CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

73-720 Fred Waring Dr. #100
Palm Desert, CA 92260
(760) 346-7491
Regional Board Website (https://www.waterboards.ca.gov/coloradoriver)

WASTE DISCHARGE REQUIREMENTS ORDER R7-2026-0011

ORDER INFORMATION

Order Type(s):	Waste Discharge Requirements (WDRs)
Status:	ADOPTED
Program:	Title 27 Discharges to Land
Discharger(s):	Magma Power Company, Desert Valley Company
Facility:	Desert Valley Monofill
Address:	3301 West Highway 86, Brawley, CA 92227
County:	Imperial County
APN(s):	019-100-004
GeoTracker ID:	L10003472657
WDID:	7A132197001
Prior Order(s):	WDRs Order R7-2016-0016, R7-2003-075, 98-024, 94-021, 90-053

CERTIFICATION

I, Michael Placencia, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on May 12, 2026.

Original signed by
MICHAEL PLACENCIA
Executive Officer

GeoTracker ID: L10003472657
WDID: 7A132197001

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE INDEX

FIGURE INDEX

GLOSSARY

Units

°F .....Degrees Fahrenheit

ft bgs .....Feet Below Ground Surface

ft/day.....Feet per Day

ft3.....Cubic Feet

ft3/min .....Cubic Feet per Minute

µg/L.....Micrograms per Liter

µg / cm.....Micrograms per Centimeter

µS / cm.....Microsiemens per Centimeter

mg/L.....Milligrams per Liter

ml/L.....Milliliters per Liter

NTU.....Nephelometric Turbidity Units

% Vol. .....Percent Volume

SU .....Standard pH Units

Other Terms

Antidegradation Policy .....Statement of Policy with Respect to Maintaining High Quality Waters in California, State Water Resources Control Board Resolution 68-16

Basin Plan.....Water Quality Control Plan for Colorado River Basin Region (inclusive of all amendments)

BCT.....Best Conventional Pollutant Control Technology

bgs.....Below Ground Surface

GLOSSARY

BLM	Bureau of Land Management
BPTC	Best Practicable Treatment and Control
Ca	Calcium
CalRecycle	California Department of Resources Recycling and Recovery (CalRecycle)
CAP	Corrective Action Program
CAMP	Corrective Action Monitoring Program
CEQA	California Environmental Quality Act
CEQA Guidelines	California Code of Regulations, Title 14, section 15000 et seq.
CFR	Code Federal of Regulations
COCs	Constituents of Concern
CPCMP	Closure and Post-Closure Maintenance Plan
CWC	California Water Code
CQA	Construction Quality Assurance
Designated Waste	(a) Hazardous Waste subject to variance from management requirements per Health and Safety Code section 25143; and (b) Nonhazardous Waste containing pollutants that, under ambient conditions, could be released in concentrations exceeding applicable WQOs, or that could reasonably be expected to affect beneficial uses of water. (Wat. Code, § 13173.)
DMP	Detection Monitoring Program
DTSC	California Department of Toxic Substances Control
DDW	Division of Drinking Water

GLOSSARY

DWR.....California Department of Water Resources

EC .....Electrical Conductivity

EIR .....Environmental Impact Report

EIS .....Environmental Impact Statement

EMP .....Evaluation Monitoring Plan

EW .....Extraction Well

FEMA .....Federal Emergency Management Agency

GCL.....Geosynthetic Clay Liner

HDPE .....High-Density Polyethylene

HCO3 .....Bicarbonate

JTD .....Joint Technical Document

K.....Potassium

LCRS .....Leachate Collection and Recovery System

LEA.....Local Enforcement Agency

Leachate.....Liquid formed by the drainage of liquids from waste or by the percolation or flow of liquid through waste. Leachate includes any constituents extracted from the waste and dissolved or suspended in the fluid. (Title 27, § 20164.)

LFG.....Landfill Gas

MB.....megabytes

MCE .....Maximum Credible Earthquake

MCL[s] .....Maximum Contaminant Level[s] for Drinking Water under Title 22

GLOSSARY

MCE .....Maximum Credible Earthquake

MDL .....Method Detection Limit

MPE .....Maximum Probable Earthquake

Mg .....Magnesium

MRP .....Monitoring and Reporting Program

MSL.....Above Mean Sea Level

MSW .....Municipal Solid Waste regulated under 40 C.F.R. part 258

MW.....Monitoring Wells

Na.....Sodium

ND .....Non-Detect

NOD .....Notice of Determination

NORM .....Naturally Occurring Radioactive Material

NPDES.....National Pollutant Discharge Elimination System

OES.....Office of Emergency Services

pH .....potential or power of hydrogen

PQL.....Practical Quantitation Limit

RCRA.....Resource Conservation and Recovery Act

Subtitle D .....USEPA-promulgated MSW regulations under RCRA (see 40 C.F.R. part 258)

QA/QC .....Quality Assurance and Quality Control

ROWD.....Report of Waste Discharge

SMR[s].....Self-Monitoring Report[s]

GLOSSARY

SO4.....Sulfate

State Water Board.....State Water Resources Control Board

TDS.....Total Dissolved Solids

Title 22.....California Code of Regulations, Title 22

Title 23.....California Code of Regulations, Title 23

Title 27.....California Code of Regulations, Title 27

Trace Results.....Results between Method Detection Limit (MDL) and Practical Quantitation Limit (PQL)

USEPA.....United States Environmental Protection Agency

VOC ..... Volatile Organic Constituent

WDRs.....Waste Discharge Requirements

WMU.....Waste Management Unit

WQO[s].....Water Quality Objective[s]

WQPS.....Water Quality Protection Standard

(findings begin on next page)

FINDINGS

The California Regional Water Quality Control Board, Colorado River Basin Region (Colorado River Basin Water Board) hereby finds as follows:

Introduction

1. This Order prescribes Waste Discharge Requirements (WDRs) for the Desert Valley Monofill Class II Solid Waste Management Facility (Facility), which is operated by the Desert Valley Company, a subsidiary of the CalEnergy Operating Corporation (CalEnergy). The Report of Waste Discharge application submitted by CalEnergy on September 26, 2025, identifies Magma Power Company as the owner of the Facility. For the purposes of this Order, the Desert Valley Company and its corporate parent, the Magma Power Company, are collectively referred to as the "Discharger."

2. The Facility currently contains three landfill-type waste management units (WMUs) that receive solid wastes from Imperial County geothermal facilities for disposal, as well as three surface impoundment WMUs that receive and evaporate the leachate generated by other disposal units. All of the existing WMUs have been classified as class II units for the receipt of "designated waste," as defined per Water Code section 13173.[1]

3. The Facility is located on Assessor's Parcel No. 019-100-004 and at the physical address, 3301 West Highway 86, Brawley, CA 92227. The Facility is situated on private lands in Imperial County, approximately 12 miles west of Westmorland, and approximately 4 miles south of the Salton Sea (Figure 1).

4. The Facility is regulated by the Imperial County through its Public Health Department, Division of Environmental Health, which acts as the Local Enforcement Agency (LEA) in Imperial County for the Department of Resources Recycling and Recovery (CalRecycle).

5. Pursuant to Water Code section 13264, subdivision (a), the Discharger is prohibited from initiating the discharge of new wastes (i.e., other than those described herein), or making material changes to the character, volume and timing of waste discharges authorized herein, without filing a new Report of Waste Discharge (ROWD) per Water Code section 13260. Failure to file a new

[1] WMUs are classified based on "their ability to contain wastes." (Title 27, § 20240, subd. (a).)

ROWD before initiating material changes to the character, volume or timing of discharges authorized herein, will constitute an independent violation of these WDRs.

6. The Facility was previously regulated under the following WDRs Orders: Order R7-2016-0016, Order R7-2003-075, Order 98-024, Order 94-021, and Order 90-053.

7. On September 26, 2025, the Discharger submitted a Report of Waste Discharge (ROWD). The Discharger is proposing the construction of new Waste Management Units (WMU) as follows:

   a. Two new landfill-type WMUs, which are referred to herein as “Cell 4A” and “Cell 4B.”

   b. A new lined surface impoundment-type WMU with a capacity of approximately 750,000 gallons.

   c. The Discharger is also proposing to construct the following supporting infrastructure:

   d. One water supply well for construction of Cells 4A and 4B for ongoing dust control needs of the Facility.

   e. Stormwater run-on diversion berms and intra-facility runoff drainage channels.

   f. Access roads, stockpile areas, and additional perimeter fencing around the proposed cells which will connect with the existing Facility perimeter fence.

8. In 2024 three monitoring wells (W-401, W-402, and W-403) were installed near the proposed Cells 4A and 4B to collect background monitoring data.

Applicability of Title 27 Standards

9. Solid wastes that cannot be discharged directly or indirectly to waters of the state are required to be discharged into and contained within Waste Management Units (WMUs) that comply with the prescriptive standards[2] in California Code of Regulations, title 27 (Title 27). (Title 27, § 20200, subd. (a).) Such standards are implemented through the waste discharge requirements (WDRs) issued by the Regional Water Board. (§ 20080, subd. (f).)

10. Because the Facility does not accept municipal solid waste[3] (MSW), the standards in part 258 of Code of Federal Regulations, title 40, and State Water Resources Control Board Resolution 93-62 are inapplicable.

11. The Regional Water Board may approve an engineered alternative to a prescriptive standard where the Discharger demonstrates that the implementation of the standard will not be feasible under the circumstances,[4] and that the proposed alternative is consistent with the applicable performance goal and offers equivalent protection against water quality impairment. (Title 27, § 20080, subd. (b).)

Description of Wastes

12. "Designated Waste" is defined in relevant part as "[n]onhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions at a waste management unit, could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state…." (Wat. Code, § 13173, subd. (b).)

---

[2] Title 27 standards are *prescriptive* insofar as they must be incorporated in WDRs, with some limited exceptions (e.g., approved "engineered alternatives").

[3] Waste streams from household sources.

[4] In demonstrating infeasibility, the Discharger may show that the standard either will be "unreasonably and unnecessarily burdensome and will cost substantially more than alternatives…," or will be "impractical and will not promote attainment of applicable performance standards." (Title 27, § 20080, subd. (c)(1)-(2).) However, infeasibility is not required for alternative final cover designs and alternative monitoring systems. (See Title 27, §§ 20380, 20950.)

13. The Facility's active WMUs receive geothermal drilling mud and cuttings; filter cake (silica); plastic liners; and soil contaminated with geothermal materials. These materials are known to contain constituents that could be released in concentrations exceeding water quality objectives, and could otherwise impact the beneficial uses of water. According, these materials are considered "Designated waste" and must be discharged to a Class II WMU. (Title 27, § 20220.)

14. Additionally, geothermal wastes generated by the Magma Power Company's geothermal facilities contain Naturally Occurring Radioactive Material (NORM). NORM for the purpose of this Order shall be defined as material containing detectable amounts of Radium-226, Thorium-228, Thorium-232, Potassium-40, Gross Alpha or Gross Beta particles. Existing monitoring data confirm that these NORM wastes do not need to be managed as "hazardous waste" under California law, and may be discharged to Class II WMUs.

Facility and Operations

15. The Discharger currently owns and operates the Facility, which receives nonhazardous geothermal wastes generated in Imperial County by the CalEnergy Operating Corporation (CalEnergy).

16. Per Imperial County Conditional Use Permit 13-AA-0022 (issued on July 31, 2025, the Discharger is authorized to accept the following materials for disposal at the Facility: geothermal drilling mud and cuttings; filter cake (silica); plastic liners; and soil contaminated with geothermal materials. The Facility operates with a maximum allowable daily tonnage of 750 tons per day, and operates a maximum of 365 days per year, which corresponds to a maximum annual permitted disposal of 273,750 tons.

17. The Facility is not open for public or commercial use at any time. Access to the site is controlled at all times. The site operates a maximum of 12 hours per day between the hours of 6:00 am and 6:00 pm, from 5 to 7 days per week, for 52 weeks per year. Operations only occur during daylight hours.

18. With the proposed expansion, the Facility will consist of the WMUs listed in the table below.[5]

Table 1. Waste Management Units at Facility.

WMU	Class	Status	Area / Capacity	Construction	Closure
Cell 1	II	Closed	12 acres	1990	May 2008
Cell 2	II	Closed		1999	May 2008
Cell 3	II	Active	16.8 acres	June 2005	2030[6] (est.)
Cell 4a	II	Planned	15.3 acres	TBD	2050[7] (est.)
Cell 4b	II	Planned	17.8 acres	TBD	2050[8] (est.)

[5] For reasons that remain unclear, the Board's previous orders did not regulate the Facility's surface impoundments in accordance with Title 27 prescriptive standards, despite also being WMUs subject to the same Class II standards. (See Title 27, § 20164 [defining "surface impoundments"; see also Title 27, § 20340, subd. (g) [requirements for leachate handling].) This Order therefore incorporates new requirements for the surface impoundment closure, as well as for the demonstration of financial assurances of the Discharger's ability to pay for closure and corrective action activities.

[6] The closure estimate is based on the WMU's current average disposal rate.

[7] Cell 4A has an expected operating life of 24 years.

[8] Cell 4B has an expected operating life of 24 years.

WMU	Class	Status	Area / Capacity	Construction	Closure
Surface Impoundment 1	II	Active	400,000 gallons *(Total combined Impoundments. 1 and 2)*	1999	TBD
Surface Impoundment 2	II	Active	400,000 *(Total combined Impoundments. 1 and 2)*	1999	TBD
Surface Impoundment 3	II	Active	1,400,000 gallons	June 2005	TBD
Surface Impoundment 4	II	Planned	750,000 gallons	2026-2027	TBD

Waste Containment Systems

19. Cell 3 has an alternative double composite liner system consisting of the following components, from top to bottom:

    a. A protective soil cover comprised of at least 18 inches of on-site soil, with waste materials placed directly on this layer

    b. LCRS (primary drainage layer) comprised of a geocomposite geonet with a nonwoven geotextile bonded on top

    c. Primary liner comprised of 80-mil HDPE geomembrane

    d. LDS (secondary drainage layer) comprised of HDPE geonet

e. Secondary liner system comprised of 80-mil HDPE geomembrane underlaid by a geosynthetic clay liner with a permeability of less than 1×10^{-7} centimeters per second (cm/s).

