CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

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MONITORING & REPORTING PROGRAM R8-2025-0006

ORDER INFORMATION

Order Type(s):	Monitoring & Reporting Program (MRP)
Status:	ADOPTED
Program:	Title 27 Discharges to Land
Discharger(s):	Riverside County Department of Waste Resources
Facility:	Badlands Sanitary Landfill
Address:	31125 Ironwood Avenue Moreno Valley, California 92555
County:	Riverside County
GeoTracker ID:	L10003146754

CERTIFICATION

I, JAYNE JOY, 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, Santa Ana Region, on 13 June 2025.

Jayne Joy
Digitally signed by Jayne Joy
Date: 2025.06.18 12:38:00 -07'00'
Water Boards

JAYNE JOY
Executive Officer

PREFACE

Adopted by the California Regional Water Quality Control Board, Santa Ana Region (Santa Ana Water Board) pursuant to Water Code section 13267, subdivision (b)(1), this Order establishes a Monitoring and Reporting Program (MRP) for Riverside County Department of Waste Resources (the Discharger), which owns and operates the Badlands Sanitary Landfill (the Facility). Additional information regarding the Facility is set forth in the enumerated findings of Waste Discharge Requirements Order R8-2025-0006 (WDRs Order). Except as otherwise provided in the following MRP, these findings are incorporated herein.

The MRP also contains supplemental findings related to monitoring and reporting activities, and/or the Facility conditions. For the purposes of California Code of Regulations, title 27, division 2, subdivision 1, *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste* (Title 27) (e.g., sections 21720, 20380-20435), the findings and provisions of this Order are conversely incorporated as part of the WDRs Order as well.

Although adopted with the WDRs Order, this is a separate order subject to subsequent revision by the Executive Officer (EO) in accordance with delegated authority per Water Code section 13223. For the purposes of Title 27, such revisions shall be automatically incorporated as part of the WDRs Order. Unless otherwise specified, all section, table and figure references are references to those set forth in this MRP.

This MRP may be revised by the Santa Ana Water Board's EO as necessary to reflect changes in the required water quality programs, or upon a written request by the Discharger. At any time, the Discharger may file a written request, including appropriate supporting documents, with the EO of the Santa Ana Water Board, proposing modifications to the MRP. The Discharger shall implement any changes in the revised MRP approved by the Santa Ana Water Board's EO upon receipt of a signed copy of the revised MRP.

REQUIREMENTS

IT IS HEREBY ORDERED, pursuant to Water Code section 13267, that the Discharger shall comply with the following.

A. Water Quality Protection Standard

1. Components

In accordance with Title 27, sections 20390-20405, the Water Quality Protection Standard (WQPS) for the Facility shall consist of a list of

Constituents of Concern (COCs), Concentration Limits for each COC, and a Point of Compliance and all designated Monitoring Points in **Table 2** of Attachment A**.** These components of the WQPS shall be established in accordance with the procedures described in this section.

2. **Constituents of Concern (COCs)**

As of the date of this MRP, the COCs for the Facility shall consist of those constituents listed in **Tables 3 and 4,** which include those constituents listed in Appendix II of the Code of Federal Regulations, title 40, part 258 (40 CFR part 258).

3. **Concentration Limits**

The concentration limits for the COCs and any given constituent in a given monitored medium (e.g., the uppermost aquifer) are either the natural background level, the laboratory Reporting Limit (RL) or the Practical Quantitation Limit (PQL) for the constituent as follows:

a. If the constituent naturally exists in the monitored medium (e.g., total dissolved solids [TDS]), or has been demonstrated to have originated off-site, the limit shall be the value determined using a valid and appropriate statistical procedure based on a minimum of eight background data points (Title 27, § 20415, subd. (e)(10).)

b. If the constituent does not naturally exist in the monitored medium (e.g., a volatile organic compound [VOC]), the laboratory RL/PQL shall be the limit.

4. **Point of Compliance Wells**

In accordance with Title 27, section 20405, the Points of Compliance (POC) where the WQPS applies shall be a vertical surface, located at the hydraulically downgradient limit of each Waste Management Unit (WMU), that extends through the uppermost aquifer underlying the WMU at the Facility or an alternate location approved by the EO of the Santa Ana Water Board. Due to the nature of the hydrogeology at the site, for the Facility, the POC shall include the monitoring wells listed in **Table 2** of Attachment A and as shown in **Figure 1** of Attachment B.

5. **Duration of Application**

The WQPS shall apply during the active life of the Facility, the closure period, the post-closure maintenance period, and during any other compliance period. (Title 27, §20410.)

6. **Performance of Monitoring Activities**

Unless the Discharger proposes and the EO of the Santa Ana Water Board approves an alternative WQPS, the Discharger shall perform the monitoring activities in compliance with the WQPS specified in this MRP.

