrieved by this action of the Lahontan Water Board may petition the State Water Board to review the action in accordance with California Water Code, 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 [Water](#)

[Code section 13320; title 23, California Code of Regulations \(CCR\) sections 2050-2068](#) or will be provided in hard copy or electronic format upon request.

37. Consideration of Public Comments

The Lahontan Water Board, in a public meeting held on August 5, 2026, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED**, pursuant to California Water Code sections 13263 and 13267, that the Dischargers 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 Harper Valley 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.

## 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 landfill is prohibited.
5. The discharge of solid or liquid waste, leachate, or any other deleterious material to surface waters or groundwater is prohibited.
6. The discharge of waste that contains liquid in excess of the moisture-holding capacity of the SEGS IX Landfill is prohibited.
7. Surface drainage from off-site areas and internal Facility drainage from surface or subsurface sources, must not contact or percolate through solid wastes discharged at the SEGS IX Landfill.
8. The discharge of pesticides to surface waters or groundwater is prohibited.

9. 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.
10. The Dischargers must maintain in good working order any control system or monitoring device installed to achieve compliance with these WDRs.
11. The SEGS IX Landfill 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.
12. The exterior surfaces of the SEGS IX Landfill must be graded to promote lateral run-off of precipitation and to prevent ponding. Ponding of any liquid on the Landfill is prohibited.
13. The Dischargers must notify the Lahontan 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 Dischargers 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).
14. The Dischargers 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.
15. The Dischargers must comply with CCR, title 27, section 20950, closure and post-closure maintenance, general standards for all WMUs.
16. The Dischargers must comply with CCR, title 27, section 21090, requirements for closure and post-closure maintenance and design requirements for solid waste landfills except where engineered alternatives to the requirements in CCR, title 27, section 21090 have been approved by the Lahontan Water Board pursuant to CCR, title 27, section 20080.
17. The SEGS IX Landfill is the only authorized disposal location at the Facility. The only waste authorized to be disposed in the Landfill is the solid wastes remaining in the three surface impoundments (West

Surface Impoundment, East Surface Impoundment, and North Surface Impoundment).

B. Clean Closure of the Land Treatment Unit

1. These WDRs document clean closure of the LTU, which no longer contains any waste as described above in Finding Nos. 2 and 6.

C. Specific Requirements for Clean Closure of the Surface Impoundments

1. Two surface impoundments (West Surface Impoundment and East Surface Impoundment) will be clean closed in accordance with the FCPCMP, the requirements in this Order, and with CCR, title 27, section 21400(b)(1).
2. Free liquids must be allowed to evaporate prior to residual solids, sludge, and evaporite material, and waste-impacted liner material being removed and discharged to the SEGS IX Landfill.
3. Confirmation sampling and analyses are necessary to verify clean closure of the surface impoundments (i.e., West Surface Impoundment and East Surface Impoundment). A minimum of four individual samples of the underlying soil exposed within each surface impoundment (following removal of residual solids, sludge, evaporite material, and waste-impacted liner material) must be collected and analyzed individually for 1,1-Biphenyl and 1,1-Oxybisbenzene via United States Environmental Protection Agency (USEPA) Method 8015B. Exceedance of the laboratory detection limits will require further soil sampling at 1-foot depth increments until results verify concentrations are acceptable. The surface impoundments will be considered clean closed when concentrations of the analytes reported for each individual sample have concentrations that are below laboratory detection limits. The results of the confirmation sampling must be included in the final Construction Quality Assurance Report, as required by section V.C. of this Order.
4. All closure activities must be under the direct supervision of a California professional civil engineer or California certified engineering geologist pursuant to CCR, title 27, section 20950(b).
5. Successful clean closure must be demonstrated to and accepted by the Executive Officer for the units to no longer be subject to the SWRCB-promulgated requirements of title 27.

D. SEGS IX Landfill Construction and Closure Requirements

1. The SEGS IX Landfill must be constructed and closed in accordance with the FCPCMP and with the specifications contained in CCR, title 27, 20240 et seq.
2. All closure activities must be under the direct supervision of a California professional civil engineer or California certified engineering geologist pursuant to CCR, title 27, section 20950(b).

E. Specific Requirements for Use of Engineered Alternative Evapotranspirative Cover at SEGS IX Landfill

The Dischargers have proposed the option of using an ET cover in lieu of the prescriptive cover required by CCR, title 27, section 21090(a)(3)(A)(1). The Lahontan Water Board approves the engineered alternative ET cover pursuant to CCR, title 27, section 20080. A cross-section of the proposed bottom liner system, waste, and ET cover for the Landfill is presented in Attachment C, which is made a part of this Order. The cover must be established during closure and maintained during post-closure in accordance with the FCPCMP and with CCR, title 27, section 21090.

F. Storm Water Discharges

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

G. Extreme Weather Event

After an extreme weather event<sup>1</sup> at or near the Facility, if erosion, cracking, or depressed areas are identified at the SEGS IX Landfill, the Dischargers 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 of completion of repairs.

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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.

H. Storm Events

Following a qualifying storm event<sup>2</sup>, the Dischargers must inspect all precipitation, diversion, and drainage facilities for damage, within **10 days**. 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.

I. Significant Earthquake Event

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

J. Electronic Submittal of Information

Pursuant to CCR, title 23, section 3890, the Dischargers 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 or successor database as directed by updates to the MRP. 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 Dischargers must maintain a DMP as required in CCR, title 27, section 20420.

B. Evaluation Monitoring Program

The Dischargers must establish an EMP whenever there is measurably significant evidence and/or significant physical evidence of a new release from the SEGS IX Landfill as required in CCR, title 27, section 20385(a)(2) and section 20425. Within **90 days** of initiating an EMP, unless the Dischargers propose and substantiate a longer time period for

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<sup>2</sup> For the purposes of this Order, a qualifying storm event is defined in the latest version of the California Industrial General Permit (IGP), Order 2014-0057-DWQ. A qualifying storm event is currently defined as a precipitation event that produces a storm water discharge for at least one drainage area and is preceded by 48 hours with no discharge from any drainage area. This incorporation-by-reference is prospective including future changes to the incorporated definition as any changes take effect.

implementing the EMP that is approved by the Executive Officer, the Dischargers 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 Dischargers must implement the corrective action program as specified in CCR, title 27, section 20385(a)(4) and 20430(c). The Dischargers must continue implementing the corrective action program until it can be demonstrated to the satisfaction of the Lahontan 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 Lahontan 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-TENT.
2. The Dischargers must propose to the Lahontan 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 Dischargers must estimate the concentrations for such constituents within the waste stream and submit written statistical method(s) to detect a release of such constituents. At any given time, the concentration limit for each COC must be equal to the background data set of that constituent unless a concentration level greater than background has been established.
3. If the Dischargers or the Lahontan Water Board Executive Officer determine that concentration limits were or are exceeded, the Dischargers 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 Lahontan Water Board authorizing the EMP, the Dischargers must complete the delineation, develop a suite of proposed corrective action measures,

and submit a proposed corrective action program for adoption by the Lahontan 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 receipt of laboratory results, the Dischargers 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 SEGS IX Landfill, the Dischargers 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 Dischargers 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 Dischargers must immediately notify the Lahontan 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 Lahontan Water Board," MRP No. R6-2026-TENT. The Dischargers must initiate the verification procedures, as specified in this Order, Section III.F.