20. Cells 4A and 4B also will incorporate an engineered alternative liner system design. Their alternative liner system proposed consists of the following components, from top to bottom:

a. A protective soil cover layer comprised of at least 18 inches of on-site soil, with waste materials placed directly on this layer

b. Geotextile filter layer comprised of nonwoven geotextile placed over the LCRS to prevent soil migration from the protective layer into the LCRS

c. LCRS (primary drainage layer) consisting of a 1-foot thick layer of drainage gravel with a hydraulic conductivity of 1×10^{-2} cm/s or greater laid over an HDPE geonet

d. Geotextile cushion placed under the LCRS layer and over the primary geosynthetic liner to minimize puncture damage from the overlying LCRS layer

e. Primary liner system comprised of an 80-mil HDPE geomembrane lain over a geocomposite clay layer (GCL). The GCL is comprised of a layer of bentonite clay bounded by upper and lower layers of geotextiles, with a total layer maximum hydraulic conductivity of 5×10^{-9} cm/s or less.

f. LDS (secondary drainage layer) comprised of HDPE geonet

g. Secondary liner system comprised of an 80-mil HDPE geomembrane lain over a geocomposite clay layer (GCL). The GCL is comprised of a layer of bentonite clay bounded by upper and lower layers of geotextiles, with a total layer maximum hydraulic conductivity of 5×10^{-9} cm/s or less.

21. For purposes of Title 27, section 20080, subdivisions (b)-(c), the proposed alternative for Cells 4A and 4B is consistent with the applicable performance goal, and will afford equivalent water quality protection. Compliance with the prescriptive standard would also be infeasible under the circumstances.

22. For Cells 3, 4A and 4B, the LCRS is designed to minimize accumulation of liquids above the main liner.

23. The Leak Detection Systems (LDS) were designed to assist in determining if a leak may exist in the primary synthetic liner. The LDS serves as a secondary leachate collection system installed beneath the primary liner and the LCRS. The LDS of the active Cell 3 is currently monitored weekly, and any liquid found is removed and stored either in an above ground storage tank or a lined Surface Impoundment (leachate evaporation pond). The LDS's for inactive Cell 1 and Cell 2 are inspected quarterly. Any liquid removed from an LDS system from any cell is tested for specific conductance and pH.

24. For the purposes of this Order, in the absence of a separate unsaturated zone monitoring system (e.g., neutron probes), the vadose zone monitoring sump, installed beneath the LDS, does not constitute part of the WMU or its waste containment system. In other words, liquid released to the vadose zone monitoring sump constitutes "physical evidence" of a release from the WMU for the purposes of the Monitoring and Reporting Program.

25. Title 27 ordinarily requires the Discharger to prepare and implement an Operations Plan that provides for "operation levels and waste input quantities … based on anticipated precipitation and on past precipitation conditions for the year." (Title 27, § 20375, subd. (b).) However, to the extent that the Facility's surface impoundments only receive leachate from their associated WMUs, and do not directly receive discharges of geothermal wastes, an Operations Plan is not required under the circumstances. Moreover, each of the Facility's surface impoundments appear to be somewhat oversized relative to the leachate being generated by their associated WMU; given the limited seasonal rainfall at this location, it is unlikely that at least two feet of freeboard will not be maintained at all times.

WMU Closure

Standards

26. Each WMU is required to be closed so that it no longer poses a threat to water quality. Further, closure activities must be conducted in accordance with an approved Closure and Post-Closure Maintenance Plan[9] (CPCMP) that meets the requirements of Title 27. (Title 27, § 20950, subd. (a)(1).)

---

[9] Preliminary CPCMPs are a required component of a Report of Waste Discharge. (Title 27, §§ 21750(i), 21769(b).)

27. For landfill WMUs (e.g., Cells 1 – 4B), Title 27, section 21090, subdivisions (a)(1)-(3) establishes the prescriptive standard for the "closure" (i.e., covering) of landfills. The prescriptive final cover consists of the following layers, in descending order:

    a. Erosion-Resistant Layer [Top], which is either vegetative or mechanically erosion-resistant (e.g., cobbles and gravel);

    b. Low-Hydraulic Conductivity Layer, consisting of at least one foot of uncontaminated soil (containing no waste or leachate) that is compacted for a hydraulic conductivity of $1x10^{-6}$ cm/sec (i.e., 1 ft/yr) or less; and

    c. Foundation Layer [Bottom], consisting of soil, contaminated soil, incinerator ash or other waste materials, that is "compacted to the maximum density obtainable at optimum moisture content using methods that are in accordance with accepted civil engineering practice," and at least two feet thick.

28. The Regional Water Board may allow any alternative final cover design that will continue to isolate the waste in the WMU from precipitation and irrigation waters at least as well as a prescriptive final cover.[10]

29. For surface impoundment WMUs, Title 27 generally requires "clean closure." Class II surface impoundments are required to be clean-closed per subdivisions (a) and (b)(1) of Title 27, section 21400.

Closure of Cell 3

30. The Discharger anticipates closing Cell 3 within the next five years.

31. Per the Preliminary Closure and Post-Closure Maintenance Plan (Preliminary CPCMP) dated April 2020, the Discharger proposes to construct a final cover consisting of the following layers from top (surface) to bottom:

[10] Alternative final cover designs may be approved without a demonstration that compliance with the prescriptive standard would be infeasible. (Cf. Title 27, § 20080, subds. (b)-(c).)

a. Soil Cover: A native soil layer with minimum thickness of 2-feet. The upper 12 inches will be treated with a soil binder to minimize wind and rain erosion

b. Geotextile: 8-ounce non-woven covering to protect the underlying liner

c. Final Cover Liner: 40-millimeter-thick HDPE geomembrane covering

d. Compacted Clay Liner: A clay layer with a minimum thickness of 2 feet, and a maximum hydraulic conductivity of 10^{-7} cm/s.

32. Because the Discharger's proposed final cover is at least as protective of water quality as the prescriptive standard, the alternative design for Cell 3 is hereby approved.

33. This Order requires the Discharger to submit a Notice of Proposed Closure and Final CPCMP at least 180 days prior to the commencement of closure activities. (Title 27, § 21710, subds. (a)(2), (c)(5).)

Closure of Cells 4A and 4B

34. For Cells 4A and 4B, the Discharger's ROWD/JTD includes a Preliminary CPCMP that proposes the construction of a final cover consisting of the following layers from top (surface) to bottom:

a. Soil Cover: A layer of native soils with a minimum thickness of 2-feet. The top 12 inches will be treated with a soil binder to minimize wind and rain erosion.

b. Geomembrane: A 40-mm thick geomembrane overlain by a cushion geotextile,

c. Geosynthetic Clay Liner: A layer of bentonite clay lain between two geotextile layers. The GCL layer will have a maximum hydraulic conductivity of 5×10^{-9} cm/s or less.

d. Compacted Clay Layer: A two-foot thick layer of drilling muds and cutting materials with high clay content.

35. Due to the limited availability of on-site clay materials for the final cover clay liners proposed for Cells 4A and 4B, the Discharger proposes a Geosynthetic Clay Liner (GCL) system which exceeds the final cover requirements for a low

hydraulic conductivity layer with a maximum hydraulic conductivity of $1x10^{-6}$ cm/s in Title 27, section 21090.

36. Because the Discharger's proposed final cover is at least as protective of water quality as the prescriptive standard, the alternative design for Cells 4A and 4B is hereby approved.

Closure of Surface Impoundments

37. To date, the Discharger has not been required to submit a Preliminary CPCMP proposing the closure of any of its Surface Impoundments (clean-closure or closure as a landfill). (See fn. 5.) In accordance with Title 27, this Order now requires the Discharger to submit a Preliminary CPCMP for each of its Surface Impoundments.

Financial Assurances

38. Title 27 requires dischargers demonstrate their ability to pay for the estimated costs of WMU[11] closure (§§ 20950(f), 22205-22207), for post-closure maintenance (§§ 20950(f), 22210-22212) and for known or reasonably foreseeable corrective action in response to a release (§§ 20380(b), 20950(f), 22220-22222).

39. As of February 2025, the Discharger's financial assurances estimates for Cells 1-3 are listed in the tables below. The Discharger has provided financial assurances for these WMUs to CalRecycle in the form of bonds.

Table 2. Financial Assurance Cost Mechanisms for Cells 1-3.

Category	Estimate
Closure (Cell 3)	$12,744,593

[11] State Water Resources Control Board regulations extend financial assurance requirements to surface impoundments and other WMUs not regulated by CalRecycle. (Title 27, §§ 22207, 22212, 22222.) In such instances, the Regional Water Board must be designated as the beneficiary of the mechanisms.

Post-Closure Maintenance	$5,473,440
Corrective Action	$520,533

Table 3. Financial Assurance Cost Estimates for Cell 4.

Category	Estimate
Closure	$6,667,054
Post-Closure Maintenance	$3,130,770
Corrective Action	$411,981

40. To date, the Discharger has not yet been required to provide cost estimates or financial assurances for Surface Impoundments 1-3, which are subject to similar requirements under Title 27. This Order now requires the Discharger to submit cost estimates (along with a Preliminary CPCMP) and a financial assurances demonstration.

41. Additionally, this Order requires the Discharger to demonstrate financial assurances for Cells 4A and 4B, as well as for Surface Impoundment 4, within 180 days from the issuance of this Order.

Hydrogeology and Climate Conditions

42. There are no surface waters within the Facility boundaries, and the nearest surface water is the Westside Canal, located approximately 1.5 miles northeast of the Facility. The Facility is within the Salton Sea surface water drainage area. The Salton Sea is located approximately five miles to the northeast of the Facility.

43. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (https://msc.fema.gov/portal), the Facility is not located within a 100-year floodplain.

44. The Facility is situated within the Salton Trough. The Salton Trough is a structural basin on the northern extension of the Gulf of California Rift Zone. The trough consists of a depressed crustal block within the plate boundary zone between the North American and Pacific tectonic plates. The rift zone is

comprised of multiple parallel transform faults, including the San Andreas, San Jacinto, and Elsinore fault zones.

45. Typical stratigraphy incorporates up to 21,000 feet of Late Cenozoic Era sediments and metasediments which were deposited primarily by the Colorado River. Other sediment sources include aeolian (wind) and lacustrine (lake) deposits.

46. The Facility is underlain by geologic units of the Pleistocene Brawley Formation. The stratigraphy beneath the Facility reflects changing depositional environments through time. Two thick clay layers (Qb2 and Qb5) are interbedded with coarser deposits (Qb1, Qb3, Qb4, and Qb6) which indicate changes from low-energy depositional environments typical of clay deposits such as bays, deep lakes or lagoons, to relatively higher-energy depositional environments with coarser sediments such as lacustrine shoreline or aeolian dunes. The geologic units of the Brawley formation (from top to bottom) are:

    a. Alluvium (Qb1) – Quaternary alluvium consisting of unconsolidated silty to clayey sands.

    b. Brawley Formation Unit 2 (Qb2) – Exposed at the surface and found underneath Qb1. Qb2 ranges from 5 to 25 feet thick beneath the Facility and is comprised predominantly by lean clay with intermittent lenses of fat, plastic clay.

    c. Brawley Formation Unit 3 (Qb3) – Encountered at the surface on the northwest portion of the proposed Cell 4 and underlying Qb2 across the site. Qb3 ranges in thickness from 5 to 15 feet and is comprised of lean silts.

    d. Brawley Formation Unit 4 (Qb4) – Encountered within the southern portion of the Facility underlying Qb2 and interlaced with Qb3. Qb4 is approximately 5 feet thick and is comprised of silty sands with clayey sand lenses encountered at varying depths.

    e. Brawley Formation Unit 5 (Qb5) – The second clay unit (along with Qb2) beneath the Facility. Qb5 ranges from approximately 5 to 40 feet thick and alternates between lean and fat clays with lenses of sand and lean silt.

    f. Brawley Formation Unit 6 (Qb6) – Underlies Qb5 at various depths beneath the Facility and was encountered between -130 and -160 feet mean sea level. Qb6 is comprised of interbedded sands, silts, and clays.

The exploratory drillings at the Facility's WMUs did not extend through this layer and its thickness beneath the Facility is unknown.

g. Brawley Formation Units 7 and 8 (Qb7 and Qb8) – Encounters of these formations offsite indicate Qb7 is a relatively coarser sand deposit overlying the silty clay Qb8. Their thicknesses beneath the Facility are unknown.

47. The Facility is characterized by generally low-lying level topography with surface elevations ranging from approximately -40 to -140 feet below mean sea level (MSL), with a slight southwest to northeast gradient across the Facility. Surface exposures within the Facility consist of recent alluvial and aeolian deposits, as well as ancient shoreline and lacustrine materials associated with Cahuilla Lake.

48. The Facility is within an active seismic region subject to regular earthquake events, however no recent ground ruptures have occurred at the Facility, and no known faults occur within or adjacent to the Facility footprint. The nearby Elmore Ranch Fault, approximately 0.9 miles from the Facility, and the Superstition Hills Fault, approximately 4.3 miles from the Facility, as well as several small unnamed faults west and south of the Facility last experienced surficial ground rupture in November 1987. Cell 4 was designed to withstand a maximum credible earthquake (MCE) of 6.72 with a distance to rupture of 1.7 km.

49. The seismic design of Cells 3 and 4 were based on the maximum credible earthquake (MCE) in accordance with Title 27, section 20370 and section 21750, subdivision (f)(5). The MCE is the largest earthquake considered possible to occur on a fault under present geologic conditions without regard to recurrence interval. The seismic hazard analysis for Cells 4A and 4B, performed in 2021, indicated a design MCE of $M_w = 6.72$.

50. Shallow groundwater depths beneath the Facility range from 50 to 70 feet below ground surface (bgs), therefore groundwater levels are not expected to contribute to liquefaction settlements.

51. Groundwater in the area of the Facility has been encountered both in a shallow aquifer zone and in a deeper (lower) aquifer. Shallow zone groundwater occurs within eight separate geologic layers within the Pleistocene Brawley Formation. These layers represent ancient lakebed deposits that range from clay lenses to fine-grained sand units. The geologic layers beneath the Facility dip toward the north at a slope of 5 to 8 percent (%) or about 2 to 5 degrees. Due to the sloping layers, wells that are drilled to the same depth within the shallow aquifer zone in

different parts of the Facility are often not completed within the same geologic layer[12].

52. Groundwater quality throughout the region varies between aquifers but generally is characterized by a high total dissolved solids (TDS) content. At the Facility, TDS in the shallow aquifer ranges from 2,000 to 11,000 mg/L and varies significantly between layers of the Brawley Formation. Groundwater from Qb3 has historically ranged between 7,000 to 11,000 mg/L TDS, whereas groundwater sampled from Qb4 and Qb6 ranged from 5,000 to 3,500 mg/L, respectively.

53. There are no domestic water supply wells within one mile of the Facility.

54. The Facility is located in a desert environment which experiences hot summers with maximum temperatures ranging between 104 degrees Fahrenheit (F) to 115°F, and mild dry winters with maximum temperatures ranging between 65°F and 75°F. Precipitation at the site averages 2.5 to 3.0 inches per year, and surface evaporation averages 72-84 inches per year.