B. Water Quality Monitoring Program

1. Groundwater Quality Monitoring

The Discharger shall conduct the following groundwater monitoring activities at the Facility:

a. **Monitoring Points**— Monitoring shall be conducted on a semi-annual basis (see **Table 1**) at all groundwater monitoring wells (see **Table 1** and **Figure 1**).

b. **Semi-Annual Monitoring**—On a semi-annual basis, water samples shall be collected from these monitoring points (and any additional monitoring points subsequently installed at the site) and analyzed for the constituents listed in **Table 3** and any additional constituents in **the Table of Detected Constituents, Table 6** (see Sections D.1 and F.5.d.), not otherwise specified in **Table 3**. Analytical monitoring data generated from these monitoring activities shall be evaluated in accordance with Section C (Data Analysis Methodology). Constituents in **Tables 3 and 6** are collectively known as the Monitoring Parameters.

c. **Five-Year Evaluation (or COC Analysis)**—Every five years, continuing in 2025, alternately in the Fall (4th Quarter) and Spring (2nd Quarter) of 2030, the Discharger shall collect water samples from all groundwater monitoring wells and analyze these samples for those constituents listed in **Tables 3-5**. Analytical monitoring data generated from these monitoring activities shall be evaluated in accordance with Section C (Data Analysis Methodology).

2. Vadose Zone Monitoring

The Discharger shall conduct the following vadose zone monitoring activities at the Facility:

a. Monitoring shall be conducted on a semi-annual basis (see **Table 1**) at all soil-pore gas (via landfill gas probes) monitoring points (see **Table 2** and **Figure 1**).

b. Soil-pore gas samples shall be monitored for percent (%) methane, oxygen, carbon dioxide, and nitrogen in the field. A soil gas sample

from a gas probe that exceeds 5 percent methane or with the highest methane reading shall be collected and analyzed for volatile organic compounds in **Table 3**.

c. If there are any newly detected constituents at levels above the reporting limit in samples collected from one or more of these monitoring points, the subject monitoring points must be re-sampled and retested for the newly detected constituents. Results from this retest must be evaluated in relation to the initial results for the purpose of verification.

3. **Landfill Leachate and Gas Condensate Monitoring**

The Discharger shall conduct the following leachate and gas condensate monitoring activities at the Facility:

a. Monitoring shall be conducted on an annual basis (see **Table 1**) at landfill leachate and gas condensate monitoring points (see **Table 2 and Figure 1)**.

b. Samples shall be collected annually and analyzed for all constituents listed in **Tables 3-5** herein. Analytical monitoring data generated from these monitoring activities shall be evaluated in accordance with Section C (Data Analysis Methodology). If there are any newly detected constituents at levels above the reporting limit in samples collected from one or more of these monitoring points, the subject monitoring points must be re-sampled and retested. Results from this retest must be evaluated in relation to the initial results for the purpose of verification.

4. **Additional Monitoring Constituents**

Based upon analysis of monitoring results, the EO may require that additional constituents be regularly monitored in addition to the constituents identified above and that monitoring samples must be analyzed for these constituents on a regular basis.

5. **USEPA SW-846**

Sample collection, storage, and analysis shall be performed in accordance with the most recent version of standard U.S. Environmental Protection Agency (USEPA) Methods (USEPA Publication “SW-846”), and in accordance with a sampling and analysis plan acceptable to the EO.

6. **State-Approved Laboratory**

Laboratory water quality analyses must be performed by the State Water Resources Control Board's Environmental Laboratory Accreditation Program (ELAP) certified laboratory and specific analytical methods must be identified. In addition, the Discharger is responsible for ensuring that laboratory analyses of samples from all monitoring points are performed in accordance with the following requirements:

a. **Appropriate Analytical Methods and Detection Limits**—The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90 percent non-numerical determinations (i.e., Trace or ND determinations) in historical data for that medium, the SW-846 analytical method having the lowest Method Detection Limit (MDL) shall be selected.

Derivation of MDL and PQL—MDL and PQL shall be derived by the laboratory for each analytical procedure, according to ELAP accreditation procedures. Both limits shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. If the laboratory suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived values, the results shall be flagged accordingly, and an estimate of the limit actually achieved shall be included.

b. **Reporting of Trace Results**—Trace results (results falling between the MDL and the PQL for organic compounds shall be reported as such.

c. **Identify and List MDL and PQL**—For each constituent monitored during a given reporting period, the Discharger shall include in the monitoring report the prevailing MDL and PQL for each constituent. The Discharger shall require the analytical laboratory to report censored data (trace level and non-detect determinations).

d. **Report QA/QC Data**—Quality assurance and quality control (QA/QC) data shall be reported along with the sample results to which it applies. Sample results shall be reported unadjusted for blank results or spike recovery. The QA/QC data submittal shall include:

i. The method, equipment, and analytical detection limits.

ii. The recovery rates, including an explanation for any recovery rate that is outside the USEPA-specified recovery rate.

iii. The results of equipment and method blanks.

iv. The results of spiked and surrogate samples.

v. The frequency of quality control analysis.

vi. The name and qualifications of the person(s) performing the analyses.

e. **Indicate Detection of Laboratory Contaminants**—QA/QC analytical results involving detection of common laboratory contaminants in any sample shall be reported and flagged for easy reference.

7. **Groundwater Level, Elevation, and Flow Direction**

The Discharger shall measure the water level and determine the groundwater elevation in each groundwater monitoring well semi-annually and determine the presence and character of horizontal and vertical gradients (if applicable), and groundwater flow rate and direction for the respective groundwater body.