F. Verification Procedures

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

1. The Dischargers 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 Dischargers 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 Dischargers must report to the Lahontan 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 Dischargers or Lahontan Water Board Executive Officer verifies that there is or was evidence of a release, the Dischargers are required to submit a technical report to the Lahontan 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 Lahontan 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 Lahontan Water Board," MRP No. R6-2026-TENT).
5. If the Dischargers decline to conduct verification procedures, the Dischargers must submit a technical report, as specified in this Order, Section III.G.

G. Technical Report Without Verification Procedures

If the Dischargers choose 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 SEGS IX Landfill.

H. Monitoring and Reporting

1. Pursuant to CWC, section 13267, subdivision (b), the Dischargers must comply with the monitoring and reporting requirements as established in the attached MRP No. R6-2026-TENT and as specified by the Lahontan Water Board Executive Officer. The MRP may be modified by the Lahontan Water Board Executive Officer.
2. The Dischargers must comply with the "General Provisions for Monitoring and Reporting," which is attached to and made part of MRP No. R6-2026-TENT.

IV. PROVISIONS

A. Rescission of Waste Discharge Requirements

Board Order No. 6-98-74 is hereby rescinded.

B. Standard Provisions

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

C. Closure and Post-Closure

This Order provides Lahontan Water Board approval of the FCPCMP and the proposed engineered alternative final cover.

The Dischargers must submit a report to the Lahontan Water Board on or before **April 30, 2027** and by **February 15** every year thereafter, indicating that existing site monitoring and maintenance conditions are in are in conformance with the FCPCMP or provide an updated FCPCMP, if conditions warrant. The FCPCMP and cost estimates for corrective action must be updated if/when there is a significant change in the activities or costs for maintenance and/or monitoring of the Facility, and to reflect changes in inflation rates.

D. Financial Assurance

The Dischargers must submit to the Lahontan Water Board a financial assurance report on or before **120 days of Lahontan Water Board adoption of these WDRs**, and by **February 15** every year thereafter, providing evidence that adequate financial assurance has been provided for closure and 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 Dischargers. In addition, the Dischargers 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.

No later than **30 days** following the Lahontan Water Board acceptance of the Final CQA Report required in section V.C below, the Dischargers must submit Instruments of Financial Assurance acceptable to the Lahontan Water Board.

1. A Financial Assurance Instrument providing adequate funding for the post-closure monitoring and maintenance activities, as described in the accepted FCPCMP, must be submitted to the Lahontan Water Board, pursuant to CCR, title 27, section 22212.
2. A Financial Assurance Instrument providing adequate funding for corrective action of a known and reasonably foreseeable release must be submitted to the Lahontan Water Board, pursuant to CCR, title 27, section 22222.

#### V. Additional Reporting and Other Deliverables

##### A. Monitoring Systems Installation Work Plans

Of the 13 groundwater monitoring wells that were drilled to monitor groundwater at the Facility, only three downgradient wells were usable as of March 1, 2026: MW-7, MW-10, and MW 12. The Dischargers installed additional groundwater monitoring wells in March 2026 as proposed in the *Revised Groundwater Investigation and Well Installation Report* (Northstar, 2025) and as approved by Lahontan Water Board staff. If Water Board Staff determine that additional groundwater monitoring wells are required (e.g., due to additional dry wells), the Dischargers must submit a work plan for additional groundwater monitoring wells for Lahontan Water Board approval no later than **60 days** from receipt of a Lahontan Water Board directive. The work plan must be certified by a California professional civil engineer or a California professional geologist.

The Dischargers must submit a work plan for additional unsaturated zone monitoring points for Lahontan Water Board approval no later than **60 days** from Lahontan Water Board adoption of these WDRs. The unsaturated zone monitoring work plan must address the need to monitor landfill gas, LCRS sumps, and neutron probe wells for the SEGS IX Landfill. The work plan must be certified by a California professional civil engineer or a California professional geologist. In order for the Discharger to utilize an existing monitoring point instead of installing a new one, the Dischargers

must submit documentation demonstrating that the existing monitoring point(s) are usable.

B. Monitoring Systems Installation Report

No later than **60 days** following the construction completion of a monitoring system or monitoring system component, the Dischargers must submit a technical report discussing the installation of the monitoring systems or monitoring system component(s) for the closed WMU. The report must summarize all work activities associated with the installation of the groundwater and unsaturated 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.

C. Final Construction Quality Assurance Report

No later than **90 days** following clean closure and the construction completion of the closed WMU, a Final Construction Quality Assurance (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 by the Executive Officer. The report must be certified by a California professional civil engineer or a California certified engineering geologist. The report must contain sufficient information and test results to verify clean closure and to verify construction specifications with respect to the accepted engineered alternative to the prescriptive standards and with performance goals of CCR, title 27.

D. Sampling and Analysis Plan

No later than **90 days** following the construction completion of the closed WMU, the Dischargers must submit for Lahontan Water Board review and acceptance a Sampling and Analysis Plan (SAP) for the closed WMU, including procedures for monitoring, sampling, and analysis of the groundwater and unsaturated zone monitoring systems. The SAP must include soil moisture background values for the unsaturated zone monitoring program and propose soil moisture action limits for which unsaturated zone monitoring data will be compared to determine physical evidence of a release.

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 August 5, 2026.

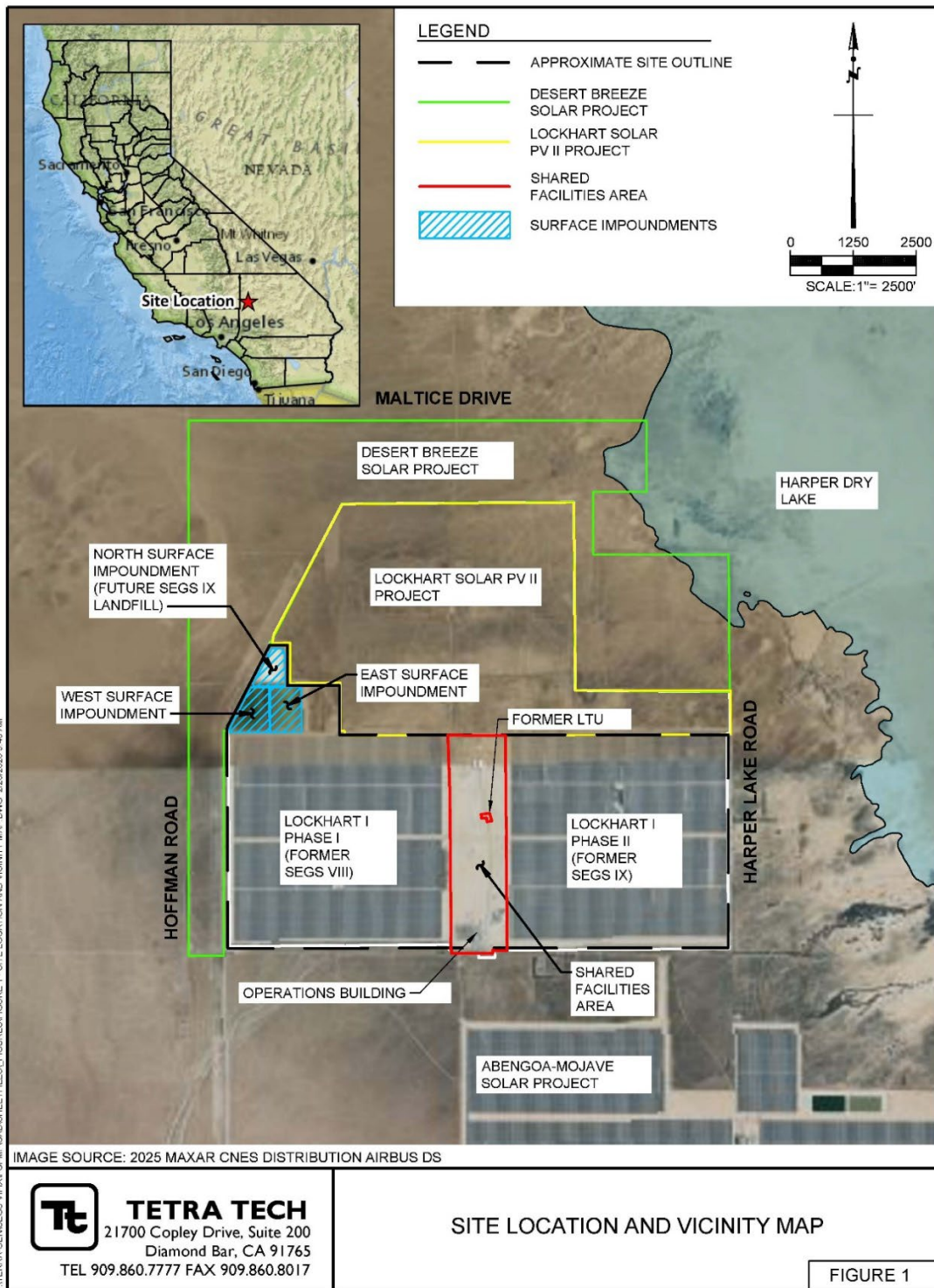
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BEN LETTON  
EXECUTIVE OFFICER