55. The typical wet season at the Facility is from November to April; however, rain events occur throughout the year, with monsoon storms occurring in the summer months. The projected 24-hour, 1,000-year storm, and the 24-hour, 100-year storm are expected to yield approximately 9.47 inches, and 3.00 inches, respectively.

56. Winds typically prevail from the west and northwest from late fall to early spring and prevail from the south during the rest of the year.

Monitoring

57. Each WMU is required to be monitored in accordance with Title 27, sections 20385 through 20430.

Water Quality Protection Standard

58. The Monitoring and Reporting Program (MRP) establishes the Water Quality Protection Standard (WQPS) for each WMU, which is the analytical framework

[12] Joint Technical Document, Desert Valley Company Monofill Facility, Appendix I. Cell 3 Geologic Investigation Report

for monitoring groundwater, unsaturated zone and surface water monitoring to detect a release from at the earliest possible time. (Title 27, § 20420, subd. (b).)

59. The WQPS elements are as follows: for the duration of the Compliance Period, the Monitoring Points at the Point of Compliance (POC) are sampled and analyzed for Monitoring Parameters indicative of a release; and if concentrations of Constituents of Concern (COCs), including Five-Year COCs, exceed Concentration Limits, the results are confirmed through Retesting Procedures, and then Corrective Action will be required.

a. **Compliance Period.** The "compliance period" is the minimum time for which a water quality monitoring will be required—i.e., equal to the sum of active years and the closure period. (§ 20410.) The period restarts each time an Evaluation Monitoring Program (EMP) is initiated for a given WMU. (§§ 20410(a), 20415, 20425.) If a WMU is in corrective action, the period continues until it is demonstrated that the WMU has been in continuous compliance with its WQPS for at least three years. (§ 20410, subd. (c).)

b. **Monitoring Points**. For WQPS purposes, a "monitoring point" is any well, device, or location where monitoring is conducted, as specified in the WDRs. (Title 27, § 20164.)

c. **Point of Compliance (POC)**. The POC is a vertical plane at the WMU's hydraulically downgradient limit, extending through the uppermost underlying aquifer. (Title 27, §§ 20164, 20405(a).) The POC monitoring wells are discussed further below.

d. **Monitoring Parameters.** Monitoring Parameters are a predetermined set of Constituents of Concern (see below) and measurable physical characteristics (e.g., temperature, electrical conductivity, pH), which serve as reliable indicators of a release, and for which samples will therefore be routinely analyzed. (Title 27, §§ 20164, 20395(a), 20420(e)-(f).)

e. **Constituents of Concern (COCs).** COCs are Monitoring Parameters that consist of waste constituents, reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in a WMU. (Title 27, §§ 20164, 20395.)

f. **Five-Year COCs.** Five-Year COCs are a subset of Monitoring Parameter COCs for which analyses are only required every five years. They are essentially a broader range of Monitoring Parameter COCs that do not require more frequent monitoring.

g. **Concentration Limits.** The Concentration Limit is the "background concentration" for each Monitoring Parameter, as determined by the statistical methods outlined in subdivision (e)(8) of Title 27, section 20415. (Title 27, § 20400, subds. (a), (b).)

h. **Retesting Procedures.** If monitoring results indicate "measurably significant" evidence of a release, the MRP requires the Discharger to follow one of two retesting procedures, depending on whether the COC is naturally occurring (i.e., detected in at least 10 percent of background samples).

Monitoring Networks

60. As of the date of this Order, the Facility's groundwater monitoring network consists of the wells listed in Table 4 below. These wells are also depicted in Figure 5 (p. 68).

Table 4. Current Groundwater Monitoring Network.

WMU	Monitoring Wells
Landfill Cells 1 and 2	W-01, W-09A, W-10A, W-11, W-12
Surface Impoundments 1 and 2	W-09A, W-10A, W-11, W-12
Landfill Cell 3	W-302, W-305, W-306, W-307, W-308, W-309
Surface Impoundment 3	W-10A, W-305, W-307, W-308
Landfill Cells 4A and 4B, and Surface Impoundment 4	W-401, W-402, W-403

61. Due to the natural variability of the water quality of the uppermost aquifer below the Facility, the background water quality cannot be determined consistently from an upgradient monitoring well, therefore, each groundwater well at the Facility is used as its own background for purposes of detection monitoring. This approach has been used for Cells 1 through 3, and will continue with Cell 4 and its associated surface impoundment (Title 27, § 20415, subd. (b)). Background groundwater quality has already been monitored for a minimum of one year in wells W-401, W-402, and W-403 (Figure 4).

62. The Discharger implements a range of unsaturated zone (vadose zone) monitoring systems that allow for early detection of potential releases.

    a. For Cells 1-3 and Surface Impoundments 1-3, the monitoring systems consist of neutron probe access tubes used to monitor moisture levels. These vadose zone monitoring probes are designated Z-2 through Z-7.

    b. For Cells 4A and 4B, the Discharger proposes to implement an engineered alternative that utilizes an additional liner and sump located beneath the LCRS sump and liner to capture all liquids that are released from the primary and secondary liner. This tertiary sump system will essentially function as a pan lysimeter beneath WMUs liners and sump systems. For the purposes of Title 27, section 20380, subdivision (e), this engineered alternative meets the requirements of Title 27, section 20080, subdivisions (b)-(c), and achieves the goals for detection monitoring per Title 27, section 20420, subdivision (b).

    c. For Surface Impoundment 4, this Order requires the Discharger to propose and implement an unsaturated zone monitoring system.[13] (See Special Provisions.)

63. Surface water monitoring is not required because there are no surface watercourses within the immediate vicinity that could be affected by a release. (Title 27, § 20415, subd. (c)(1).)

Other Regulatory Considerations

Basin Plan Implementation

64. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) designates beneficial uses and establishes water quality objectives for ground and surface waters in the Region, and contains implementation programs and policies to achieve objectives.

[13] The Discharger previously proposed to implement a management/inspection schedule in lieu of an unsaturated zone monitoring network/system, as required by Title 27.

65. The Facility is located in the Imperial Hydrologic Unit. The designated beneficial uses of the groundwaters in the Imperial Hydrologic Unit are:

    a. Municipal supply (MUN)

    b. Industrial supply (IND)

66. These WDRs implement numeric and narrative water quality objectives for groundwater and surface waters established by the Basin Plan and other applicable state and federal laws and policies. The numeric objectives for groundwater designated for municipal and domestic supply (MUN) include the Maximum Contaminant Levels (MCLs) and bacteriological limits specified in California Code of Regulations, title 22, section 64421 et seq. The Basin Plan states that groundwater for use as domestic or municipal water supply (MUN) shall not contain taste- or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity.

67. These WDRs implement state regulations applicable to the discharge of solid/designated waste to land found in Title 27. These regulations contain classification criteria for wastes and for disposal sites, and prescribe minimum standards for the siting, design, construction, monitoring, and closure of the WMUs.

Permitting Authority

68. This Order is issued pursuant to Water Code section 13263, subdivision (a), which provides that “[t]he regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed.”

69. Water Code section 13263, subdivision (a) further provides that WDRs “shall implement water quality control plans and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required

for that purpose, other waste discharges, the need to prevent nuisance[14], and the provisions of Section 13241."

70. The ability to discharge waste is a privilege, not a right. The adoption of this Order shall not be construed as establishing a vested right in the continuance of discharge activities. (Wat. Code, § 13263, subd. (g).)

71. This Order establishes WDRs pursuant to division 7, chapter 41, article 4 of the Water Code for discharges that are not subject to regulation under Clean Water Act section 402 (33 U.S.C. § 1342).

72. For the purposes of waste discharge fees under California Code of Regulations, title 23 (Title 23), section 2200, the Facility has a threat-complexity rating of **2-B**.

    a. Threat Category "2" reflects waste discharges that can impair receiving water beneficial uses, cause short-term water quality objective violations, cause secondary drinking water standard violations, and cause nuisances.

    b. Complexity Category "B" reflects any discharger not included in Category A, with either (1) physical, chemical or biological treatment systems (except for septic systems with subsurface disposal), or (2) any Class II or Class III WMUs.

Monitoring and Reporting Requirements

73. This Order is also issued pursuant to Water Code section 13267, subdivision (b)(1), which provides that the Regional Water Board may require that persons discharging waste within the region "shall furnish, under penalty of perjury, technical or monitoring program reports," provided that the discharger's burdens of compliance, including costs, is reasonable relative to the need for the submittals and the benefits to be obtained.

[14] "Nuisance" is defined by statute as a condition that: "(1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property[;] [¶] (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons…[;] [and] [¶] (3) Occurs during, or as a result of, the treatment or disposal of wastes." (Wat. Code, § 13050, subd. (m).)

74. The various notifications, technical reports and monitoring program reports required under this Order, including those contained within the MRP in **Attachment A**, are necessary to ensure compliance with the WDRs.

75. In accordance with section 13267, the burdens of monitoring and reporting imposed on the Dischargers under this Order and the MRP, are reasonable relative to the need for compliance described above.

76. The technical reports required under this Order, as well as those required under the MRP, are necessary to ensure compliance with prescribed WDRs. Additionally, the burdens associated with such reports are reasonable relative to the need for their submission.

77. The Executive Officer may issue a Revised MRP as a standalone order, pursuant to their delegated authority under Water Code section 13223 and Regional Water Board Resolution R7-2022-0036. Upon issuance, the Revised MRP shall supersede the provisions of **Attachment A**.

Antidegradation Policy

78. The Basin Plan incorporates the State Water Board's *Statement of Policy with Respect to Maintaining High Quality Waters in California*, Resolution 68-16 (Antidegradation Policy), which prohibits the Regional Water Board from authorizing discharges that will result in the degradation of "high quality waters," unless it is demonstrated that any such degradation in water quality:

79. Will not unreasonably affect beneficial uses,[15] or otherwise result in water quality less than that prescribed in applicable plans and policies (e.g., violation of WQOs);

    a. Is minimized through best practicable treatment or control (BPTC);

    b. Is consistent with maximum benefit to the people of the state of California.

80. In accordance with Title 27, this Order requires total containment of all wastes discharged to the Surface Impoundment (§ 20310, subds. (a)-(b)), and in the

[15] The Water Code defines "Pollution" in relevant part as the "alteration of the quality of the waters of the state by waste to a degree which unreasonably affects … [¶] [t]he waters for beneficial uses." (Wat. Code, § 13050, subd. (l)(1)(A).)

event of a release, corrective action (§ 20340). Compliance with these WDRs will preclude any degradation in quality of the waters of the State of California. Accordingly, this Order is consistent with the Antidegradation Policy.

Stormwater

81. Federal regulations for stormwater discharges were promulgated by the U.S. Environmental Protection Agency (USEPA) on November 16, 1990 (40 C.F.R. parts 122, 123, and 124) to implement the Clean Water Act's stormwater program set forth in Clean Water Act section 402(p) (33 U.S.C. § 1342(p)). In relevant part, the regulations require specific categories of facilities that discharge stormwater associated with industrial activity to "waters of the United States" to obtain National Pollutant Discharge Elimination System (NPDES) permits and to require control of such pollutant discharges using Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards.

82. The State Water Board adopted Order 2022-0057-DWQ (NPDES NO. CAS000002), *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit), which regulates Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. The Facility will enroll under the Construction General Permit during the construction phase.

83. The State Water Board adopted Order 2014-0057-DWQ (NPDES No. CAS000001), General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit), as amended in 2015 and 2018 which became effective on July 1, 2020. The Industrial General Permit regulates discharges of stormwater associated with certain industrial activities, excluding construction activities, and requires submittal of a Notice of Intent (NOI) to be covered under the permit. When requested by the Water Boards to obtain General Permit coverage, entities must meet these "No Discharge" eligibility requirements or obtain General Permit coverage. This Order makes no determination as to the Discharger's need for enrollment under the Industrial General Permit.

84. The final surfaces, interim surfaces, and top deck areas of the landfill Cells will be sloped to promote controlled runoff of stormwater which falls directly onto the Cell. Channels, basins, and other drainage control structures will be constructed during various phases of construction and operations.

85. During a storm event, any runoff from normal operations will be collected and routed inside of a perimeter conveyance system along the perimeters of the WMUs to stormwater runoff channels. Run-on berms on the south and west sides of the Facility will route incoming stormwater along the northern perimeter of the Facility and around the WMUs.

Additional Considerations

86. Water Code section 106.3, subdivision (a) provides that it is "the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." Although subdivision (a) does not apply directly to the prescribing of WDRs (see Wat. Code, § 106.3, subd. (b)), this Order nevertheless furthers the stated policy by requiring that the receiving groundwater comply with WQOs protective of MUN beneficial uses.

CEQA and Public Participation

87. A Notice of Determination for the Environmental Impact Report (EIR) for this Facility was received by the State Clearinghouse (SCH No. 1990102236) on July 18, 1990. Imperial County Department of Public Works acting as the lead agency drafted an amended EIR for the proposed expansion. The EIR was notified and circulated for public comment in accordance with Public Resources Code, section 21000 et seq. A Final EIR for the Facility expansion and construction of Cell 4 was approved by the Imperial County Board of Supervisors on January 25, 2022 (CUP# 21-0001) and filed under State Clearinghouse No. 2019120605.

88. Water Code section 13149.2, subdivision (d) requires that the Regional Water Board, "[w]hen issuing … individual WDRs … that regulate activity or a Facility that may impact a disadvantaged[16] or tribal community,[17] and that includes a

[16] For the purposes of this requirement, a "disadvantaged community" is defined as a "community in which the median household income is less than 80 percent of the statewide annual median household income level." (CWC, § 13149.2, subd. (f)(1).)

[17] For the purposes of this requirement, a "tribal community" is defined as a "community within a federally recognized California Native American tribe or non-federally recognized Native American tribe on the contact list maintained by the Native American

time schedule in accordance with subdivision (c) of Section 13263 for achieving an applicable water quality objective, an alternative compliance path that allows time to come into compliance with water quality objectives, or a water quality variance…," shall include finding(s) regarding "potential environmental justice,[18] tribal impact, and racial equity considerations" that are relevant to the permitting action. This Order does not incorporate a time schedule for compliance with applicable WQOs, or any of the other provisions described in Water Code section 13149.2, subdivision (d). Accordingly, no additional findings are necessary under section 13149.2.

89. In developing these WDRs, Colorado River Basin Water Board staff have complied with Water Code section 189.7, subdivision (a)(1), which requires "equitable, culturally relevant community outreach to promote meaningful civil engagement from potentially impacted communities of proposed discharges of waste that may have disproportionate impacts on water quality in disadvantaged communities or tribal communities…."

90. The Dischargers and other interested public agencies and persons were notified of the Regional Water Board's intent to prescribe the WDRs in this Order and provided an opportunity to submit their written views and recommendations at a public hearing. (Wat. Code, § 13167.5.)

91. The Regional Water Board, in a public meeting, heard and considered all timely comments pertaining to this discharge.

Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004." (CWC, § 13149.2, subd. (f)(2).)

[18] Water Code section 13149.2 incorporates the general definition of "environmental justice" in Public Resources Code section 30107.3, subdivision (a): "the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." (Wat. Code, § 13149.2, subd. (f).)

REQUIREMENTS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13263 and 13267, that R7-2016-0016 is rescinded (except for enforcement purposes), and that the Dischargers shall comply with the following requirements.

A. Prohibitions

1. Wastes that are required to be managed as “hazardous waste” shall not be accepted or discharged at the Facility.

2. Wastes shall not be discharged, directly or indirectly, to any of the following:

    a. Closed WMUs;

    b. Areas outside of Cell 3 [until closed], Cells 4A and Cell 4B, and Surface Impoundments 1-4;

    c. Surface waters or surface drainage courses;

    d. Land not owned or controlled by the Discharger; and

    e. Groundwater or the unsaturated zone.

3. Except as expressly approved in writing by the Executive Officer, the discharge of liquid or semi-solid waste to Cells 3, 4A and 4B.

4. The disposal of incompatible wastes or wastes that, when mixed or commingled with other wastes, may create heat, pressure, fire, explosion, toxic by-products, or other chemical reactions that: (1) impair the integrity of the containment structures, or (2) generate products requiring a higher level of containment than provided by the waste management unit into which the wastes are placed, is prohibited.

5. The storage, treatment, or disposal of wastes shall not cause contamination, pollution, or nuisance as defined in Water Code section 13050, subdivisions (k), (l), and (m).

6. Domestic waste shall not be discharged to any WMUs at the Facility.

B. Discharge Specifications

1. The Discharger is authorized to discharge the wastes described in Finding 12 to the following WMUs: Cell 3 (until closed); Cells 4A and 4B; and Surface Impoundments 1-4.

2. Thirty days prior to introduction of a new waste stream into the monofill, the Discharger shall request approval from the Colorado River Basin Water Board's Executive Officer.

3. The Discharger shall remove any wastes that are discharged at this site in violation of these requirements.

C. WMU Operations

1. Surface Impoundments

   a. Surface Impoundments shall be designed, constructed, operated, and maintained to limit, to the greatest extent possible, erosion, slope failure, overtopping, inundation or washout, and damage resulting from natural disasters such as: stormwater; the maximum credible earthquake (MCE); and severe wind storms; or overtopping and/or structural failure.

   b. Surface Impoundments shall be designed and constructed to prevent scouring of containment structures at points of discharge into the impoundments and by wave action at the waterline. (Title 27, § 20375, subd. (e).)

   c. The Discharger shall maintain sufficient freeboard within each Surface Impoundment to accommodate seasonal precipitation and a 1000-year, 24-hour storm, but in no case less than two feet (measured vertically, from the water surface up to the point on the surrounding lined berm, etc. having the lowest elevation). (Title 27, § 20375, subd. (b).)

   d. Prior to directly receiving geothermal wastes, the Discharger shall submit an Operations Plan per Title 27, section 20375, subdivision (b).

   e. Residual solids obtained from wastewater discharged to the Surface Impoundments shall be discharged at the active landfill

units or at a solid waste management facility permitted to receive such wastes.

f. The Discharger shall maintain legible records on the volume and type of waste removed from the Surface Impoundments and shall submit a shipping manifest or other appropriate documentation showing the disposal method and location.

2. Leachate Collection and Removal Systems (LCRS)

a. Leachate shall be removed from LCRS sumps as often as needed to prevent the liquid in the sump from backing up into the collection portion of the LCRS. The removed liquid may be discharged into any of the Facility's operating Surface Impoundments (including the WMU from which it originated). If leachate generation exceeds the volume needed for safe pump operation, then the Operators shall notify the Regional Water Board in writing within **seven days**. Notification shall include a timetable for a remedial action to repair the containment structures or other action necessary to reduce leachate production.

D. New WMU Construction

1. Except as expressly authorized by the Executive Officer in writing, the Discharger shall construct Cells 4A and 4B, and Surface Impoundment 4 in accordance with the specifications in the JTD/ROWD.

2. Construction Quality Assurance

a. For each WMU to be constructed, the Discharger shall establish and implement a Construction Quality Assurance (CQA) Program to demonstrate that materials and procedures utilized in the placement of the any WMU containment feature are tested and monitored in such a manner as to ensure that the containment feature structure is constructed in accordance with the approved design specifications. (Title 27, § 20324, subd. (a.)

b. CQA Programs shall be supervised by a registered civil engineer or a certified engineering geologist, designated as the "CQA Officer." (Title 27, § 20324, subd. (b)(2).)

c. The Discharger shall propose an electronic leak location survey of the top liner for new WMUs in the CQA Plan, unless the Discharger demonstrates that a leak location survey is not needed.

d. Each WMU shall be constructed in accordance with the CQA Plan certified by the CQA Officer. (Title 27, § 20323.)

e. The Discharger shall notify the Regional Water Board staff at least 14 days prior to commencing field construction activities for new WMUs.

f. Following the completion of construction activity for a new WMU, but at least 60 days prior to discharge, the Discharger shall submit, for review and approval, the Final Documentation described in subdivision (d)(1)(C) of Title 27, section 20324. This submittal shall be certified by the CQA Officer and demonstrate that the new Unit:

i. Was constructed in accordance with the approved design plans and specifications, the CQA Plan and any other relevant provisions herein; and

ii. Meets the applicable Title 27 performance standards, as set forth in section 20310 et seq.

g. Waste shall not be discharged to a new WMU until each of the following has occurred:

i. For Surface Impoundment 4, there is an Executive Officer-approved unsaturated zone monitoring system in place;

ii. The WMU has been subject to a final inspection and approval Board staff. (Title 27, § 20310, subd. (e)); and

iii. The Final Documentation (see above) has been reviewed and approved by the Regional Water Board's Executive Officer.

3. All containment structures shall be designed by, and construction shall be supervised by, a California registered civil engineer or a certified engineering geologist, and shall be certified by that individual as meeting the applicable Title 27 prescriptive standards, or an approved engineered alternative design.

4. Wastes shall not be discharged to a newly-constructed WMU until the Discharger has submitted financial assurances for closure, post-closure maintenance (as applicable[19]) and corrective action.

E. Closure and Post-Closure Maintenance

1. The Discharger shall submit a final or partial final closure and post-closure maintenance plan (CPCMP) at least **two years** prior to the anticipated date of closure of a WMU. (Title 27, § 21780, subd. (d)(1).)

2. Unless the Discharger demonstrates that it would be infeasible to do so, all of the Facility's surface impoundments shall be clean-closed as described in subdivisions (a) and (b)(1) of Title 27, section 21400. Closure of a surface impoundment shall occur once it is no longer necessary to receive leachate from the associated WMU.

3. Post-Closure Maintenance[20]

   a. For the duration of each WMU's post-closure maintenance period, the Discharger shall:

      i. Maintain the structural integrity and effectiveness of all containment structures, and maintain the final cover as necessary to correct the effects of settlement or other adverse factors;

      ii. Continue to operate leachate collection and removal systems (LCRS) as long as leachate is generated and detected;

      iii. Monitor groundwater and the unsaturated zone in accordance with the operative Monitoring and Reporting Program and Title 27, section 20380 et seq.;

---

[19] To the extent that they are proposed to be clean-closed, surface impoundments do not require financial assurances for post-closure maintenance.

[20] This section applies to WMUs that are not clean-closed (i.e., closed with a final cover).

iv. Prevent erosion and related damage of the Closed Landfill's final cover due to drainage; and

v. Protect and maintain surveyed monuments installed per Section E.3.b below. (Title 27, § 21090, subd. (c).)

b. Closed WMUs shall have at least two permanent surveying monuments, installed by a licensed land surveyor or by a registered civil engineer, from which the location and elevation of all wastes, containment structures, and monitoring facilities can be determined throughout the post-closure maintenance period. (Title 27, § 20950, subd. (d).)

c. When repairs are needed for a monolithic final cover, the final cover's low-hydraulic conductivity layer, or other Board-approved final cover, such repairs shall be conducted in accordance with an approved Construction Quality Assurance Plan (CQA Plan) and the operative CPCMP or equivalent document. (Title 27, § 21090, subd. (b)(1)(E).)

d. Final covers incorporating a low-hydraulic conductivity layer, the Discharger shall conduct a periodic leak search to monitor the integrity of the final cover in accordance with the schedule in the approved CPCMP or equivalent document. (Title 27, § 21090, subd. (a)(4)(A).)

e. Dischargers shall periodically inspect and identify problems with the final cover including areas that require replanting, erosion, areas lacking free drainage, areas damaged by equipment operations, and localized areas identified in the required five-year iso-settlement survey. (Title 27, § 21090, subd. (a)(4)(B).)

f. After final cover installation, the Discharger may perform minor modifications to problematic areas, provided that: (a) the barrier layer of the final cover (e.g., geomembrane, GCL and/or compacted clay layer) remains intact; and (b) the Board approves of such modifications. For final covers incorporating an engineered alternative, the Discharger may perform remedial actions on the final cover in accordance with an approved workplan detailing how the final cover shall be restored so as to provide the full protection of its original design.

g. If the final cover incorporates a geomembrane barrier, all edges of the final cover shall remain sealed to the liner.

h. The Discharger shall ensure that methane and other landfill gases (LFG) are adequately vented, removed from closed WMUs, or otherwise controlled to prevent the danger of adverse health effects, nuisance conditions, degradation, or the impairment of the beneficial uses of water to migration through the unsaturated zone.

F. General Facility and Stormwater Requirements

1. Waste materials shall not be discharged on any ground surface that is less than five (5) feet above the highest anticipated groundwater level.

2. Public contact with wastes shall be precluded through fences, signs, or other appropriate alternatives.

3. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources, shall not contact or percolate through the wastes discharged at the Facility.

4. The exterior surfaces of the disposal area, including the intermediate and final Landfill covers, shall be graded and maintained to promote lateral runoff of precipitation and to prevent ponding.

5. The Facility shall be operated and maintained to prevent inundation, washout, or erosion of wastes or covering material which could occur as a result of floods having a predicted frequency of once in 100 years.

6. The LDS systems for Cells 4A and 4B will also be inspected weekly, and any liquid found shall be removed and stored in either an above ground storage tank or a lined Surface Impoundment.

G. Financial Assurances

1. The Dischargers shall provide financial assurances of ability to pay for the costs of closure and, as applicable, post-closure maintenance[21] of each WMU at the Facility. (Title 27, § 22510, subd. (f); see also § D.6 herein for newly-constructed WMUs.) Financial assurance shall be provided via the mechanisms specified in Title 27, sections 22225 through 22254.

2. Within 180 days of the adoption of this Order, the Dischargers shall demonstrate to the Regional Water Board that it has established acceptable financial assurance mechanisms described in subchapter 3 ("Allowable Mechanisms") of Title 27, division 2, subdivision 1, chapter 6 in at least the amount of the cost estimates for corrective action, closure, and post-closure maintenance.

3. Financial assurances cost estimates shall be periodically updated as provided in the attached MRP (or subsequently-issued Revised MRP).

H. Special Provisions

1. **Preliminary Closure Plan for Surface Impoundments**. Within 180 days,[22] the Discharger shall submit an updated Preliminary Closure Plan describing all of the activities necessary to clean-close all Surface Impoundments in accordance with Title 27, section 21400. Additionally, each plan shall contain all of the information specified in Title 27, sections 21750(i), 21769(b), excluding those components specifically related to the post-closure maintenance period. In particular, the plan shall include cost estimates for clean-closure.

2. **Financial Assurance Demonstrations for Surface Impoundments.** Within 180 days[21], the Discharger shall submit documentation of having obtained financial assurance mechanisms for clean-closing all Surface Impoundments at the Facility, as described in the Preliminary Closure Plan (Title 27, §§ 20950(f), 22207); and addressing to foreseeable releases from the Surface Impoundments (Title 27, § 22222). The

---

[21] To the extent that they are proposed to be clean-closed, surface impoundments do not require financial assurances for post-closure maintenance.

[22] Unless otherwise specified, all deadlines are relative to the date of adoption.

mechanism(s) used to provide financial assurance shall conform with the provisions of Title 27, sections 22225 to 22254, and name the Regional Water Board as a beneficiary (as applicable). (Title 27, §§ 22207, 22222.)

3. **Vadose Zone Monitoring Work Plan for Surface Impoundment 4.** Prior to commencing construction on Surface Impoundment 4, the Discharger shall submit, for Executive Officer review and approval, a Vadose Zone Monitoring System Work Plan proposing an unsaturated zone monitoring network that complies with Title 27 prescriptive standards, or alternatively, an engineered alternative that complies with Title 27, sections 20080 and 20380.

I. Standard Provisions

1. **Operation and Maintenance.** The Operators shall at all times properly operate and maintain all systems and components the Facility installed or used to achieve compliance with this Order. Proper operation and maintenance include effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained and made available to the Regional Water Board on request.

2. **Backup Generators**. Power generating apparatuses shall be available to operate the solution conveyance and collection systems during a commercial power failure.

3. **Duty to Mitigate.** The Dischargers shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment.

4. **Operational Personnel.** The Facility shall be supervised and operated by persons possessing the necessary expertise in the operation and maintenance of the Facility. Further, the Operators shall ensure that all site-operating personnel are familiar with the content of this Order and maintain a copy of this Order at the Facility.

5. **Inspection and Entry.** The Dischargers shall allow the Regional Water Board staff, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

   a. Enter the premises regulated by this Order, or the place where records are kept under the conditions of this Order;

   b. Have access to and copy, at reasonable times, records kept under the conditions of this Order;

   c. Inspect at reasonable times any facilities, equipment (including 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.

6. **Records Retention.** The Dischargers shall retain copies of all reports required by this Order and the associated MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Executive Officer.

J. Monitoring and Reporting Provisions

1. **Compliance with Monitoring and Reporting Program.** The Dischargers shall comply with the MRP in Attachment A, or in the event of a subsequently issued Revised MRP, the provisions of that Revised MRP, which shall supersede the provisions of Attachment A.

2. **Notification Requirements**

   a. **Change in Ownership.** This Order is not transferable to any person without written approval from the Regional Water Board's Executive Officer. Prior to any change in ownership of this operation, the Dischargers shall notify the Regional Water Board's Executive Officer in writing at least **30 days** in advance. The notice shall include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement

shall contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment that the new owner or operator is liable for compliance with this Order from the date of transfer. The Regional Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary

b. **Noncompliance.** The Dischargers shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally to the Regional Water Board and the Office of Emergency Services (OES) within **24 hours** of when the Discharger becomes aware of the incident. If noncompliance occurs outside of business hours, the Discharger shall leave a message on the Regional Water Board's voicemail.