C. Data Analysis Methodology

1. **Groundwater Monitoring Points**

Analytical monitoring data generated from analysis of samples from groundwater monitoring points shall be evaluated as follows:

a. Monitoring data for **Table 3** organic constituents shall be evaluated using non-statistical data analysis methods, including time-series concentration plots to determine whether there is measurably significant evidence of a release from the Facility. These analyses shall include a minimum of ten years of data.

b. Monitoring data for **Table 3** inorganic constituents shall be evaluated using statistical data analysis methods and/or appropriate non-statistical data analysis methods as specified in Title 27, section 20415, subdivision (e)(8) to determine whether there is measurably significant evidence of a release from the Facility.

c. Monitoring data for inorganic constituents (Field Parameters, General Chemistry, and Dissolved Metals) listed in **Table 3** shall be evaluated as needed to provide water quality characterization regarding hydrogeochemical conditions and to assist in making determinations regarding measurably significant evidence of a release from the Facility or other changes in site conditions.

d. Monitoring data for **Table 4** Organic Constituents, which includes Chlorinated Herbicides, Organochlorine Pesticides, and Semi-Volatile Organic Compounds, shall be evaluated using non-statistical data analysis methods to determine whether there is measurably significant evidence of a release from the Facility.

e. Monitoring data for **Table 4** inorganic constituents, including but not limited to metals, cyanide, and sulfide, shall be evaluated using statistical data analysis methods and/or non-statistical data analysis methods as specified in Title 27, section 20415, subdivision (e)(8) to determine whether there is measurably significant evidence of a release from the Facility.

f. In evaluating the results of a five-year Evaluation analysis, all **Table 4** constituents that have been detected during an event shall be evaluated using appropriate data analysis methods, which shall include all historical data for the detected constituents as appropriate.

g. Monitoring data for constituents in **Table 5** shall be evaluated using statistical data analysis methods and/or non-statistical data analysis methods approved by the EO to evaluate trends and to determine whether there is increasing concentrations of inorganic constituents.

h. On an annual basis, all constituents in **Tables 3 and 6** that have been detected and confirmed in a groundwater sample shall be evaluated using time-series concentration plots, which shall include all historical data for the detected constituents.

2. **Landfill Leachate and Gas Condensate**

Analytical monitoring data generated from analysis of landfill leachate and gas condensate samples shall be evaluated as follows:

a. Annually, monitoring data for all organic constituents shall be evaluated for presence or absence of new constituents in samples through comparison with constituents listed in **Table 6** (Table of Detected Constituents); see Sections D.1. and F.5.d.)

b. If any previously undetected organic constituents that are detected at or above PQLs in leachate and gas condensate at any sampling point, the Discharger shall resample the leachate or condensate at that sampling point during the following April and analyze the sample for those newly detected constituents. If any such constituent is confirmed in the leachate or gas condensate, the Discharger shall add the constituent to the current **Table of Detected Constituents** (see Section F.5.d) and report this to Santa Ana Water Board staff within two weeks of the confirmation. During all subsequent monitoring events, the Discharger shall analyze all water samples for constituents in the up-to-date Table of Detected Constituents.

c. Monitoring data for inorganic constituents (Field Parameters, General Chemistry, and Dissolved Metals) in **Table 3** shall be evaluated to provide water quality characterization in relation to hydrogeological conditions, to indications of a release, or to changes in other site conditions.

3. **Measurably Significant Evidence of Release of Table 3 and Table 4 Organic Constituents at Groundwater Monitoring Wells**

Measurably significant evidence of release of an organic constituent to groundwater at a groundwater monitoring well will be tentatively determined to have occurred if analysis of groundwater sampling data from any well indicates that, pursuant to the applicable data analysis method (including its corresponding trigger), there has been a significant change in Monitoring Point data relative to the reference background value (or other approved reference value or distribution), the concentration limits specified in Section A.3.

4. **Measurably Significant Evidence of Release of Table 3 and Table 4 Inorganic Constituents at Groundwater Monitoring Wells**

Measurably significant evidence of release of inorganic constituents to groundwater at a groundwater monitoring well will be tentatively determined to have occurred when the concentration of any inorganic constituent in a groundwater sample collected from a background well or compliance well is determined to be significantly above a statistically calculated limit such as, but not limited to, an intra-well prediction limit. In assessing a tentative release, analytical data should also be evaluated using trend analyses, historical constituent concentration ranges, and background concentrations in the determination process.

D. Contingency Responses

1. Table of Detected Constituents

Any Appendix II constituents that were previously detected and confirmed in samples collected from groundwater well (in accordance with Section B.1.c) and leachate and gas condensate (per Section B.3) monitoring points at the Facility are listed in **Table 6** (Table of Detected Constituents).

Any newly detected constituents in samples collected from these monitoring points and confirmed shall be immediately added to the monitoring parameters specified in **Table 6** (Section F.5.d) for the Facility. The newly updated Table 6 (indicating the newly added constituent[s]) shall be submitted by the Discharger to the Santa Ana Water Board within 14 days following the addition of any new constituents to **Table 6**. This constitutes the means by which the Discharger shall comply with 40 CFR part 258.55, subdivision (d)(1).