Attachments:

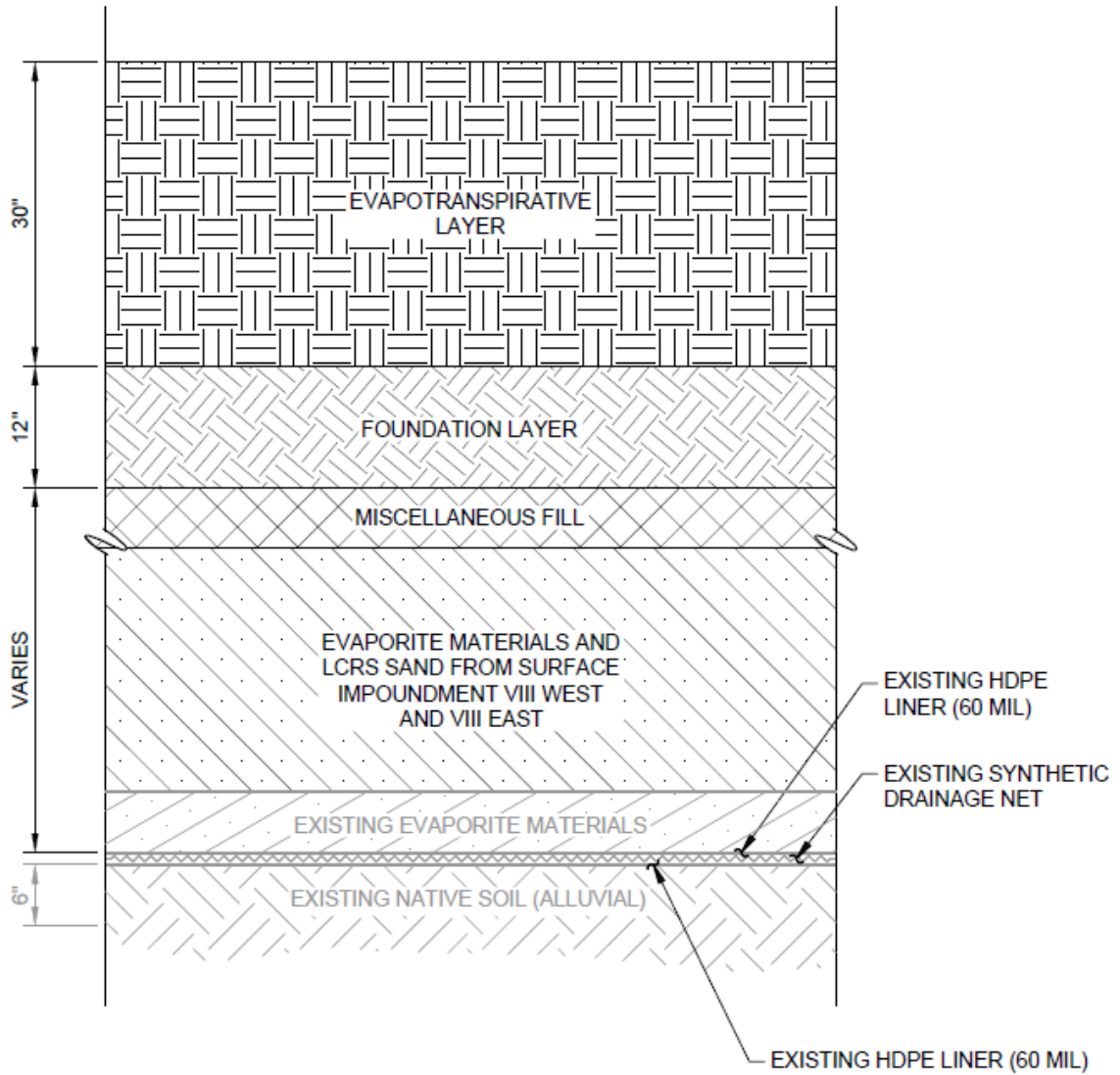
- A. Facility Location and Current Layout Map
- B. Plan View of SEGS IX Landfill
- C. Detail – SEGS IX Landfill Closure System
- D. Monitoring and Reporting Program No. R6-2026-Tentative
- E. Standard Provisions for Waste Discharge Requirements

Attachment A – Facility Location and Current Layout Map





Attachment C – Detail – SEGS IX Landfill Closure System



## ATTACHMENT D

### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

#### MONITORING AND REPORTING PROGRAM NO. R6-2026-(TENTATIVE) WDID NO. 6B368050006

#### SOLAR ELECTRIC GENERATING SYSTEMS (SEGS) VIII AND IX, THREE SURFACE IMPOUNDMENTS, ONE LAND TREATMENT UNIT, AND SEGS IX LANDFILL

San Bernardino County

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For the purposes of this Order, Luz Solar Partners Ltd., VIII; Luz Solar Partners Ltd., IX; Lockhart Land Holdings; and Terra-Gen are referred to as the "Dischargers." This monitoring and reporting program (MRP) is issued to the Dischargers pursuant to California Water Code 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-TENT and MRP No. R6-2026-TENT are necessary to assure compliance with these waste discharge requirements. Therefore, the burden, including costs, of these reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

In requiring those reports, the regional board must provide the person with a written explanation with regard to the need for the reports and must identify the evidence that supports requiring that person to provide the reports. Water Code section 13268, building from section 13267, states, in part: (a) any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b). (b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which must not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

#### I. WATER QUALITY PROTECTION STANDARD

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

The owner/operator, Terra-Gen, submitted a Final Closure and Post-Closure Maintenance and Monitoring Plan (FCPCMP) on September 9, 2025 (Revised February 4, 2026). A WQPS is necessary to evaluate the effectiveness of the detection monitoring program (DMP) to determine if a release occurs from the SEGS IX Landfill (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 WMU. The WMU that this MRP focuses on is the SEGS IX Landfill. The COCs for each monitored medium at the SEGS IX Landfill are listed in Attachment A, which is made part of this MRP. The Dischargers must monitor for 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 a WMU. The monitoring parameters for each monitored medium at the Landfill are listed in Attachment A. The Dischargers 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 WMU. 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 allows for various options to determine concentration limits including statistical interwell and intrawell methods and non-statistical methods.