A written report shall also be provided within **five business days** of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. A final certified report shall be submitted online through the GeoTracker database (https://geotracker.waterboards.ca.gov/). Additional information may be added to the certified report, in the form of an attachment, at any time. All other forms of noncompliance shall be reported in the next scheduled SMR, or earlier if requested by the Executive Officer.

c. **Slope Failures.** The Discharger shall promptly notify the Board of any slope failure occurring at a WMU, and shall promptly correct any failure which threatens the integrity of containment features.

d. **Earthquakes.** Following an earthquake that generates significant ground shaking (Modified Mercalli Intensity Scale V or greater) at or near the Facility, the Dischargers shall submit a detailed post-earthquake inspection and corrective action plan (if necessary). The plan shall address damage to and corrective measures for: containment structures; leachate control and stormwater management systems; wells and equipment to monitor groundwater; and any other system/structure potentially impacted by static and seismic deformations of the WMUs at the Facility. The

Discharger shall notify the Executive Officer immediately, but no later than **24 hours**, of damage to the Facility due to an earthquake, and provide a post-earthquake inspection report within **15 business days**.

e. **Spills.** In the event of any spills or other unauthorized discharges at the Facility that exceed the reporting thresholds of applicable statutes and regulations (as summarized by the California Office of Emergency Services at *https://www.caloes.ca.gov/wp-content/uploads/Fire-Rescue/Documents/Release-Reporting-Matrix.pdf*) the Operators shall do the following:

i. Orally report to the Regional Water Board staff and the Office of Emergency Services within **24 hours** of when the Operators become aware of the incident. If noncompliance occurs outside of business hours, the Operators shall leave a message on the Regional Water Board's office or staff's voicemail.

ii. Provide a written report within **five business days** of the time the Operators become aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Operators shall estimate the total volume as well as the vertical and horizontal extent of the spill/leak/release.

iii. Submit a follow-up report within **30 days** that includes confirmation sampling results indicating that cleanup goals have been achieved.

iv. If the release or spill was captured in appropriate secondary containment, the Operators do not need to submit the follow-up report, nor do the Operators need to conduct confirmation sampling. However, the Operators shall inform the Regional Water Board that the spill was successfully contained within secondary containment within the Oral and Writing Reporting timeline specified above.

3. **General Reporting Requirements**

a. **Electronic Submittal.** All materials shall be submitted electronically via the GeoTracker Database (https://geotracker.waterboards.ca.gov).[23] After uploading, the submitting party shall notify Regional Water Board staff via email to RB7_WDRs_paperless@waterboards.ca.gov, or another address specified by staff. The following information shall be included in the body of the email:

Attention:	Land Disposal Unit
Report Title:	[Report Title]
Upload ID:	[Number]
Facility :	Desert Valley Monofill
County:	Imperial County
GeoTracker ID:	L10003472657

b. **Qualified Professionals.** All technical reports[24] submitted under this Order shall be prepared by, or under the direct supervision of, a competent licensed civil engineer or engineering geologist (Qualified Professional). The submittal shall be signed and stamped by the Qualified Professional and contain a brief summary of the Qualified Professional's qualifications.

c. **Certification.** All submittals under this Order shall be accompanied by a transmittal containing the certification language below that is signed by either the Required Signatory, as identified in the table below, or their Authorized Representative. To act as an Authorized Representative for a Required Signatory, an individual shall be identified[25] and duly authorized in writing by the Required Signatory; this written authorization shall be provided to the

[23] Large files must be split into appropriately labelled, manageable file sizes and uploaded into GeoTracker.

[24] A "technical report" is a one incorporating the application of scientific or engineering principles.

[25] This identification may be in reference to the Authorized Representative's title or position, provided it is one that customarily has the responsibility of supervising the Facility's overall operation (e.g., facility manager, superintendent).

Regional Water Board beforehand, or concurrently with the first submittal signed by the Authorized Representative.

> I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Table 5. Required Signatories for Submittals.

Category of Discharger	Required Signatory
Corporations	Senior Vice President or Equivalent Principal Executive
Limited Liability Companies (LLCs)	Manager
General Partnerships and Limited Partnerships (LPs)	General Partner
Sole Proprietorships	Sole Proprietor
Public Agencies	Principal Executive or Ranking Elected/Appointed Official

4. **Data Presentation.** In reporting monitoring data, the Discharger shall arrange data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. Additionally, data shall be summarized in a manner that clearly illustrates compliance/noncompliance.

    a. Unless reporting limits are specified in the same table, non-detections and sub-RL concentrations shall be reported as "< [limit]" (e.g., "< 5 µg/L").

    b. Absent specific justification, all monitoring data shall be reported in the units specified herein.

c. All analytical data shall be reported with method detection limits (MDLs) and with either the reporting level or limits of quantitation (LOQs) according to 40 C.F.R. part 136, Appendix B. The laboratory reporting limit for all reported monitoring data shall be no greater than the practical quantitation limit (PQL).

5. **Quality Assurance / Quality Control (QA/QC).** Quality Assurance / Quality Control (QA/QC) data shall be reported, along with the sample results to which they apply, including the method, equipment, and analytical detection limits, the recovery rates, an explanation of any well recovery rate that is less than 80 percent, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analyses, and the name and qualifications of the person(s) performing the analyses. Sample results shall be reported unadjusted for blank results or spike recovery. In cases where contaminants are detected in QA/QC samples (i.e., field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged, but the analytical results shall not be adjusted.

LIST OF ATTACHMENTS

Attachment A — Monitoring and Reporting Program
Attachment B — Maps and Facility Diagrams

ENFORCEMENT

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Regional Water Board reserves the right to take any enforcement actions authorized by law.

ADMINISTRATIVE REVIEW

Any person aggrieved by this Regional Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and CCR, title 23, section 2050 et seq. To be timely, the petition shall be received by the State Water Board by 5:00 pm on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday or state holiday, the petition shall be received by the State Water

Board by 5:00 pm on the next business day. The law and regulations applicable to filing petitions are available on the State Water Board website (http://www.waterboards.ca.gov/public_notices/petitions/water_quality). Copies will also be provided upon request.

ATTACHMENT A — MONITORING AND REPORTING PROGRAM

A. General Monitoring Requirements

1. **Representative Sampling.** All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the chain of custody form for the sample. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved in writing by Regional Water Board staff.

2. **Instrumentation and Calibration.** All monitoring instruments and devices used by the Discharger shall be properly maintained and calibrated to ensure their continued accuracy. Any flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices. In the event that continuous monitoring equipment is out of service for a period greater than **24 hours**, the Discharger shall obtain representative grab samples each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. The Discharger shall report the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

3. **Field Test Instruments.** Field test instruments (e.g., those used to test pH, and electrical conductivity) may be used provided:

    a. The user is trained in proper use and maintenance of the instruments,

    b. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer,

    c. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency, and

    d. Field calibration reports are submitted.

4. **30-Day Sample Collection Limitation.** For any given monitored medium, the samples collected from all monitoring points and background monitoring points to satisfy the data analysis requirements for a given reporting period shall all be collected within a span not to exceed 30 days, unless a longer time period is approved by the Executive Officer and shall

be collected in a manner that ensures sample independence to the greatest extent feasible.[1]

5. **Testing and Analytical Methods.** The collection, preservation, and holding times of all samples shall be performed in accordance with USEPA-approved procedures. Except as otherwise specified in the MRP or as approved in writing by the Executive Officer, all analyses shall be conducted in accordance with the latest editions of either of the USEPA's *Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act* (40 C.F.R. part 136); or *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods Compendium* (SW-846).

6. **Laboratory Certification.** Except as otherwise approved in writing by the Executive Officer, all analyses shall be conducted by a laboratory certified by the State Water Board, Division of Drinking Water Environmental Laboratory Accreditation Program (ELAP).

7. **Records Retention.** The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if continuous monitoring instruments are used), for a minimum of five years from the date of the sampling or measurement. Records of monitoring information shall include:

    a. The date, exact place, and time of sampling or measurement(s);

    b. The individual(s) who performed the sampling or measurement(s);

    c. The methods used for groundwater purging/sampling;

    d. The date(s) analyses were performed;

    e. The individual(s) who performed the analyses;

    f. The analytical techniques or method used; and

[1] The 30-day limit does not apply to media that (1) are resampled to confirm the results of the initial round of samples, or (2) are resampled due to errors in the original sampling and analysis, but the Discharger shall conduct the resampling as expeditiously as practical.

g. All sampling and analytical results, including units of measurement used, minimum reporting limit for the analyses, results less than the reporting limit but above the method detection limit (MDL), data qualifiers and a description of the qualifiers, quality control test results (and a written copy of the laboratory quality assurance plan), dilution factors, if used, and sample matrix type.

B. Detection Monitoring Program

1. General Requirements

a. To detect a release at the earliest possible opportunity, the Discharger shall implement a Detection Monitoring Program (DMP) for groundwater, the unsaturated zone and surface water in accordance with the provisions of Title 27, sections 20415 and 20420.[2] A separate DMP is required for each WMU (including Surface Impoundments).

b. Additional monitoring points shall be added as necessary to provide the best assurance of the earliest possible detection of a release. (Title 27, § 20415, subd. (b)(1)(B)2.)

1. Groundwater

a. **General Standards.** The Discharger shall operate and maintain a groundwater monitoring system that complies with the applicable provisions of Title 27, sections 20415 and 20420. Monitoring shall be performed in accordance with the locations, frequencies, and parameters described below.

b. **Monitoring Well Locations.** The Facility's groundwater monitoring network currently consists of the wells listed below in Table A-1. The groundwater monitoring system shall include a sufficient number of monitoring points, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer

[2] The Colorado River Basin Water Board Executive Officer may waive detection monitoring for the unsaturated zone and/or surface waters, based on demonstrations in the WQMP. (See Title 27, § 20415, subds. (c)(1), (d)(5).)

and any perched groundwater that represents the quality of groundwater that has not been affected by a release from each Unit. (Title 27, §§ 20415(b)(1)(A)-(B), 20420(b).)

Table A-1. Groundwater Monitoring Well Network (Figure 5).

Well	Location	Screening Depth (ft. bgs)	Function
W01	W of Cells 1 and 2	66	Detection
W09A	N of Cells 1 and 2	70	Detection
W10A	NE corner of Cell 1, E of W09A	60	Detection
W11	N of Cells 1 and 2, west of W09A	66.5	Detection
W12	NW corner of Cell 2, W of W11	60	Detection
W302	W of Cell 3	57.5	Detection
W305	E of Cell 3	62	Detection
W306	S of Cell 3	53.5	Detection
W307	NE corner of Cell 3	54	Detection
W308	Northern extent of Cell 3, SE of Cells 1 and 2	74	Detection
W309	NE side of Cell 3, SE of W307	55	Detection
W401	E side of Cell 4, between Cells 4A and 4B, SE of new leachate pond	50-60	Detection
W402	N side of Cell 4 (nearest Cell 4B)	79-94	Detection
W403	SW side of Cell 4, nearest Cell 4A, W of W306	65-76	Detection

c. **Groundwater Conditions.** Each quarter, the Discharger shall monitor Groundwater Conditions specified in Table A-2. To the extent feasible, this information shall be determined separately for: (1) the uppermost aquifer; (2) any zones of perched water; and (3) any additional zone of saturation monitored based upon water level elevations taken prior to the collection of the water quality data submitted in the report. (Title 27, § 20415, subd. (e)(15).) Such information shall be reported semiannually.

Table A-2. Groundwater Conditions Monitoring.

Conditions	Units	GeoTracker Code	Monitoring	Reporting
Elev. (Well-Specific)	ft bgs	ELEV	Quarterly	Semiannual
Gradient / Direction	-	(none)	Quarterly	Semiannual
Flow Rate	ft. / year	(none)	Quarterly	Semiannual

d. **Monitoring Parameters.** All monitoring wells shall be sampled and analyzed for the Monitoring Parameters listed in Table A-3, in accordance with the specified frequencies. (Title 27, § 20420, subds. (e)-(f).). Whenever a well is sampled, temperature, specific conductance, turbidity, and pH shall be accurately measured at each well. (Title 27, § 20415, subd. (e)(13).)

Table A-3. Groundwater Monitoring Parameters.

Monitoring Parameter	Units	GeoTracker Code	Monitoring	Reporting
Temperature	°F	TEMP	Quarterly	Semiannual
Specific Conductance	µS/cm	SC	Quarterly	Semiannual
Turbidity	NTU		Quarterly	Semiannual
pH	Std. Units	PH	Quarterly	Semiannual

Monitoring Parameter	Units	GeoTracker Code	Monitoring	Reporting
Total Dissolved Solids (TDS)	mg/L	TDS	Quarterly	Semiannual
Arsenic	mg/L		Quarterly	Semiannual
Chloride	mg/L	CL	Quarterly	Semiannual
Barium	mg/L		Quarterly	Semiannual
Cadmium	mg/L		Quarterly	Semiannual
Lead	mg/L		Quarterly	Semiannual
Zinc	mg/L		Quarterly	Semiannual
Sodium	mg/L		Quarterly	Semiannual
Sulfate	mg/L		Quarterly	Semiannual
Gross Alpha Particles	pCi/L		Quarterly	Semiannual
Gross Beta Particles	pCi/L		Quarterly	Semiannual

e. **Five-Year Constituents of Concern.** Beginning in 2026, the Discharger shall analyze groundwater samples for the Constituents of Concern (COCs) listed in Table A-4 every five years. (Title 27, § 20395, subd. (a).)[3] Results of such monitoring shall be reported in the next Semiannual Monitoring Report.

[3] COCs are the list of "waste constituents, reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in the WMUs." (Title 27, § 20395, subd. (a).)

Table A-4. Five-Year Constituents of Concern.

Constituent of Concern	Units	GeoTracker Code
Fluoride	mg/l	
Nitrate as Nitrogen	mg/l	
Cesium 137 (gamma scan)	pCi/L	
Cobalt 60 (gamma scan)	pCi/L	
Radium 226 (gamma scan)	pCi/L	
Potassium 40 (gamma scan)	pCi/L	
Thorium 228 (gamma scan)	pCi/L	
Thorium 232 (gamma scan)	pCi/L	

2. **Vadose Zone**

   a. As of the date of this MRP's issuance, the Facility's unsaturated zone monitoring network consists of the monitoring points listed in Table A-5.

   b. Quarterly, neutron probe monitoring points (e.g., Z-2 through Z-7) shall be used to test for the presence of moisture. Results of such activity shall be reported on a semiannual basis.

   c. For monitoring systems incorporating a vadose zone monitoring sump (e.g., Z-8 through Z-9), the collection sumps shall be inspected each quarter for the presence of liquid. Any liquids present in the sump shall be monitored per Table A-6.[4]

[4] It is expected that the liquids present in the vadose zone monitoring sump will have essentially the same character as those present in the primary leachate collection and

d. A log shall be maintained of when the vadose zone monitoring points are sampled, including when the sample was taken, by whom, and results. The log shall be maintained on site and shall be available for inspection. The results of each quarterly sampling event shall be included in the semi-annual self-monitoring report.

e. Any detection of liquid within the vadose zone monitoring sumps or neutron probes, which could indicate a release, shall be reported by both phone call and email to Regional Water Board staff within 24 hours. The Discharger shall thereafter submit a follow-up report with any information specified by staff in a technical reporting order. (Wat. Code, § 13267, subd. (b)(1).)