2. Response to an Initial Indication of a Release

If previously undetected measurably significant evidence of release is tentatively indicated in a groundwater monitoring well per Section C above, the Discharger shall immediately notify the Santa Ana Water Board and shall collect a retest sample from the subject well at mid-reporting period (unless laboratory contamination is suspected). The retest sample shall be tested in a laboratory only for the constituent(s) detected in the previous sample that indicated measurably significant evidence of a tentative release. If analysis of the monitoring data for the retest sample also indicates measurably significant evidence of a release, these results shall serve as verification that such a release has occurred.

3. Optional Demonstration

If measurably significant evidence of a release is verified per Section D.2. above, but is believed to be derived from off-site source(s) or due to natural changes in water chemistry, the Discharger may propose to demonstrate that the Facility is not the cause of the release in accordance with Title 27, section 20420, subdivision (k)(7).

4. Response to Verified Evidence of a Release

If either the Discharger or the Santa Ana Water Board determines that there is measurable significant physical evidence of a release pursuant to

Title 27, section 20385, subdivision (a)(3) and Section D.2. above, the Discharger shall:

a. Within seven days notify Santa Ana Water Board staff of this fact by email (or acknowledge the Santa Ana Water Board's determination);

b. Carry out the requirements of release discovery response for all potentially affected monitored media as follows:

i. Implement those response actions described in Title 27, section 20420, subdivision (k)(1)-(6).

ii. Implement an Evaluation Monitoring Program (EMP) pursuant to Title 27, section 20425.

iii. Implement a Corrective Action Program (CAP) pursuant to Title 27, section 20430 - If the Santa Ana Water Board determines that the Discharger has satisfactory implemented and completed the EMP release response actions in Section D.4.b.ii., above, based upon results of the EMP and other monitoring activities, the Discharger shall implement a CAP.

c. Carry out any additional investigations stipulated in writing by Santa Ana Water Board staff for the purpose of identifying the cause of the release.

5. **Release Beyond Facility Boundary**

Any time the Discharger concludes that a release from the Facility has proceeded beyond the facility boundary, the Discharger shall so notify all persons who either own or reside upon the land that directly overlies any part of the plume (Affected Persons) as follows:

a. Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the Discharger's current knowledge of the nature and extent of the release.

b. Subsequent to initial notification, the Discharger shall provide updates to all Affected Persons, including any persons newly affected by a change in the boundary of the release, within 14 days of concluding there has been any material change in the nature or extent of the release.

c. Each time the Discharger sends a notification to Affected Persons (under Section D.5.a or Section D.5.b above), it shall, within

seven days of sending such notification, provide Santa Ana Water Board staff with, and add into the Facility's operating record, both a copy of the notification and a current mailing list of Affected Persons.

6. **Liquid Waste Spill**

The Discharger shall notify Santa Ana Water Board staff by telephone or electronic mail within 24 hours (or one business day) of the discovery of any liquid waste spill in the WMU area. A written report shall be filed with Santa Ana Water Board staff within seven days, containing at least the following information:

a. **Map** – A map showing the location(s) of the discharge.

b. **Flow Rate** – An estimate of the flow rate of the discharge.

c. **Description** – A description of the nature and extent of the discharge (e.g., all pertinent observations and analysis).

d. **Sampling** – A description of any sample(s) collected for laboratory analysis and a copy of the analytical results of the sample.

e. **Corrective Measures** – A description of the corrective measure(s) implemented, and any proposed mitigation measures for approval by Santa Ana Water Board staff.

7. **Facility Failure and Special Occurrences**

The Discharger shall notify Santa Ana Water Board staff by telephone and/or email within 48 hours (or two business days) of any slope failure, tension cracks, failure of facilities, and any special occurrences, such as a landfill fire, subsurface fire, an accidental spill, necessary to maintain compliance with the requirements in this Order. Within seven days, the notification shall be submitted in writing to Santa Ana Water Board staff. Any failure that threatens the integrity of the waste containment features or the Facility shall be promptly corrected after a remediation workplan and schedule have been approved by Santa Ana Water Board staff, unless it poses an immediate threat to the environment or landfill containment structures. Then it shall be corrected as soon as possible.

8. **Leachate Seep**

The Discharger shall immediately notify Santa Ana Water Board staff by telephone and/or email within 48 hours (or two business days) following the discovery of any seepage from, or soil staining, at the site. If feasible, a sample of the seep shall be collected for analysis. A written report shall be filed with Santa Ana Water Board staff within seven days, containing at least the following information:

a. **Map –** A map showing the location(s) of seepage;

b. **Flow rate** – An estimate of the flow rate or volume;

c. **Description** – A description of the location, size, and nature of the discharge (e.g., all pertinent observations and analyses);

d. **Corrective Measures** – Measures proposed to address any seep(s) for approval by Santa Ana Water Board staff;

e. **Photographs** – Photographs representing the location, extent, and detailed nature of the discharge; and,

f. **Analytical Results** – A copy of the laboratory analytical results of the seep sample shall be submitted to Santa Ana Water Board staff within 60 days after filing the written report.