1. The Dischargers are using the following methodologies to determine concentration limits for the groundwater monitoring program.
  - a. Interwell Comparisons – The Dischargers are using historical water quality data from the upgradient groundwater monitoring wells to develop concentration limits for inorganic COCs. Because there is no indication of a release from the Landfill, interwell comparisons are appropriate. As of August 2026, there is only one usable upgradient groundwater monitoring wells because other upgradient wells went dry due to declining groundwater levels, and there are not enough sampling events for the upgradient well to allow interwell comparisons. Historical data from now-dry upgradient wells and additional data from new upgradient wells can be used for initial interwell comparisons, if appropriate. Data from the new groundwater monitoring wells can be used for interwell comparisons after an appropriate number of sampling events are completed.
  - b. Intrawell Comparisons – When the upgradient groundwater dataset is determined to have a non-normal distribution, non-parametric intrawell prediction limits are calculated for those inorganic COCs.
  - c. Non-Statistical Comparisons – For inorganic COCs either not detected in background wells or only detected at trace concentrations and for man-made organic COCs, the concentration limit has been set at the method detection

limit (MDL) for the analytical method used. For the DMP, the MDL is selected as the concentration limit, as this will allow for early detection of a release from the Landfill.

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

D. Point of Compliance and Monitoring Points

The monitoring points for the groundwater and unsaturated zone monitoring systems for the closed WMU are shown in Attachment B of this MRP. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the Landfill that extends through the uppermost aquifer underlying the Landfill. New groundwater monitoring points were proposed, including upgradient (background) groundwater and downgradient groundwater monitoring points, in the *Revised Groundwater Investigation and Well Installation Report* (Northstar, 2025) and approved by Lahontan Water Board staff. The additional groundwater monitoring wells were installed in March 2026. Board Order No. R6-2026-TENT, Section V.A, requires the Dischargers to submit a work plan for the installation of additional unsaturated zone monitoring points for the Landfill.

The Dischargers may add monitoring points, as needed, to comply with the DMP, evaluation monitoring program (EMP), and corrective action program requirements contained in Board Order No. R6-2026-TENT and this MRP, and as approved by the Lahontan Water Board.

The Landfill monitoring points must include the leachate collection and removal system sumps originally designed and constructed for the North Surface Impoundment of SEGS IX. The purpose is to provide an early indication of a release that may have breached the HDPE bottom liner and entered the sand drain.

E. Post-Closure Period

The FCPCMP proposes to close the North Surface Impoundment as a landfill. The post-closure period for the SEGS IX Landfill (closed WMU) will extend as long as the wastes pose a threat to water quality pursuant to CCR, title 27, section 20950 (a)(1). The Landfill is expected to be certified closed by April 2027; therefore, the post-closure period is expected to end in 2057 for planning purposes. However, the post-closure maintenance period may be extended if measurably significant evidence of release is detected from the Facility or shortened if the Dischargers demonstrate and the Lahontan Water Board finds that the waste in Landfill no longer represents a threat to water quality and 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).

## II. MONITORING

The Dischargers must comply with the monitoring requirements outlined below. All monitoring and inspecting activities must be documented, and all sampling must be conducted in accordance with an approved 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).

All groundwater samples, with the exception of field parameters, must 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.

### A. Detection Monitoring Program

The Dischargers must operate and maintain a detection monitoring system that complies with the DMP monitoring provisions contained in CCR, title 27, sections 20385 through 20420. Monitoring of the groundwater and unsaturated zone must be conducted to evaluate the effectiveness of the DMP and to provide the best assurance of the early detection of any releases from the Landfill. Changes to the existing monitoring system must be designed and certified by a California-licensed professional civil engineer or professional geologist as meeting the requirements of CCR, title 27, section 20415(e)(1). The Dischargers must collect, preserve, and transport samples in accordance with an approved SAP.

The components of the DMP include groundwater monitoring, soil-pore gas monitoring, leachate collection and removal system (LCRS) sump monitoring, and neutron probe monitoring. Lysimeters are not required in the DMP because water was never recovered from any of the four lysimeters located adjacent to the West Surface Impoundment and East Surface Impoundment, despite those impoundments containing liquids, and neutron probe moisture monitoring was a more reliable method for evaluating the presence of moisture in subsurface soils adjacent to the WMUs.

#### 1. Groundwater Monitoring

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.

##### a. Monitoring Points

Groundwater monitoring points are shown on MRP, Attachment B.

##### b. Depth to Groundwater

Prior to purging and sampling, the Dischargers must measure and record the

depth below the ground surface (bgs) of the static groundwater surface in all groundwater monitoring wells relative to the surveyed (by California-licensed Land Surveyor or appropriately experienced California-licensed Civil Engineer) top-of-casing measuring point for each well. The measurements must be accurate to the nearest 0.01 foot.

c. Groundwater Purging and Sampling

Prior to sampling, all groundwater monitoring wells must be purged using either standard or United States Environmental Protection Agency (USEPA) low-flow techniques until temperature, electrical conductivity, and pH of extracted well water have stabilized. These parameters will be considered stable when three consecutive readings have pH values within +/- 0.3 pH units and temperature and electrical conductivity values within +/- 3 percent.

d. Constituents of Concern and Monitoring Parameters

The Dischargers 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 its respective concentration limit by a measurably significant amount at any given monitoring point, that non-monitoring parameter COC will become a monitoring parameter at that monitoring point.

e. Field Parameters

The Dischargers must monitor, at each groundwater monitoring well, all field parameters in accordance with the frequencies listed in Attachment A.

f. Aquifer Characteristics

The Dischargers must calculate and illustrate on a site plan and/or aerial photograph, the following aquifer characteristics: the static water level elevation (feet above mean sea level) in each groundwater monitoring well; the groundwater gradient (feet per foot); the direction of the groundwater gradient beneath and around the Facility (azimuth as degrees from north); the seepage velocity of groundwater flow (feet per year); and the current groundwater elevation isocontours for that monitoring period.

g. Calibration Documentation

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

2. Soil-Pore Gas Monitoring

The unsaturated zone monitoring program includes monitoring the composition

of soil-pore gases, also known as landfill gas (LFG) and soil gas, near the Landfill through the collection soil-pore gas samples for laboratory analyses and field measurements.

a. Monitoring Points

The unsaturated zone will be monitored for soil-pore gas using a series of LFG monitoring wells, each having isolated multi-level (nested) probes, located around the perimeter of the Landfill. All LFG monitoring wells will be completed with isolated shallow and deeper probes. The location of soil-pore gas monitoring points will be identified in the work plan for unsaturated zone monitoring the Dischargers are required to provide as mentioned above in I.D.

b. Field Calibration

Prior to beginning gas collection at the Landfill, the instrument(s) will be calibrated using laboratory-grade calibration gases and procedures according to manufacturer recommendations and the approved SAP. This will 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-pore gas samples are collected.

c. Soil-Pore Gas Purging and Sampling

Prior to sampling, each LFG 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 when continuous readings have stopped fluctuating. Atmospheric pressure will also be recorded during the purging process.