Table A-5. Vadose Zone Monitoring Points.

Monitoring Point	Type	Associated WMU(s)	Location
Z-2	Neutron Probe	Cells 1-2	North boundary of Cells
Z-3	Neutron Probe	Cells 1-2	East boundary of Cells
Z-4	Neutron Probe	Cells 1-3	South boundary of Cells 1-2; North boundary of Cell 3
Z-5	Neutron Probe	Cells 1-2	Northeast boundary of Cells 1 and 2; east of Z-2
Z-6	Neutron Probe	Cells 1-2	Northwest boundary of Cells 1 and 2; southeast of Z-5
Z-7	Neutron Probe	Cell 3	Northeast boundary of Cell 3; southeast of Z-4

removal system sump, which is already being monitored. It is therefore not necessary to require separate analyses.

Monitoring Point	Type	Associated WMU(s)	Location
Z-8	Vadose Zone Monitoring Sump	Cell 4A	Beneath LDS of Cell 4A
Z-9	Vadose Zone Monitoring Sump	Cell 4B	Beneath LDS of Cell 4B

Table A-6. Unsaturated Zone Monitoring Parameters (Tertiary Liner Collection Systems Only).

Monitoring Parameter	Units	GeoTracker Code	Monitoring	Reporting
Volume Removed	Gallons		Quarterly	Semiannual
Temperature	°F	TEMP	Quarterly	Semiannual
pH	Std. Units	PH	Quarterly	Semiannual

3. **Establishment of Concentration Limits**

a. The Discharger shall establish a Concentration Limit (i.e., background value) for each Monitoring Parameter and Constituent of Concern (COC) at each Monitoring Point, in accordance with the statistical methods in subdivision (e)(8) of Title 27, section 20415.[5] (Title 27, § 20400, subds. (a), (b).).

b. Updated Concentration Limits shall be proposed by the Discharger every five years, and submitted via the Annual Monitoring Report. Unless expressly rejected by the Regional Water Board's Executive

[5] The Concentration Limit for organic compounds that are neither naturally occurring, nor detected in background groundwater samples, shall be taken as the detection limit of the analytical method used (e.g., USEPA Methods 8260, 8270).

Officer in writing, the updated Concentration Limits shall be used to determine whether there has been a release from the Unit.

c. If the Discharger fails to submit updated Concentration Limits, the existing ones shall remain operative, provided that, where appropriate, the Regional Water Board's Executive Officer may revert to lower concentrations where so warranted by existing monitoring data.

4. **Procedures to Confirm Evidence of Release**

a. **Verification Sampling after Detection of Constituent of Concern.** Whenever a COC is detected at a Monitoring Point at a concentration exceeding the applicable Concentration Limit the Discharger shall conduct verification sampling to confirm if the exceedance is due to a release, or if it is a false-positive (unless previous monitoring has already confirmed a release for that constituent at that monitoring point). An exceedance of the Concentration Limit shall be considered "measurably significant evidence of a release" that shall be either confirmed or denied through the applicable verification procedure specified below.

b. **Procedure for Analytes Detected in Less than 10 Percent of Background Samples (Non-Statistical Method).**

i. **Initial Determination.** The Discharger shall identify each analyte in the current DMP Monitoring Point sample that exceeds either its respective MDL or PQL, and for which a release has not been previously confirmed. The Discharger shall conclude that the exceedance provides a preliminary indication of a release or a change in the nature or extent of the release, at that monitoring point, if either: (i) The data contains two or more analytes that equal or exceed their respective MDLs; or (ii) the data contains one or more analyte that equals or exceeds its PQL.

ii. **Notification to Regional Water Board Staff.** Upon determining that there is a preliminary indication of a release, the Discharger shall immediately notify Regional Water Board staff by phone or email (not required if Board staff made the determination in writing and notified Discharger).

iii. **Discrete Retest.** Within 30 days of either the Discharger or the Regional Water Board determining that there is a preliminary indication of a release, the Discharger shall collect two new (retest) samples from the relevant monitoring point(s), and analyze the samples for COCs at issue. (Title 27, §§ 20415(e)(8)(E), 20420(j)(1)-(3).)

iv. **Confirmation of Release.** As soon as the retest data are available, the Discharger shall conclude that measurably significant evidence of a release is confirmed if (not including the original sample) two or more analytes equal or exceed their respective MDLs or if one or more analyte equals or exceeds its PQL. The Discharger shall then immediately verbally notify the Regional Water Board whether or not the retest confirmed measurably significant evidence of a release for the analyte at the monitoring point, and follow up with written notification submitted by certified mail within seven days of the verbal notification.

c. **Procedure for Analytes Detected in 10 Percent or More of Background Samples (Statistical or Non-Statistical Method).**

i. **Initial Determination.** The Discharger shall compare the value reported by the laboratory for each analyte to the statistically-derived Concentration Limit from the most recent report (e.g., Annual Report) that uses the approved statistical procedure. If the value exceeds the Concentration Limit for that analyte, the Discharger shall determine if there is “measurably significant evidence of a release.” (Title 27, § 20420, subd. (i).)

ii. **Notification to Regional Water Board Staff.** Upon determining that there is a preliminary indication of a release, the Discharger shall immediately notify Regional Water Board staff by phone or email (not required if Board staff made the determination in writing and notified Discharger).

iii. **Retest Method.** Within 30 days of either the Discharger or the Regional Water Board determining that there is a preliminary indication of a release, the Discharger shall implement a verification procedure/retest option in

accordance with Title 27, section 20415, subdivision (e)(8)(E) and section 20420, subdivision (j)(2). (Title 27, §§ 20415(e)(8)(E), 20420(j).) The verification procedure shall include either a single "composite" retest (i.e., a statistical analysis that augments and reanalyzes the data from the monitoring point that indicated a release), or shall consist of at least two "discrete" retests (i.e., statistical analyses each of which analyzes only newly acquired data from the monitoring point that indicated a release).[6] (Title 27, § 20415, subd. (e)(8)(E).)

The retest samples shall be collected from the monitoring point where the release is preliminarily indicated and shall be analyzed for the constituents that caused the need for the retest. For any indicated monitoring parameter or constituent of concern, if the retest results of one or more of the retest data suites confirm the original indication, the Discharger shall conclude that measurably significant evidence of a release has been confirmed.

The Discharger shall then immediately verbally notify the Regional Water Board whether the retest confirmed measurably significant evidence of a release for the analyte at the monitoring point, and follow up with written notification submitted by certified mail within seven days of the verbal notification.

d. Next Steps After Confirmation. If a release has been confirmed under either of the procedures above, the Discharger shall comply with the Response to Release Requirements below. If the analyte at issue is a Five-Year COC, that analyte shall be added to list of Monitoring Parameters that are monitored on a more frequent basis.

---

[6] The Discharger may use an alternate method previously approved in writing by the Regional Water Board. The verification procedure shall comply with the requirements of Title 27, section 20415, subdivision (e)(8)(E), in addition to the performance standards of section 20415, subdivision (e)(9).

e. **Physical Evidence of a Release.** If the Discharger determines that there is significant physical evidence of a release, the Discharger shall immediately verbally notify Regional Water Board staff and provide written notification by certified mail within seven days of such determination. (Title 27, §§ 20385(a)(3), 20420(l)(1)-(2).)

5. **Response to Release Requirements**

a. If the Discharger confirms that there is "measurably significant evidence of a release", the Discharger shall comply with the time schedule of required actions in Table A-7 below.

b. If the Discharger confirms that there is measurably significant evidence of a release from a WMU at any monitoring point, the Discharger may attempt to demonstrate that a source other than the WMU caused the evidence of a release or that the evidence is an artifact caused by an error in sampling, analysis, or statistical evaluation or by natural variation in groundwater, surface water, or the unsaturated zone.

c. The Discharger may make a demonstration pursuant to section 20420, subdivision (k)(7); however, the Discharger is not relieved of the requirements and due dates of Title 27, sections 20420, subdivision (k)(6)-(7), unless Regional Water Board staff concur that the demonstration successfully shows that a source other than the WMU caused the evidence of a release or that the evidence resulted from error in sampling, analysis, or statistical evaluation or from natural variation in groundwater, surface water, or the unsaturated zone.

d. In order to make this demonstration, the Discharger shall notify the Regional Water Board by certified mail of the intent to make the demonstration **within seven days** of determining measurably significant evidence of a release, and shall submit a report **within 90 days** of determining measurably significant evidence of a release. (Title 27, § 20420, subd. (k)(7).)

Table A-7. Time Schedule of Required Actions After Confirming Measurably Significant Evidence of Release.

Deadline	Required Action
Immediately after Confirmation	***Additional Sampling*** The Discharger shall sample all monitoring points in the affected medium at that Unit and determine the concentration of all monitoring parameters and constituents of concern for comparison with established concentration limits (CLs). Because this constituent of concern (COC) scan does not involve statistical testing, the Discharger will need to collect and analyze only a single water sample from each monitoring point in the affected medium (Title 27, § 20420, subd. (k)(1))
Within 90 Days of Confirmation	***Submit Evaluation Monitoring Program*** The Discharger shall submit a Report of Waste Discharge (ROWD) with a proposed Evaluation Monitoring Program (EMP) in accordance with Title 27, section 20420, subdivision (k)(5)(A)-(D), and incorporating the results of the immediate post-confirmation sampling activities required above. Specifically, the EMP shall be designed for the collection and analysis of all data necessary to assess the nature and extent of the release and to determine the spatial distribution and concentration of each constituent throughout the zone affected by the release. (Title 27, §§ 20420(k)(5), 20425(b).) The EMP is subject to Regional Water Board Executive Officer approval, including with specified revisions. The EMP shall be considered established upon its approval.
Within 180 Days of Confirmation	***Submit Corrective Action Feasibility Study*** The Discharger shall submit, for Regional Water Board Executive Officer approval, an initial engineering feasibility study for a Corrective Action Program necessary to meet the requirements of Title 27, section 20430. At a minimum, the feasibility study shall contain a detailed description of the corrective action measures that could be taken to achieve background concentrations for all constituents of concern. (Title 27, § 20420, subd. (k)(6).)

Deadline	Required Action
Within 90 Days of EMP Approval	The Discharger shall complete and submit the following: (1) Technical Report with EMP results and assessment. (Title 27, § 20425, subd. (b).) (2) Updated Engineering Feasibility Study for corrective action based on data collected to delineate the release and data from the ongoing monitoring program per Title 27, section 20425, subdivision (e). (Title 27, § 20425, subd. (c).) (3) Proposed Corrective Action Program in accordance Title 27, section 20430, based on data collected to delineate the release the updated engineering feasibility study. (Title 27, § 20425, subd. (d).)

C. Other Facility Monitoring

1. **Additional Waste Monitoring.** The Discharger shall conduct waste monitoring in accordance with Table A-8 below.

Table A-8. Additional Waste Monitoring.

Category	Units	Monitoring	Reporting
Waste Discharged to Each Cell	Tons	Monthly	Annual
Leachate Removed from Each Cell[7]	Gallons	Monthly	Annual

2. **Closed WMU Settlement Monitoring**

   a. Upon completion of cell closure activities, the Discharger shall complete a Final Cover Survey; these surveys shall include an initial survey and map. (Title 27, § 21090, subd. (e)(1).)

[7] If no liquid is present to remove, the statement “No liquids present” shall be put in the report.

b. Every five years, the Discharger shall conduct an iso-settlement survey of each closed cell and produce an iso-settlement map accurately depicting the estimated total change in elevation of each portion of the final cover's low-hydraulic-conductivity layer. For each portion of the landfill, this map shall show the total lowering of the surface elevation of the final cover, relative to the baseline topographic map. (Title 27, § 21090, subd. (e)(1)-(2).)

3. **Observed Surface Water.** If substantial volumes of surface water are observed near a WMU, the Discharger shall record the following information, which shall be reported within 24 hours:

   a. Flow rate and source of water;

   b. Floating and suspended materials of waste origin: Presence or absence, source, and size of affected area;

   c. Discoloration and turbidity: Description of color, source, and size of affected area;

   d. Evidence of odors: Presence or absence, characterization, source, and distance of travel from source; and

   e. Weather conditions: Wind direction and estimated velocity, total precipitation during the previous five-days and on the day of observation.

4. **Stormwater Monitoring.** After each Significant Storm Event,[8] the Discharger shall record the remaining freeboard (vertical feet), and identify the remaining storage capacity (gallons and/or acre-feet) of each leachate storage pond and stormwater detention basin. Any stormwater-related actions shall be reported in the next Semiannual Monitoring Report.

5. **Seep Monitoring**

   a. Whenever any seeps (i.e., liquid wastes) are observed emerging from the ground near a permitted Unit, the Discharger shall record the location, flow rate and any other relevant characteristics (e.g.,

[8] For purposes of this Order, a "Significant Storm Event" is a weather event that results in at least 1 inch of precipitation within a 24-hour period.

color or odor). This information shall be emailed to Regional Water Board staff as soon as possible and in no case more than 24 hours after the initial discovery.

b. Observed seepages shall, within 30 days of first observance, be sampled and analyzed for the Monitoring Parameters listed in Table A-3 and Constituents of Concern listed in Table A-4, as well as any other constituents or parameters specified in writing by Regional Water Board staff. Results of such analyses shall be reported within seven days of receipt of laboratory report.

6. **Leachate Collection and Removal System Monitoring**

a. Each WMU's Leachate Collection and Removal System (LCRS) shall be tested annually to demonstrate proper operation, with the results of each test being compared to the results of prior testing under similar conditions. (Title 27, § 20340, subd. (d).) Results shall be reported annually.

b. Each LCRS sump shall be inspected weekly for presence of leachate, whereupon the volume of leachate removed from the sump shall be measured via flow meter. See Table A-9.

c. Quarterly, any leachate present in a cell's LCRS sump shall be sampled and analyzed for the monitoring parameters listed in Table A-3. Once every five years, leachate samples shall also be analyzed for the Five-Year COCs listed in Table A-4.[9]

d. If an automated sump-pump is installed, an alarm shall also be installed to indicate if the sump fills beyond the upper limit of the sump-pump settings. Automated systems shall also include a means of monitoring changes in the height of liquid in the sump and measuring the frequency and volume of pumping. This data shall be converted to a daily leakage rate and summarized in the Annual

[9] It is not necessary to sample and analyze leachate in the Surface Impoundments' LCRS because such leachate is expected to have the same character as the discharges to the Surface Impoundments, as well as the leachate collected from the cells' LCRS.