E. General Site Monitoring

1. **Facility and Environmental Control Systems Monitoring**

The Discharger shall regularly inspect and evaluate the Facility and associated environmental control and monitoring systems to determine their condition and effectiveness, and to ascertain whether significant physical evidence of a release has occurred. Significant physical evidence of a release includes unexplained stress in biological communities, unexplained changes in soil characteristics, visible signs of leachate migration, and unexplained water table mounding beneath or adjacent to the site and any other change to the environment that could reasonably be expected to be the result of a release from the Facility and associated systems. These regular inspections and evaluations shall include the following:

a. **Liquid Waste Containment System Inspection** - At a minimum, liquid waste containment systems such as landfill gas condensate and leachate containment systems, shall be inspected and evaluated monthly for their condition and effectiveness in achieving compliance with requirements in this Order. All deficiencies

identified and the dates and types of corrective action taken shall be recorded in a permanent log. All deficiencies shall be documented for the record. The volume of liquids collected in and removed from the containment structures for disposal or reuse shall be recorded monthly. Liquid samples, such as landfill gas condensate and leachate, shall be collected in accordance with the monitoring frequency in **Table 1**, and analyzed in accordance with Section B herein.

b. **Waste Management Unit (WMU) Inspection** - At a minimum, all WMUs shall be evaluated monthly for their conditions and effectiveness in achieving compliance with requirements in this Order. All areas of slope failure, differential settlement, fissuring, erosion, ponding, leachate staining, and seepage into or from the WMUs shall be identified, field-marked, and documented. All such field conditions and events shall be photographed for the record. In the event seepage is discovered, the Discharger shall implement the response actions described in Sections D.7 and D.8, above.

c. **Drainage Control System Inspection** - At a minimum, all run-on and runoff drainage control structures shall be inspected and evaluated monthly for their condition and effectiveness in achieving compliance with requirements in this Order. During dry weather conditions, the condition and effectiveness of the drainage control system shall be evaluated on the basis of its conformance to the as-built drawings, or revised drawings, for the system. All deficiencies shall be identified, repaired, and recorded.

d. **Post-storm Inspection** - During the wet season (Oct. 1 through April 30 of the following year), a post-storm site inspection shall be conducted following a qualifying storm event that produces 0.5 inches or more of rain within a 24-hour period. A post-storm site inspection report, identifying the problem areas and implemented or proposed mitigation measures shall be prepared and transmitted to Santa Ana Water Board staff via email within two business days after a post-storm inspection.

2. **Annual Aerial or Ground Survey and Site Winterization**

To ensure adequate drainage and erosion control at the Facility in accordance with Sections D.1 to D.3 of the WDRs Order, an aerial or ground survey of the Facility and site winterization activities shall be performed annually by October 1, in accordance with the schedule in **Table 1**. The Discharger shall notify Santa Ana Water Board staff if performance of the aerial photogrammetric survey cannot be achieved by the October 1 deadline due to bad weather conditions or bad visibility. Site

winterization activities, such as drainage control system repair, maintenance, and improvements, are necessary to adequately prepare the Facility for the upcoming winter rainy season.

3. **Leachate Collection and Removal System (LCRS) Performance Testing**

Every five years, the Discharger shall perform the LCRS Performance Test. The LCRS performance testing and reporting schedules are specified in **Table 1**.

4. **Waste-Derived Materials Monitoring**

Information regarding acceptance and re-use of waste-derived materials (as defined in the WDRs) at the Facility shall be compiled and submitted in the general site monitoring report. The Discharger shall tabulate and report upon instances where waste-derived materials are re-used for purposes other than disposal at the Facility. For each instance, the Discharger shall indicate the type and quantity of waste-derived materials re-used, as well as the specific method and location of re-use.

5. **Liquid Waste and Wastewater Disposal Monitoring**

The Discharger shall monitor onsite wastewater disposal operations and liquid waste acceptance for disposal to comply with Section A.6 (Discharge Specifications) and Section B.6 (Discharge Prohibitions) of the WDR Order, respectively.

6. **Treated Wood Waste and CRT Panel Glass Waste Disposal Monitoring**

If treated wood waste (TWW) and CRT panel glass waste (as defined in the WDRs Order) is accepted for disposal at the Facility, information regarding such acceptance and disposal at the Facility shall be compiled, tabulated, summarized, described, and submitted in the semi-annual monitoring reports. Such information shall include, at a minimum, description of acceptance and disposal activities, tabulations of monthly quantities of TWW and CRT panel glass waste accepted, dates, and WMU locations of disposal.

F. Reporting

1. **Reporting Schedule**

The Discharger shall submit the reports and per the deadlines specified in **Table 1** (Monitoring and Reporting Schedule).