All soil-pore gas samples, with the exception of field parameters, are to be collected in passivated stainless steel canisters (e.g., Summa® canisters) and 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.

d. Constituents of Concern and Monitoring Parameters

The Dischargers must monitor the shallow and deep probes of the LFG monitoring wells for all COCs and monitoring parameters in accordance with the frequencies listed in Attachment A.

e. Field Parameters

The Dischargers must monitor all probes in each LFG monitoring well for all field parameters in accordance with the frequencies listed in Attachment A. 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 LFG monitoring probe (during that monitoring event) and analyzed for the soil-pore gas COCs listed in Attachment A.

f. Calibration Documentation

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

3. LCRS Sump Monitoring

The unsaturated zone monitoring program includes monitoring existing LCRS sumps.

a. Monitoring Points

The LCRS sumps are shown on MRP, Attachment B.

b. LCRS Sump Inspections

During groundwater and storm water sampling events, the Dischargers must visually monitor the LCRS sumps for the presence of liquid. If liquid is observed in an LCRS sump, the Dischargers must notify the Lahontan Water Board to report the apparent leakage of liquid through the upper liner and to determine the next steps (see Physical or Measurably Significant Evidence of a Release from the Landfill, section IV.C.1.a below).

4. Neutron Probe Monitoring

The unsaturated zone monitoring program includes neutron probe monitoring of the moisture content in soil surrounding the neutron probe wells.

a. Monitoring Points

The neutron probe monitoring network includes two vertical neutron probe wells and one horizontal neutron probe well shown on MRP, Attachment B.

b. Measuring Moisture Content with Neutron Probe

During groundwater and storm water sampling events, the Dischargers must check for moisture below the Landfill liner using a neutron moisture probe calibrated for use at the site. If moisture content is detected above 30 percent by volume, field verification testing must be performed and the Dischargers must notify the Lahontan Water Board to report physical evidence of a release (see Physical or Measurably Significant Evidence of a Release from the Landfill, section IV.C.1.a below). Field verification testing shall consist of

additional neutron probe analysis and visual observations to verify existence of a release.

c. Calibration

Annually, the Dischargers must submit documentation of instrument calibration and performance checks. Performance checks shall be a comparison with previous results of neutron moisture testing done under comparable conditions to verify proper operation of equipment.

B. Final Cover Integrity Monitoring and Maintenance Program

The Dischargers will install an engineered alternative final cover over the Landfill; specifically, an evapotranspirative (ET) cover. The final cover will consist of 1-foot-thick vegetative root zone layer underlain by a 1.5-foot-thick storage layer which is underlain by a 1-foot-thick foundation layer. The cover will be graded to prevent leachate formation due to storm water infiltration, to promote lateral runoff, and to prevent ponding. The Dischargers must annually monitor and maintain the final cover materials to ensure the integrity of the cover and to evaluate the cover's capability to promote runoff and prevent ponding.

C. Storm Water Monitoring and Response Program

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

1. Storm Water Pollution Control Plan

A copy of the SWPCP (and amendments thereto) must be maintained at the Facility to be available to site personnel at all times. The Dischargers are required to submit a copy of the SWPCP to the Lahontan Water Board in accordance with the schedule specified in MRP section IV.A.2. The Dischargers must develop and implement a site-specific SWPCP (or equivalent document) that contains, at minimum, the following elements below.

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 storm water drainage areas within the Facility and the flow direction of each drainage area; locations of storm water collection and conveyance systems, including associated discharge locations and directions of flow; locations of storm water monitoring points; locations of structural control measures that affect run-on; and locations of all 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 site activity that may have potential pollutant sources.

c. Potential Pollutant Sources

A description of all potential pollutant sources including chemical and other material usage, handling and storage areas, dust and particulate generating activities, non-storm water discharges, and erodible surfaces.

d. 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 potential pollutant-associated activity, the associated pollutant sources and pollutants, and the specific BMPs being implemented.

The following minimum BMPs must be implemented and maintained to reduce or prevent pollutants in storm water 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 storm water discharges in a manner that reflects best industry practice considering technological availability and economic practicability and achievability. Advanced BMPs may include exposure minimization BMPs; storm water containment and discharge reduction BMPs; treatment control BMPs; or other advanced BMPs based on site-specific criteria.

e. Storm Water Monitoring Plan

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

2. Storm Water Monitoring

a. Monitoring Points

A qualifying storm event is defined in the latest version of the California

Industrial General Permit (IGP), Board Order No. 2014-0057-DWQ. A qualifying storm event is currently defined as a precipitation event that produces a storm water discharge for at least one drainage area and is preceded by 48 hours with no discharge from any drainage area. This incorporation-by-reference is prospective including future changes to the incorporated definition as any changes take effect.

The Dischargers must collect and analyze storm water 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 Dischargers must document and report that information in the regularly scheduled Annual Storm Water Report.

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

b. Storm Water Sampling

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

All storm water samples, except for 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 Dischargers 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-storm water discharges and their sources; authorized non-storm water discharges, their sources, and associated BMPs; and all potential pollutant sources. LCRS sumps must be visually monitored for the presence of liquid when stormwater monitoring events occur.

At the time a storm water sample is collected, the Dischargers 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. If a discharge location is not visually observed during the sampling event, the Dischargers must record which discharge locations were not observed during sampling or that there was no discharge from the discharge location.

d. Monitoring Parameters

The Dischargers must monitor, at each storm water discharge monitoring location, all parameters in accordance with the frequencies listed in Attachment A.

e. Water Quality Thresholds

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

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

f. Calibration Documentation

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

3. Data Evaluation and Response Actions

The storm water monitoring data (storm water 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 storm water discharges, compliance with the monitoring parameter water quality thresholds, and the need to implement additional BMPs and/or SWPCP revisions.

The results of all storm water 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 thresholds requires the Dischargers to implement the following response actions:

- a. Notify the Lahontan 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 storm water 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 storm water discharges.
- d. Complete one of the following:
  - i. Revise or amend the SWPCP, as appropriate, to incorporate the additional BMPs or SWPCP measures necessary to reduce or prevent pollutants in storm water discharges and implement the revised SWPCP no later than 60 days following the reported exceedance
  - ii. Demonstrate, to the satisfaction of the Lahontan Water Board Executive Officer, that the exceedance(s) is attributed solely to non-industrial pollutant sources and/or to natural background sources.

### III. DATA ANALYSES

All groundwater data must be analyzed using statistical and non-statistical methods that 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 a new release from the WMU, evaluation of data will be conducted using statistical methods. For detection monitoring, the Dischargers must use statistical methods to analyze COCs and monitoring parameters that exhibit concentrations that equal or exceed their respective concentration limit. The Dischargers 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 Facility, evaluation of data will also be conducted using non-statistical methods. Non-statistical analyses must be 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. Time-series plots are not required for parameters that have never been detected above their MDL (as specified by the applicable USEPA method). Each semi-annual and annual report must include these time-series plots.