Monitoring Report. Automated sump pumps shall be tested at least quarterly to ensure they are functioning properly.[10]

Table A-9. LCRS Sump Monitoring, Monthly Inspection Parameters.

Physical Parameter	Units	Monitoring	Reporting
Total Volume Collected	Gallons	Weekly	Semiannual

7. **Geosynthetic Liner Monitoring.** The Discharger shall inspect the exposed portion of geosynthetic liner of each WMU on a monthly basis, with the observations reported on a semiannual basis. Any observed damage to the liner shall be verbally reported to Regional Water Board staff within 48 hours, with a follow-up written report submitted to the Board within seven days.

8. **Surface Impoundment Monitoring**

   a. Each month, the Discharger shall measure the available freeboard for each Surface-Impoundment WMU at the Facility. (Title 27, § 20375, subd. (a).) The available freeboard and calculated storage capacity for such WMUs shall be recorded and reported semiannually as listed in Table A-10.

   b. Each month, the Discharger shall inspect the overall condition of each Surface-Impoundment. The Discharger shall record any observed erosion, settlement or subsidence along the visible areas of the Surface Impoundment(s), including the top of the berm, outer slopes, and upper region of the inner slope. Repairs shall be performed as needed and documented in the inspection logs. Observations and repairs shall be included in the next Semiannual Monitoring Report.

[10] If the existing manual sump-pump at the Facility is replaced with an automatic sump-pump, the Discharger shall include this information in the Annual Monitoring Report.

Table A-10. Surface Impoundment Monitoring.

Parameter	Unit	Monitoring Freq.	Reporting Freq.
Available Freeboard	Feet	Monthly and after a Significant Storm Event	Semiannual
Storage Capacity	Gallons or acre-feet	Monthly and after a Significant Storm Event	Semiannual
Visual Inspection for Erosion, Settlement, Subsidence	N/A	Weekly	Semiannual
Visual Inspection of Exposed Liner (§ 20375, subd. (f).)	N/A	Weekly	Semiannual

D. Reporting Requirements

1. **Semiannual Reporting.** The Discharger shall submit Semiannual Monitoring Reports in accordance with Table A-11 below. Each report shall contain the results of all monitoring activity conducted within the subject period[11] (unless required to be reported on an annual basis), as well as the following:

    a. A cover letter that:

        i. Summarizes the essential points in the report; and

        ii. Compares groundwater chemistry analysis results for the two quarters in relation to the established background concentration for each monitoring parameter.

        iii. Discloses and discusses any violations occurring since the last report was submitted, as well as any actions taken or planned for correcting those violations (or, if no violations

[11] Such reporting shall also include the results of any additional monitoring activities that are not otherwise required under this MRP.

occurred since last submittal, an affirmative statement to that effect).[12]

b. Maps depicting the Facility layout and the location of sampling points and monitoring wells, as well as groundwater elevations in the monitoring wells, including the inferred direction of groundwater flow.[13]

c. Written summary of the monitoring results—including a discussion of the groundwater flow rate/direction, changes in groundwater chemistry, any statistical or non-statistical methods used to determine if there has been a release, or any other information suggesting a change in the underlying hydrogeologic conditions.

d. Narrative evaluation of the groundwater monitoring data, the established background concentration of each monitored constituent, any statistical or non-statistical methods used, and whether the data indicates a release from any Units.

e. A summary of leachate data for each applicable Unit, including any laboratory results and measurements of liquids in the vadose zone monitoring wells, LDCRS and the LCRS sumps.

f. Tables of the data collected. The tables shall include all the data collected, to date, at each monitoring point, organized in chronological order, with the oldest data in the top row and progressively newer data in rows below the top row. Each row shall be a separate date, and each column shall be a separate parameter at a single location (or a single average, as appropriate). The tables shall be submitted in electronic (Excel or other tab delimited) format. The data shall be summarized in such a manner

---

[12] If the Discharger previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. If no violations have occurred since the last submittal, this shall be stated.

[13] This map shall include all of the elevations obtained from monitoring wells located within a one-mile radius of the Facility boundary to which the Discharger has access. The contour intervals on the groundwater elevation map shall be small enough to show areas of groundwater mounding, if present.

as to clearly illustrate whether the Facility is operating in compliance with the WDRs. Where appropriate, the Discharger shall include supporting calculations (e.g., for averages or comparison of liquids removed to a specific reporting threshold).

g. Graphs depicting groundwater elevations and monitoring constituent concentrations through time at each monitoring point, with the concentrations being the y-axis and time being the x-axis. Logarithmic scales can be used for values that vary by order of magnitude. Individual graphs can combine multiple locations and/or multiple chemicals if it allows data to be compared more easily.

i. Field logs used during well purging and sampling. At a minimum, the field logs should include the following:

   i. The well number;

   ii. The sampling date and time;

   iii. The method of monitoring Field Monitoring Parameters and calibration of equipment used to monitor Field Monitoring Parameters;

   iv. The purge method (if a pump is used, include the depth of pump placement in each well and the pumping rate); and

   v. The purge and sample collection information such as: date each well was purged; well recovery time; method of disposal of the purged water; an estimate of the volume of water purged from each well; the results of all field analyses; depth to groundwater prior to purging, at the conclusion of purging, and when the sample was collected; the method of measuring the water level; and field personnel names and signature.

   vi. Documentation showing the calibration of flow meters and other sampling/monitoring equipment as performed in a timely manner.

   vii. Copies of the laboratory data sheets for analyses within the monitoring period.

j. Repair Logs for any repairs to Units or other onsite facilities occurring during the monitoring period.

k. A written summary of inspections by the Discharger, County of Imperial, BLM, and/or Regional Water Board and any related correspondence shall be included/attached in an appropriate place in the report. Copies of inspection reports prepared by the Discharger shall be included in an appendix to the report.

Table A-11. Reporting Schedule.

Semiannual Period	Reporting Deadline
1st Quarter (Jan. 1 – Mar. 31) 2nd Quarter (April 1 – June 30)	July 31
3rd Quarter (July 1 – Sept. 30) 4th Quarter (Oct. 1 – Dec. 31)	January 31

2. **Annual Reporting.** In addition to the components described above, the 2nd Semiannual Monitoring Report due on January 31 shall also include the results of all monitoring activities that are required to be reported annually, as well as the following:

   a. An overall evaluation of the performance of the Facility, including general maintenance, and description of the condition of each waste cell, surface impoundment, vadose zone well, LCRS and LDCRS system.

   b. [Optional] Any proposed changes to Monitoring Parameters or Constituents of Concern, monitoring points, monitoring frequencies or analytical methods.[14]

   c. Annual updates to financial assurance cost estimates.

[14] These changes may also be proposed in a separate technical report.

d. [Every Five Years] Revised Concentration Limits for all Monitoring Parameters and Constituents of Concern.

e. An annual summary consisting of the total volume of geothermal wastes disposed of at the Facility.

ATTACHMENT B — MAPS AND FACILITY DIAGRAMS

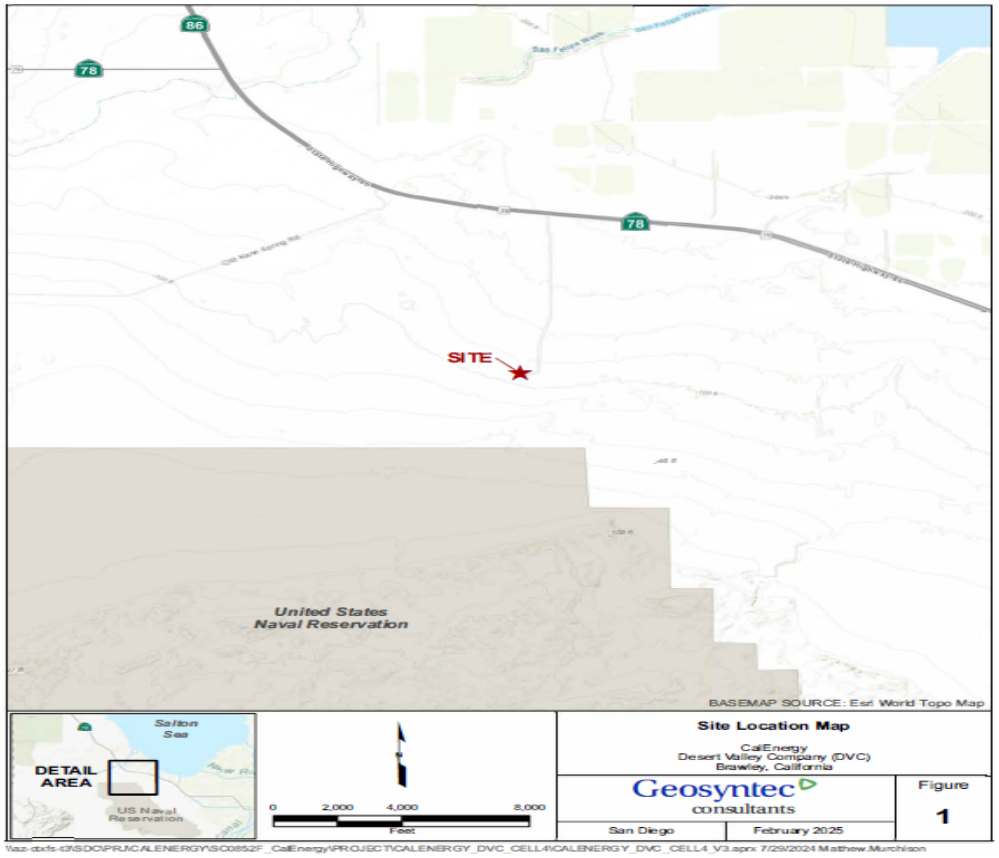

Figure 1. Site Map.

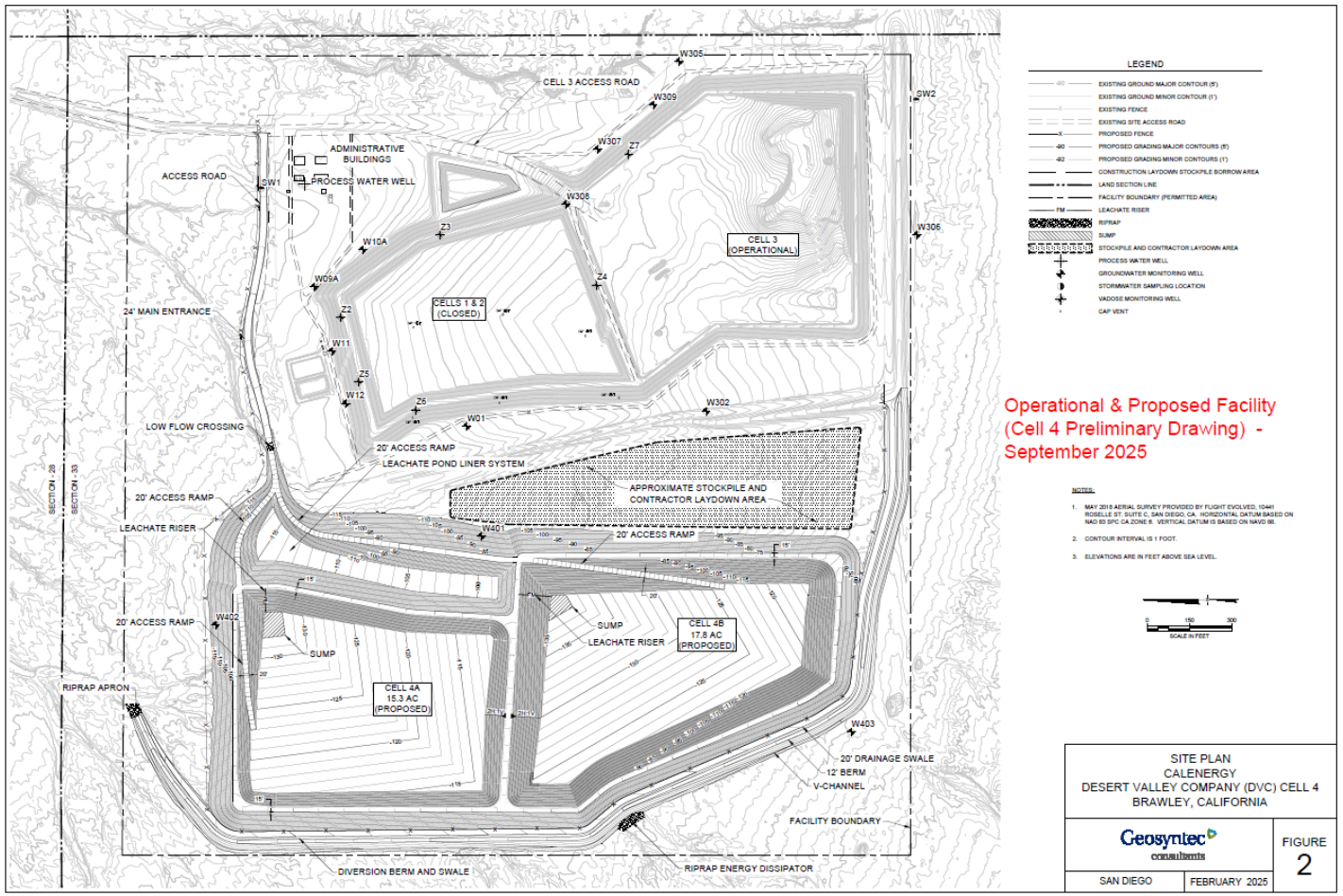

Figure 2. General Facility Map Including Cells 4A and 4B.