2. **Semi-annual General Site Monitoring Reports**

Semi-annually, the Discharger shall submit a general site monitoring report, summarizing results and findings of facility and environmental control systems monitoring, and facility activities for the previous monitoring period. The general site monitoring reports are due to the Santa Ana Water Board in accordance with the schedule listed in **Table 1**. At a minimum, the following information shall be included in general site monitoring reports:

a. **Landfill Gas Condensate and Leachate Containment Systems**—A summary of the results of inspecting and evaluating the landfill leachate and gas condensate monitoring, collection, and control facilities, as required in Section E.1.a. In addition, the reports shall include weekly field inspection records and monitoring data for the systems listed above and statements describing the condition and performance of these systems.

b. **Field Inspection Records**—Monthly field inspection records for WMUs and statements describing the condition and performance of these units, as required in Section E.1.b.

c. **Drainage and Erosion Control Systems**—Monthly field inspection records and monitoring data for the drainage and erosion control systems and statements describing the condition and performance of these systems, as required in Section E.1.c.

d. **Waste Type and Placement**—The monthly quantities and types of wastes discharged and a map indicating the locations in the landfill where waste has been placed since submittal of the last such report; and

e. **Daily Cover**—If alternative daily cover (ADC) is used at the site that complies with Title 27, section 20705, subdivision (e), and has been approved by Santa Ana Water Board staff, the type, amount (including, if applicable, average thickness) applied, method of placement, and any problems or deficiencies encountered must be noted in the report.

f. **Waste Allocation Map**—A map showing the area, where waste has been placed during the previous six months;

g. **Waste-Derived Materials**—Information pertaining to acceptance and re-use of waste-derived materials at the Facility in accordance with Section E.4.

h. **Management of Liquids and Wastewater**—The following information shall be submitted each reporting period:

i. A tabular summary of monthly total volume and type(s) of liquid waste accepted and how liquid waste is managed and disposed of at the Facility.

ii. A tabular summary of monthly total volume of landfill leachate and gas condensate collected at the site, and how these liquids are managed and disposed of.

iii. A tabular summary of monthly total volume of onsite wastewater collected and how the wastewater is managed and disposed of.

i. **Treated Wood Waste and CRT Panel Glass Waste** —Information pertaining to acceptance and disposal of TWW and CRT panel glass waste at the Facility in accordance with Section E.6. A tabular summary stating the quantities of treated wood waste and CRT panel glass waste that were accepted for disposal each month during the reporting period.

3. **Semi-Annual Water Quality Monitoring Reports**

Semi-annually, the Discharger shall submit a water quality monitoring report, summarizing water quality monitoring activities for the previous monitoring period, in accordance with **Table 1**. Semi-annual water quality monitoring reports shall include the following:

a. **Well Information**—For each monitoring well addressed by the report, a description of the method and time of water level measurement, and a description of the method of purging used to remove stagnant water in the well before sampling, pursuant to Title 27, section 20415, subdivision (e)(12)(B).

b. **Soil-Pore Gas Monitoring**—The report shall include a description of other monitoring activities that occurred during the monitoring period, including monitoring data of soil-pore gases. A tabulated summary of analytical results from these activities shall also be included in the report.

c. **Groundwater Elevations and Contours**—For each monitoring point addressed by the report, a tabular summary and graphical presentation of all measured groundwater elevation data, and a groundwater elevation contour map, showing the direction of

groundwater flow under/around the Facility based upon water level elevations measured for the monitoring period.

d. **Field Sampling Information**—For each monitoring point addressed by the report, field sampling records showing the type of pump or other device used and its vertical placement for sampling, and a detailed description of the sampling procedures (number and description of the samples, field blanks, travel blanks, and duplicate samples taken, the type of containers and preservatives used, the date and time of sampling, the name(s) and qualifications of the person(s) taking the samples, and any other observations).

e. **Analytical Data and Results**—The report shall include a summary of all analytical monitoring results. Data shall be summarized and presented in a tabular format. Statistical and non-statistical analyses of the analytical data shall be presented. An evaluation and interpretation of the data analyses and a copy of the laboratory analytical results shall also be included.

f. **QA/QC Summary and Evaluation**—The report shall include a summary describing laboratory and field QA/QC activities performed as part of monitoring activities. The summary shall include a discussion of any water sampling and monitoring activities that deviated from the sampling and quality assurance plans.

g. **Compliance Record Discussion**—A comprehensive discussion of the compliance record, and of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the Facility's waste discharge requirements relating to water quality issues.

h. **Tabulation of Monitoring Data**—All analytical monitoring data obtained during the two previous semi-annual reporting periods shall be presented in tabular form in each semi-annual monitoring report.

i. **Uploading Data to GeoTracker**—All analytical monitoring data obtained during each monitoring period shall be uploaded in Electronic Deliverable Format (EDF) to the State’s database (GeoTracker) within one month following the submittal of each monitoring report (in PDF format) to the Santa Ana Water Board.

j. **Conclusions**—Each report shall include a summary of any relevant conclusions regarding the findings and results of monitoring activities that were conducted during the monitoring period.

4. **Annual Leachate/Gas Condensate Testing and Retesting Report**

The Discharger shall submit the annual leachate and gas condensate testing and retesting results, as required in Section B.3, in accordance with the reporting schedules in **Table 1**.