IV. REPORTING REQUIREMENTS

The Dischargers must comply with the following reporting requirements.

A. Electronic Reporting Requirements

Pursuant to CCR, title 23, section 3890, the Dischargers must submit reports, including soil, vapor, and water data, prepared for the purpose of subsurface investigation or remediation of a discharge of waste to land subject to Division 2 of CCR, title 27, 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 Dischargers must provide the monitoring report to the Lahontan Water Board, as specified in this MRP, and upload the full monitoring report to GeoTracker, as stipulated by CCR, title 23.

For all other types of documents and correspondence, please send to the Lahontan Water Board's email address at [Lahontan@waterboards.ca.gov](mailto:Lahontan@waterboards.ca.gov) and include your WDID No. or Facility name in the subject line. For documents that are 50 MB or larger, please contact Lahontan Water Board staff to discuss how to transmit the documents for our review.

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

The following periodic reports, including all water quality monitoring data collected during the corresponding reporting period, must be submitted electronically to Lahontan Water Board by uploading to the GeoTracker system according to the following schedule.

REPORTING SCHEDULE		
Sampling and Reporting Frequency	Sampling and Reporting Period	Report Due Date
Annual DMP Monitoring Report	January 1 – December 31	February 15
Annual Storm Water Report	January 1 – December 31	February 15
Five-Year Constituent of Concern Monitoring Report <sup>1</sup>	January 1 – June 30	August 15
	July 1 – December 31	February 15
<sup>1</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 5-year report is due February 15, 2027.		

1. Annual Detection Monitoring Reports

Annual DMP reports must be submitted to the Lahontan Water Board no later than **February 15** of each year and must include the following information.

- a. All data collected during the reporting period in accordance with the approved SAP for the Landfill’s groundwater and unsaturated zone monitoring systems, as outlined in MRP section II.A.
- b. Tabulated results of sampling and laboratory analyses for each groundwater monitoring point where a parameter has been reported at a concentration exceeding the MDL, including historical (preceding ten years) 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 ten years) and current reporting period data.
- d. A map and/or aerial photograph showing the Landfill perimeter and ancillary facilities as well as locations of all monitoring points, observation stations, and the surface trace of the point of compliance.
- e. 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 Facility (degrees), the seepage velocity of groundwater flow (feet/year), and the current groundwater elevation isocontours for that monitoring period.
- f. Copies of all field monitoring and well sampling data sheets.
- g. Time-series plots of the laboratory 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, when available). Time-series plots must include, as horizontal lines, the COCs concentration limit as derived in accordance with the WQPS for the respective COC/monitoring point pair, as well as the MDL for the analytical method used.

- h. 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 Dischargers have 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.
- i. All data collected in accordance with MRP section II. B. Specifically, a description of the condition of the final cover materials and a discussion regarding any subsidence or soil cover washouts, which have occurred, and the capability of the cover to promote runoff and prevent ponding. In the case where subsidence, washouts or other damage to the cover is noted, the report must indicate the actions taken to repair cover material to prevent recurrence. The report must also include a determination on whether significant changes in the operation of the Landfill warrant an update to the FCPCMP.
- j. Evidence that adequate financial assurance for post-closure maintenance and corrective action is still in effect. Evidence may include a copy of the renewed financial instrument or a copy of the receipt for payment of the financial instrument.
- k. Evidence that the financial assurance amount is adequate or increase the amount of financial assurance by an appropriate amount, if necessary. An increase may be necessary due to inflation, a change in the approved closure plan, or other unforeseen events.
- l. The Dischargers must review the FCPCMP annually to determine if significant changes in the operation or maintenance of the Facility warrant an update to the plan. Proposed changes to the plan must be outlined in the annual report.

## 2. Annual Storm Water Reports

Annual storm water reports must be submitted to the Lahontan Water Board no later than **February 15** of each year in accordance with the reporting schedule in MRP section IV. B and may be combined with the annual DMP monitoring report. Annual storm water reports must include, but not be limited to, the following information:

- a. All data collected during the reporting period in accordance with the storm water monitoring plan, as outlined in MRP section II.C.2.
- b. Tabulated results of sampling and laboratory analyses for each storm water discharge monitoring location, including historical and current reporting period data, as well as the water quality objective for each monitoring parameter and an identification of each sample that exceeds its respective water quality objective at any given discharge monitoring location.
- c. A copy of the current site map from the SWPCP.
- d. Copies of all field monitoring, storm water 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 objective 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 Dischargers, including dates.
- i. A summary of employee training courses performed during the reporting period, including dates and content.

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

Pursuant to CCR, title 27, section 20420, subdivision (g), **every five years** the Dischargers 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 II of Title 40, Code of Federal Regulations (40 CFR), Part 258. Successive monitoring efforts must be carried out alternately during January 1 through June 30 of one five-year sampling event and July 1 through December 31 of the next five-year 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 next five-year sampling

event should be scheduled to occur in the first half of 2027 and reported to the Lahontan Water Board no later than **August 15, 2027**.

C. Unscheduled Reports to be Filed with the Lahontan Water Board

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

1. Notice of Tentative Release from the Landfill

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

The Dischargers must immediately notify the Lahontan Water Board verbally whenever a determination is made that there is 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 Dischargers may initiate verification procedures or demonstrate that another source other than the Landfill caused evidence of a release in accordance with MRP section IV.B.1.b.

The notification must include the following information:

- i. The potential source of the release;
- ii. General information including the date, time, location, and cause of the 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 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; or
- viii. For physical evidence of a release – the physical factors that indicate evidence of a release.

b. Other Source That May Cause Evidence of a Release from the Landfill

The Dischargers may make a demonstration that a source other than the Landfill caused evidence of a release. For this case, the Dischargers must notify the Lahontan Water Board of the intention to make this demonstration.

The notification must be sent to the Lahontan Water Board by certified mail within seven days of determining physical or measurably significant evidence of a release.

## 2. Evaluation Monitoring

The Dischargers must, **within 90 days of verifying a release**, submit a technical report pursuant to California Water Code section 13267, subdivision (b), proposing an Evaluation Monitoring Program (EMP) meeting the provisions of CCR, title 27, section 20420, subdivision (k)(5). If the Dischargers decides to not conduct verification procedures or to not make a demonstration that a source other than the Landfill 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;
- c. Proposed Monitoring Changes – any proposed additions or changes to the monitoring frequency, sampling and analytical procedures or methods, or statistical methods used at the Facility necessary to meet the provisions of CCR, title 27, section 20425; and
- d. Proposed Delineation Approach – a detailed description of the measures to be taken by the Dischargers to assess the nature and extent of the release from the Landfill.

## 3. Engineering Feasibility Study Report

**Within 180 days of verifying the existence of a release**, the Dischargers must submit an Initial 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 Evaluation Monitoring Program, per CCR, title 27, section 20425, subdivision (b).

## 4. Monitoring Well Logs

Pursuant to CCR, title 27, section 20415, subdivision (e)(2) all monitoring wells and all other borings installed to satisfy the requirements of this Monitoring and

Reporting Program 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. These logs must be submitted to the Lahontan Water Board **within 90 days following completion of fieldwork.**

5. Significant Earthquake Event

After a significant<sup>1</sup> earthquake event at the Facility, the Dischargers 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. The Dischargers must closely examine the Landfill cover, vegetative cover, slope conditions, drainage control system, and surface grading for signs of cracking or depressed/settled areas, following the earthquake event. If cracking or depressed areas of the cover is identified, the Dischargers must make repairs to those areas within 30 days from the date of the earthquake event.