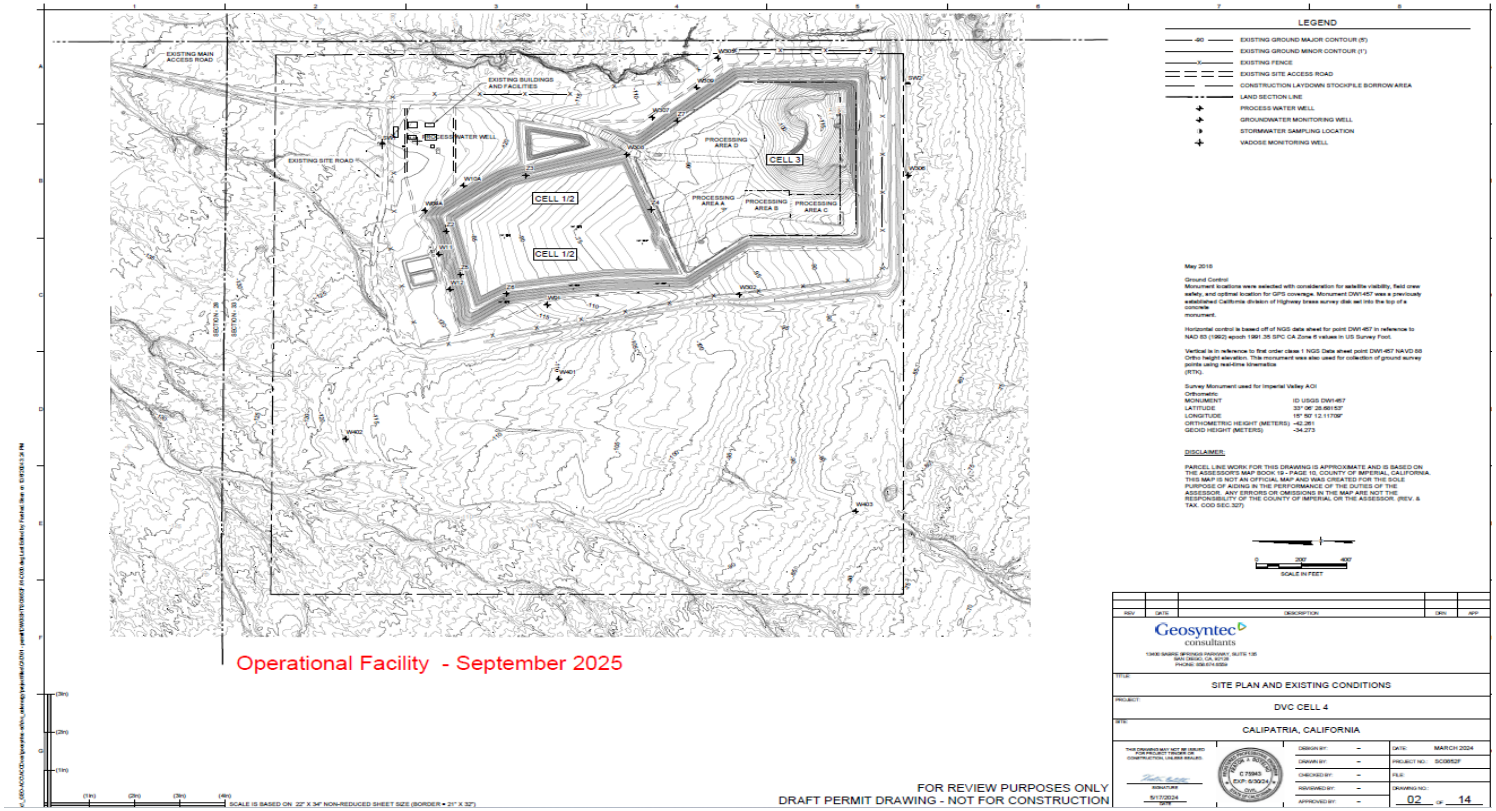

Figure 3. General Facility Map Prior to New Cells.

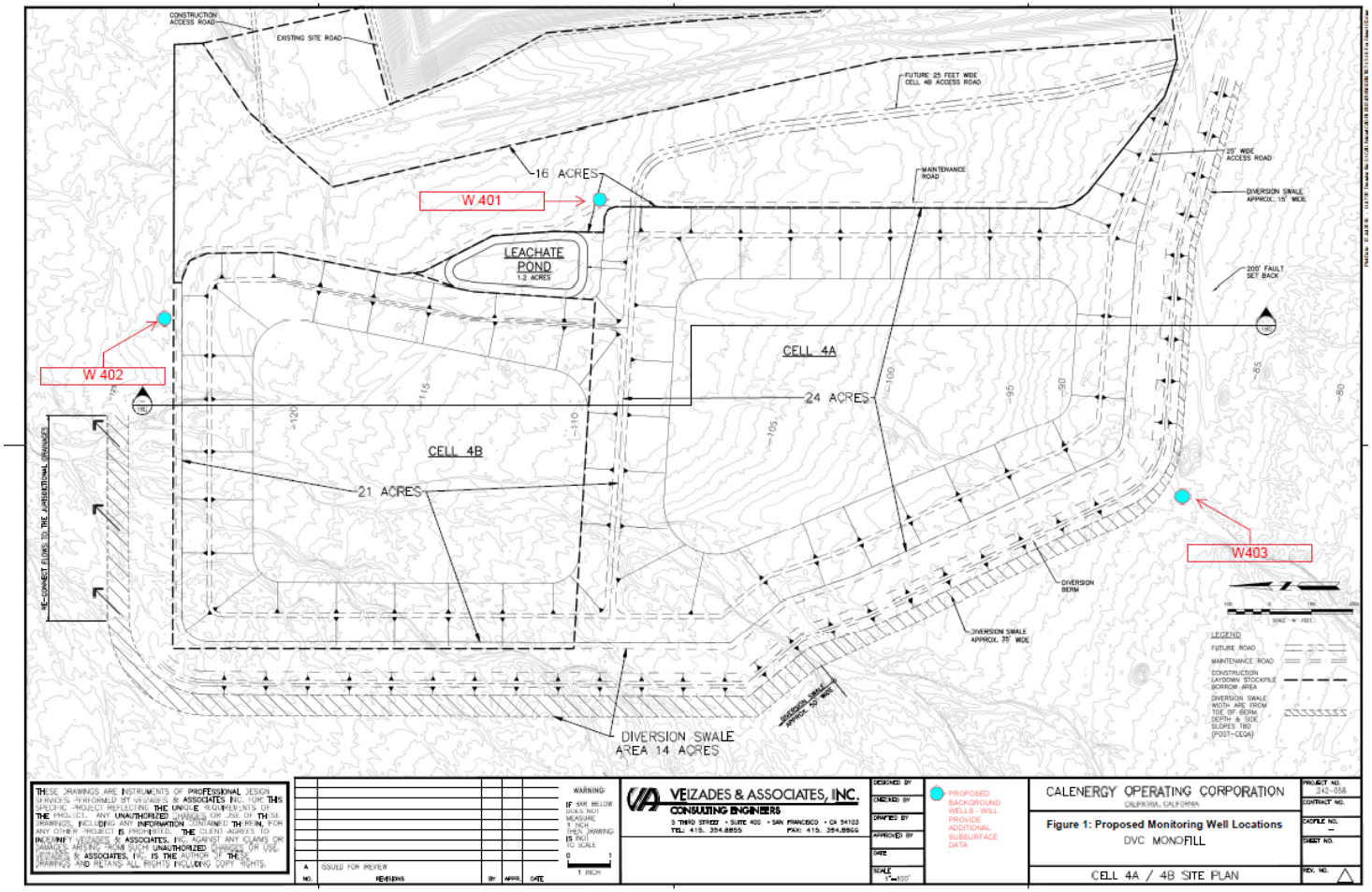

Figure 4. Monitoring Well Map - Cells 4A and 4B.

GeoTracker ID: L10003472657
WDID: 7A132197001

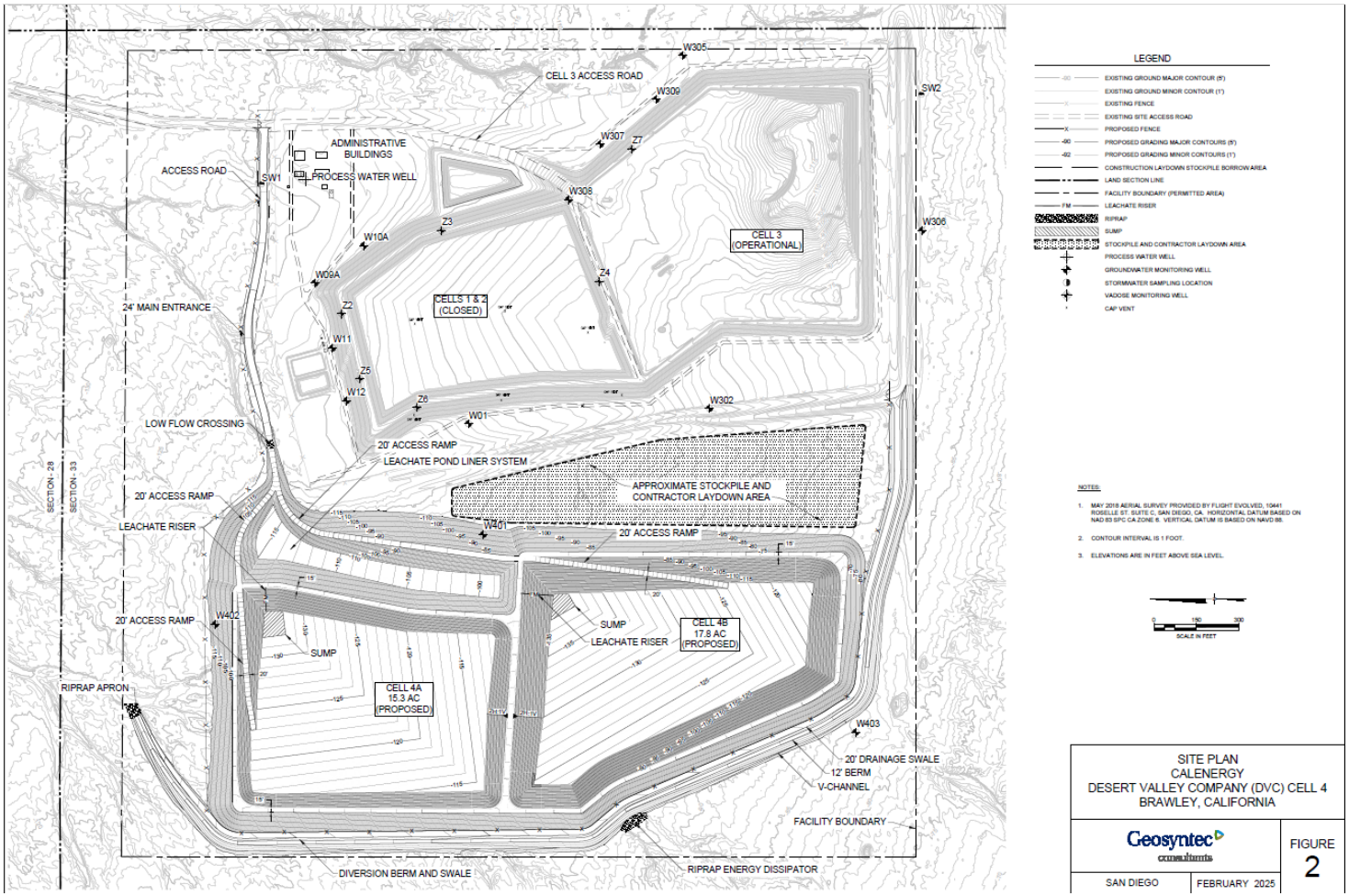

Figure 5. Monitoring Well Map - Entire Facility

GeoTracker ID: L10003472657
WDID: 7A132197001

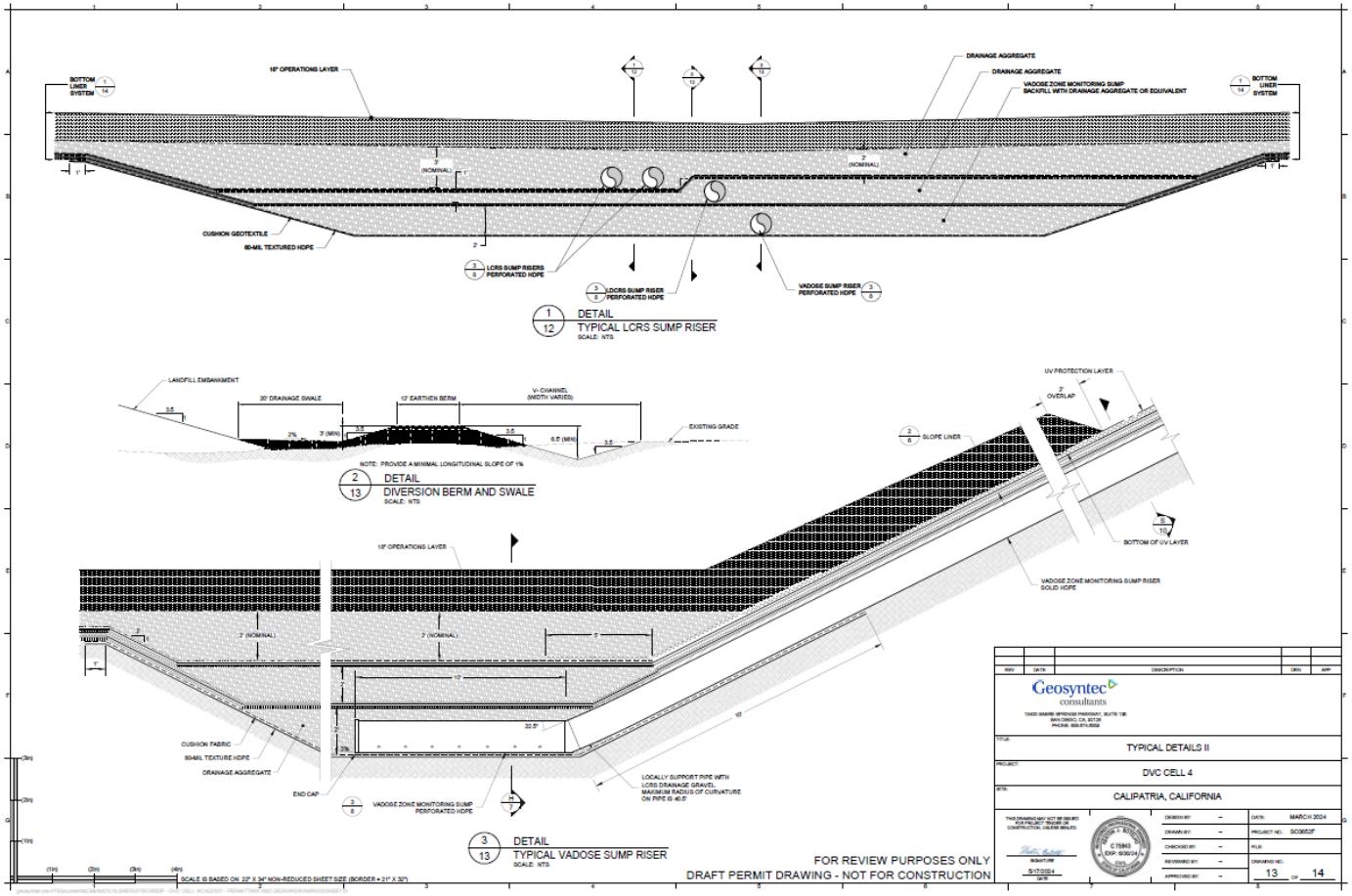

Figure 6. Cells 4A and 4B Vadose Monitoring Sump Design Detail