5. **Annual Summary Report**

The Discharger shall submit an annual report to the Santa Ana Water Board covering the previous monitoring year (April 1 of the previous year through March 31 of the following year). Annual summary monitoring reports are due on April 30. This report may be combined with the semi-annual monitoring report for the Fall/Winter monitoring period (per Section F.3) and shall include, but not be limited to, the following:

a. **Monitoring Activities**—A summary of monitoring activities that were completed during the monitoring period shall be included in the Annual Summary Monitoring Report. This summary shall include a description of all monitoring activities, identification of all monitoring dates and monitoring points, and description(s) of any unusual or anomalous occurrences related to monitoring activities.

b. **Compliance Record Discussion**—A comprehensive discussion of the compliance record, and of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the Facility's waste discharge requirements relating to water quality issues.

c. **Summary of Changes**—A written summary of monitoring results and monitoring and control systems, indicating any changes made or observed since the previous annual report.

d. **Table of Detected Constituents**—Each Annual Summary Report shall include an updated table containing any constituent that is or has been detected in samples collected from a groundwater monitoring well, leachate, or gas condensate sampling point at the site, and confirmed per the requirements of Section B. Annually, the Discharger shall update the Table of Detected Constituents in accordance with Section D.1.

e. **Table of Concentration Limits**—In each Annual Report, the Discharger shall include a table containing the concentration limits for each constituent on the COC list (see Sections A.2 and A.3). Biannually, the Discharger shall update this Table of Concentration Limits as described in Section A.3.

f. **Graphical Presentation**—Graphical presentation of Groundwater Analytical Data shall be completed pursuant to Title 27, section 20415, subdivision (e)(14) and shall include as necessary time-series concentration plots as described in Section C.

g. **Conclusions**—Reports shall include a summary of any relevant conclusions regarding the findings and results of monitoring activities and any proposed action to maintain or achieve compliance with the WDRs Order.

6. **Storm Event Report**

In the event of a major storm event at the Facility (defined as any storm that results in the site receiving 0.5 inch or more of precipitation within a 24-hour period), the Discharger shall perform a post-storm inspection within 24 hours after the cessation of precipitation and submit a brief storm event report to the Santa Ana Water Board within 48 hours of the post-storm inspection. This report shall include a brief description of facility systems performance during the storm event, a tabulation of the amount of precipitation at the site, pertinent photographs, the identification of any deficiencies, and the date and type of corrective action that has, or will be, taken to correct these deficiencies if necessary.

7. **Annual Site Survey and Winterization Plan**

By October 31 of each year, a site winterization plan per Section E.2 that includes at least the following information shall be submitted:

a. A site map showing existing and new or proposed components of the site drainage and erosion control system, including hardscape structures, other permanent and annual/seasonal erosion control, sediment control, and treatment control storm water best management practices. As part of the annual update to the Storm Water Pollution Prevention Plan for the site, the annual site winterization plan shall be used to anticipate modifications to these systems inherent to an open municipal solid waste landfill, and as a means to review the effectiveness of in-place drainage for the past 12 months.

b. Annual Survey Map - Topographic contours of the latest aerial or ground survey results showing details such as landfill elevations, the flow direction of all surface drainage.

8. **Five-Year Evaluation Monitoring Report**

As described in Section B.1.c, every five years, the Discharger shall collect and analyze water samples from all groundwater monitoring wells for all constituents listed in **Tables 3-5**, and submit a report to the Santa Ana Water Board containing the results of these activities. The results of the Five-Year Evaluation monitoring activities must be reported to the Santa Ana Water Board in accordance with **Table 1**. The last Five-Year evaluation was performed in January 2020 with the report submitted in April 2020. Future 5-Year Monitoring is due every 5 years, alternating in Fall and Spring (e.g., October 2025, April 2030, etc.) with the reports due in April 2026, October 2030, etc. This report may be combined with a Semi-Annual or Annual water quality monitoring report as appropriate, and shall include, but not be limited to, the following:

a. **Well Information**—For each monitoring well addressed by the report, a description of the method and time of water level measurement, and a description of the method of purging used to remove stagnant water in the well before sampling, pursuant to Title 27, section 20415, subdivision (e)(12)(B).

b. **Groundwater Elevations and Contours**—For each monitoring point addressed by the report, a tabular summary and graphical presentation of all measured groundwater elevation data, and a groundwater elevation contour map, showing the direction of groundwater flow under/around the Facility based upon water level elevations taken for the monitoring period.

c. **Sampling Information**—For each monitoring point addressed by the report, field sampling records showing the type of pump or other device used and its vertical placement for sampling, and a detailed description of the sampling procedures (number and description of the samples, field blanks, travel blanks, and duplicate samples taken, the type of containers and preservatives used, the date and time of sampling, the name(s) and qualifications of the person(s) taking the samples, and any other observations).

d. **Analytical Data and Results**—The report shall include a summary of all analytical monitoring results. Data shall be summarized and presented in a tabular format. Statistical and non-statistical analyses of the analytical data shall be presented. An evaluation and interpretation of the data analyses shall also be included. A copy of the laboratory analytical results shall be included.

e. **QA/QC Summary and Evaluation**—The report shall include a summary describing laboratory and field QA/QC activities

performed as part of monitoring activities. The summary shall include a discussion of any water sampling and monitoring activities that deviated from the sampling and quality assurance plans.

f. **Compliance Record Discussion**—A comprehensive discussion of the compliance record, and of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the landfill's waste discharge requirements relating to water quality issues.

g. **Summary of Changes**—A written summary of monitoring results and monitoring and control systems, indicating any changes made or observed since the previous 5-Year Evaluation Monitoring Event.

h. **Graphical Presentation**—Graphical presentation of Groundwater Analytical Data shall be completed in accordance with Title 27, section 20415, subdivision (e)(14) and shall include as necessary time-series concentration plots as described in Section C.

i. **Conclusions**—Each report shall include a summary of any relevant conclusions regarding the findings and results of monitoring activities that were conducted during the monitoring period.