6. Extreme Weather Event

After an extreme weather event<sup>2</sup> at or near the Facility, the Dischargers must notify the Lahontan Water Board within 48 hours of damages to the Facility, 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, groundwater, and/or unsaturated zone monitoring systems or to report no damage to the Facility was sustained. The Dischargers must closely examine the WMU and appurtenant piping as well as 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. General Provisions

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

E. Violations

If monitoring data indicate violation of the WDRs, the Dischargers must report the violation in the scheduled report for the corresponding reporting period and provide

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<sup>1</sup> A significant earthquake is a seismic event classified according to the United States Geological Survey 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>.

<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.

information indicating the cause of violation(s) and the action taken or planned to bring the discharge into compliance.

F. Technical Reports

Pursuant to California Water Code, section 13267, subdivision (b):

1. By **October 5, 2026**, the Dischargers must submit a Work Plan to install unsaturated zone monitoring points as required by CCR, title 27, section 20415(d)(5) and section V.A. of the WDRs.
2. By **April 31, 2027**, the Dischargers must submit a Closure Certification Report.
3. **Within 90 days of completing all closure activities for all WMUs**, the Dischargers must conduct an aerial photographic survey of the closed portions of the WMUs and of their immediate surroundings, including at least the surveying monuments pursuant to CCR, title 27, section 21090(e)(1). The data so obtained must be used to produce a topographic map of the site at a scale and contour interval sufficient to depict the as-closed topography of each portion of each WMU, and to allow early identification of any differential settlement pursuant to CCR, title 27, section 21090(e)(2).
4. **At least once every five years after completing closure of the Landfill**, the Dischargers must produce and submit to the Lahontan Water Board, **within 90 days of completing the aerial photographic survey**, an iso-settlement map accurately depicting the estimated total change in elevation of each portion of the final cover's low-hydraulic conductivity layer pursuant to CCR, title 27, section 21090(e)(2). For each portion of the Landfill, the map must show the total lowering of the surface elevation of the final cover, relative to the baseline topographic map produced in compliance with CCR, title 27, section 21090(e)(1).
5. Prior to conducting periodic grading operations on the closed Landfill, the Dischargers must note on a map of the Landfill the approximate location and outline of any areas where differential settlement is visually obvious. The Dischargers must submit the map to the Lahontan Water Board **in the next Annual Detection Monitoring Report following the grading of the Landfill**. Each five-year iteration of the iso-settlement map must show all areas where differential settlement has been noted since the previous map submittal and must highlight areas of repeated or severe differential settlement. Map notations and delineations made pursuant to this requirement need not be surveyed, so long as all areas where differential settlement was visually identifiable prior to regrading can be relocated. Such notation and delineation must be made by, or under the supervision of, a California-licensed Professional Civil Engineer or Professional Geologist.

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

Dated: \_\_\_\_\_

- Attachments:
- A. Water Quality Monitoring Program
  - B. Location Plan (Detection Monitoring Network)
  - C. General Provisions for Monitoring and Reporting

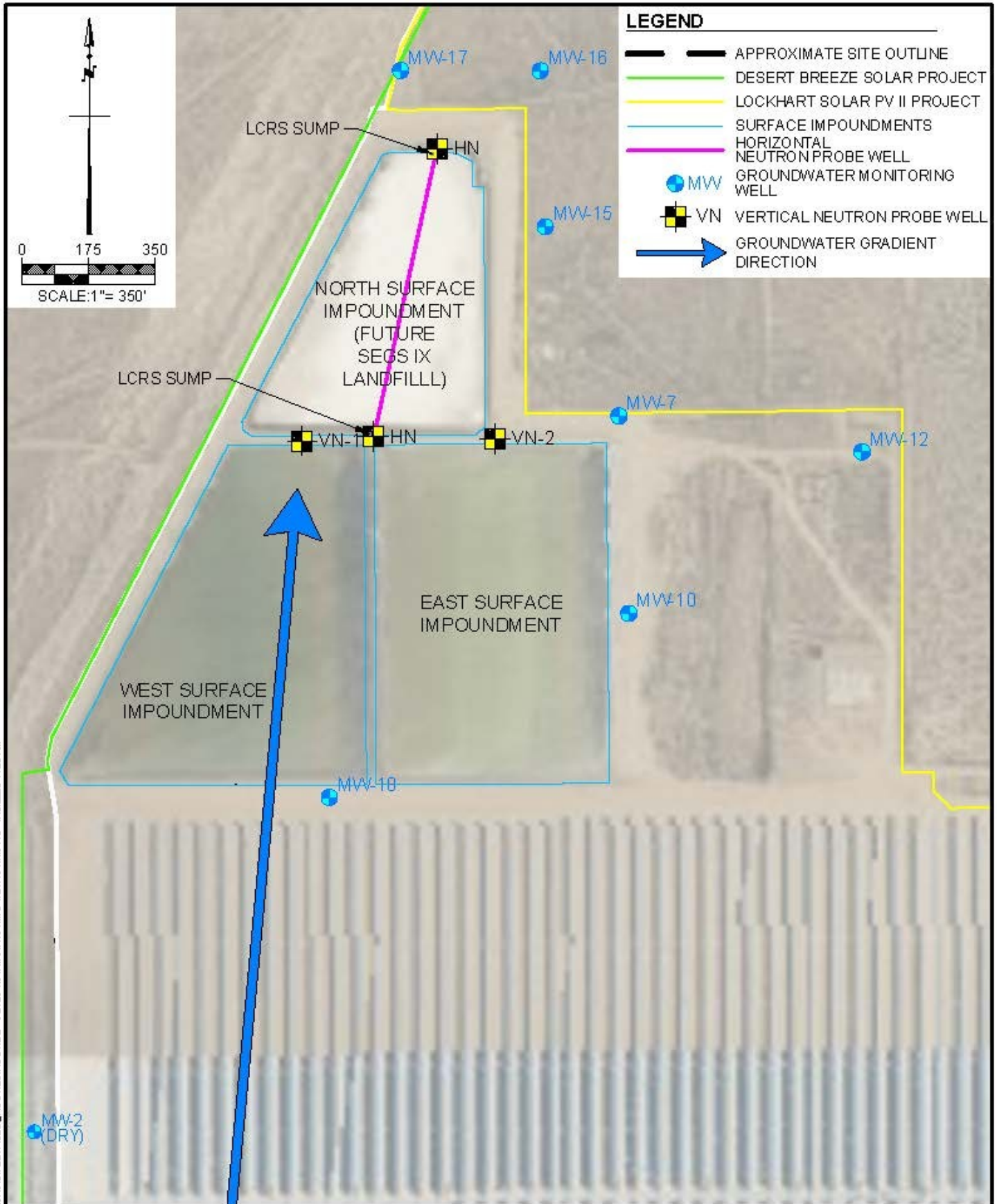
**MRP - ATTACHMENT A – WATER QUALITY MONITORING PROGRAM**

GROUNDWATER MONITORING					
Parameter		Units	USEPA Method <sup>1</sup>	Sampling Frequency	Reporting Frequency
<b>Field Parameters</b>					
Groundwater Depth		feet below ground surface	--	annually	annually
"	Gradient	foot/foot	--	annually	annually
"	Direction	compass heading	--	annually	annually
Dissolved Oxygen		milligrams/Liter	--	annually	annually
Temperature		degrees Fahrenheit	--	annually	annually
Electrical Conductivity		micromhos/cm	--	annually	annually
pH		pH Units	--	annually	annually
Turbidity		NTUs	--	annually	annually
<b>Constituents of Concern</b>					
<b>Monitoring Parameters</b>	Total Dissolved Solids	milligrams/liter	E160.1	annually	annually
	Chloride	milligrams/liter	300	annually	annually
	Sodium	milligrams/liter	6010	annually	annually
	Sulfate	milligrams/liter	300	annually	annually
	Phosphate	milligrams/liter	300	annually	annually
	Potassium	milligrams/liter	6010	annually	annually
	Benzene	micrograms/liter	8260	annually	annually
	Biphenyl	micrograms/liter	8015	annually	annually
	Diphenyl Oxide	micrograms/liter	8015	annually	annually
	Volatile Organic Compounds <sup>2</sup>	micrograms/liter	8260	annually	annually
	Semi-volatile Organic Compounds <sup>3</sup>	micrograms/liter	8270	annually	annually
Antimony		micrograms/liter	7062	5 year	5 year
Arsenic		micrograms/liter	7062	5 year	5 year
Barium		micrograms/liter	6010	5 year	5 year
Beryllium		micrograms/liter	6010	5 year	5 year
Cadmium		micrograms/liter	7131	5 year	5 year
Chromium		micrograms/liter	6010	5 year	5 year
Hexavalent Chromium		micrograms/liter	7196	5 year	5 year
Cobalt		micrograms/liter	6010	5 year	5 year
Copper		micrograms/liter	6010	5 year	5 year
Lead		micrograms/liter	7421	5 year	5 year
Mercury		micrograms/liter	7471	5 year	5 year
Nickel		micrograms/liter	7521	5 year	5 year
Selenium		micrograms/liter	7742	5 year	5 year
Silver		micrograms/liter	6010	5 year	5 year
Thallium		micrograms/liter	7841	5 year	5 year
Tin		micrograms/liter	6010	5 year	5 year
Vanadium		micrograms/liter	6010	5 year	5 year
Zinc		micrograms/liter	6010	5 year	5 year
Total Cyanide		micrograms/liter	335.4	5 year	5 year
Total Sulfide		micrograms/liter	376.2	5 year	5 year

<b>UNSATURATED ZONE MONITORING</b>				
<b>Parameter</b>	<b>Units</b>	<b>USEPA Method<sup>1</sup></b>	<b>Sampling Frequency</b>	<b>Reporting Frequency</b>
<b>Field Parameters</b>				
Presence of liquid in LCRS sumps	visual observation data	--	during groundwater and stormwater sampling events	annually
Moisture content in soil surrounding neutron probe wells	percent moisture	--	during groundwater and stormwater sampling events	annually
<b>UNSATURATED ZONE SOIL-PORE GAS MONITORING</b>				
<b>Parameter</b>	<b>Units</b>	<b>USEPA Method<sup>1</sup></b>	<b>Sampling Frequency</b>	<b>Reporting Frequency</b>
<b>Field Parameters</b>				
Atmospheric Pressure	inches of mercury	--	annually	annually
Nitrogen	parts per million or percent by volume	--	annually	annually
Methane <sup>4</sup>	parts per million or percent by volume	--	annually	annually
Carbon Dioxide	parts per million or percent by volume	--	annually	annually
Oxygen	parts per million or percent by volume	--	annually	annually
<b>Constituents of Concern</b>				
Methane	parts per million or percent by volume	ASTM-D1946	Based on results of soil-pore gas field parameter monitoring <sup>4</sup>	annually
Carbon Dioxide	parts per million or percent by volume			annually
Nitrogen	parts per million or percent by volume			annually
Oxygen	parts per million or percent by volume			annually
Volatile Organic Compounds	parts per billion or percent by volume	TO-15		annually
<b>STORM WATER MONITORING</b>				
<b>Parameter</b>	<b>Units</b>	<b>USEPA Method<sup>1</sup></b>	<b>Sampling Frequency</b>	<b>Reporting Frequency</b>
pH	pH Units	--	four qualifying storm events per year <sup>5</sup>	annually
Turbidity	NTUs	SM-2130-B		
Oil and Grease, Total	milligrams/liter	1664A		
Iron, Total	milligrams/liter	200.7		
<p><sup>1</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.</p> <p><sup>2</sup> - As defined in Appendix I, 40 CFR, part 258.</p> <p><sup>3</sup> - As defined in Appendix II, 40 CFR, part 258.</p>				

4 - 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 LFG monitoring probe (during that monitoring event) and analyzed for the soil-pore gas COCs listed.

5 - A qualifying storm event is a precipitation event that produces a storm water 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 storm water 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 Storm Water Report.



P:\ATER\BAG\EN\SEGS V\IT\CAIC\PM\FIC\AN\SH\BETT\LESL\F0U\RESH\F0U\REZ - 0\BETEC\TD\W\I\O\N\TD\B\I\N\O\N\ET\W\O\B\K\O\W\O\ 4\15\Z\O\O\ 11\55\A\N

IMAGE SOURCE: 2025 MAXAR CNES DISTRIBUTION AIRBUS DS



**TETRA TECH**

21700 Copley Drive, Suite 200  
Diamond Bar, CA 91765  
TEL 909.860.7777 FAX 909.860.8017

Detection Monitoring Network

FIGURE 2

## MRP - ATTACHMENT C

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION GENERAL PROVISIONS FOR MONITORING AND REPORTING

## I. SAMPLING AND ANALYSIS

- a. All analyses shall be performed in accordance with the most current edition(s) of the following documents:
  - Standard Methods for the Examination of Water and Wastewater, 24<sup>th</sup> Edition (2023), jointly published by American Public Health Association, American Water Works Association, Water Environment Federation
  - Methods for Chemical Analysis of Water and Wastes, U.S. Environmental Protection Agency (USEPA), EPA-600/4-79-020 (USEPA, 1983)
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the Environmental Laboratory Accreditation Program (ELAP) of the California State Water Resources Control Board or a laboratory approved by the Lahontan Water Board Executive Officer. 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 USEPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Lahontan Water Board prior to use.
- d. The Discharger shall establish chain-of-custody procedures to ensure 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 ensure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent logbook 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.

## II. 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 Lahontan Water 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 logbook.

## III. 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 Lahontan Water 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 Lahontan Water Board.
- c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Lahontan Water 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:

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;

- In the case of a partnership, by a general partner
- In the case of a sole proprietorship, by the proprietor
- 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:

- Name and telephone number of an individual who can answer questions about the report.
- The Monitoring and Reporting Program Number.
- WDID Number.

f. Modifications

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

#### **IV. 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.

**ATTACHMENT E**  
**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 to the Lahontan Water Board. The Discharger must immediately notify the Lahontan Water Board after becoming aware of when an adverse condition occurred as a result of this discharge, and a written report must be provided within ten days of the time the Discharger becomes aware of the incident. The written report must 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 at, the 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 required 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.