9. **Signature**

All reports shall be signed by a responsible officer or a duly authorized representative of the Discharger and shall be submitted under penalty of perjury.

10. **Electronic Submittal of Information (ESI)**

In accordance with Electronic Reporting Regulations (Cal. Code Regs., tit. 23, Div. 3, Ch. 30), all reports, well data, and lab data must be submitted by uploading them to the State Water Resources Control Board’s GeoTracker database. All reports shall be submitted in an electronic format [i.e., Portable Document Format (PDF)], with text, tables, figures, laboratory analytical data in Electronic Deliverable Format (EDF), graphs, and appendices.

ENFORCEMENT

If, in the opinion of the Executive Officer, the Dischargers fail 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 Santa Ana Water Board reserves its right to take any enforcement actions authorized by law.

ADMINISTRATIVE REVIEW

Any person aggrieved by this Santa Ana Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, Title 23, section 2050 et seq. To be timely, the petition must 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 must 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.

ATTACHMENTS

Attachment A – Tables

Attachment B – Figures

ATTACHMENT A – TABLES

TABLE 1: MONITORING AND REPORTING SCHEDULE

TASK DESCRIPTION	MONITORING PERIOD	REPORT DUE DATE (annually unless otherwise specified)
Weekly WMU and Liquid Waste Containment System inspection	April 1 – September 30 October 1 – March 31	October 31 of each year April 30 of following year
Monthly Drainage Control System Inspection and Maintenance	April 1 – June 30 July 1 – September 30 October 1 – December 31 January 1 – March 31	October 31 of each year April 30 of following year
Semi-Annual General Site Monitoring Report	April 1 – September 30 October 1 – March 31	October 31 of each year April 30 of following year
Semi-Annual Water Quality Report (Groundwater and Vadose Zone)	April 1 – September 30 October 1 – March 31	October 31 of each year April 30 of following year
Annual Landfill Leachate and Gas Condensate Monitoring	October 1 – October 31	January 31 of following year
April Retesting for Leachate and Gas Condensate	April 1 – April 30 (If required)	July 31 of each year (If required)
Annual Facility Survey and Winterization Plan	By October 1 of each year	October 31 of each year
Annual Summary Report	April 1 of previous year to March 31 of current year	April 30 of each year
Post-storm Inspection	After a qualifying storm event that produces 0.5 inches or more of rain within a 24-hour period	2 business days after a post-storm inspection
5-Year Evaluation Monitoring	October 1 – December 30, 2025 April 1 – June 30, 2030	April 30, 2026 October 31, 2030 and every fifth year thereafter, due alternately in the Spring and Fall
5-Year LCRS Performance Testing	October 1 – December 30, 2029	April 30, 2030 and every fifth year thereafter

TABLE 2: MONITORING POINTS

MONITORING POINT ID	LOCATION CLASSIFICATION
BL-03, BD-04, BH-11, BH-21, BH-22, BH-25	Point of Compliance Groundwater Monitoring Wells
BL-03, BD-04, BH-11, BH-21, BH-22, BH-24, BH-25	Compliance Groundwater Monitoring Wells
All Facility Perimeter Gas Monitoring Probes	Vadose Zone Soil-Pore Gas Monitoring Probes
BH-LC (Leachate Tank on Bench P)	Leachate
BH-GC (Condensate Tank on Bench P)	Gas Condensate
BH-LC2 (Leachate Tank at South End of Phase 2)	Leachate
BH-GC2 (Condensate Tank at South End of Phase 2)	Condensate

TABLE 3: MONITORING CONSTITUENTS

CATEGORY	CONSTITUENTS	
Field Parameters	Dissolved Oxygen	Temperature
	Oxidation Reduction Potential	Turbidity
	Specific Conductance	pH
General Chemistry	Total Dissolved Solids (TDS)	Sulfate
	Alkalinity (Total, Bicarbonate, Carbonate, Hydroxide)	Chloride
	Nitrate (as N)	
Dissolved Metals	Calcium	Potassium
	Magnesium	Sodium
Appendix I Volatile Organic Compounds	Acetone Acrylonitrile Benzene Bromochloromethane Bromodichloromethane Bromoform; Tribromomethane Carbon disulfide Carbon tetrachloride Chlorobenzene Chloroethane; Ethyl chloride Chloroform; Trichloromethane Dibromochloromethane 1,2-Dibromo-3-chloropropane 1,2-Dibromoethane; Ethylene dibromide o-Dichlorobenzene; 1,2-Dichlorobenzene p-Dichlorobenzene; 1,4-Dichlorobenzene trans-1,4-Dichloro-2-butene 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethylene cis-1,2-Dichloroethylene trans-1,2-Dichloroethylene cis-1,3-Dichloropropene 1,2-Dichloropropane trans-1,3-Dichloropropene	Ethylbenzene Methyl butyl ketone; 2-Hexanone Methyl bromide; Bromomethane Methyl chloride; Chloromethane Methylene bromide; Dibromomethane Methylene chloride; Dichloromethane Methyl ethyl ketone; 2-Butanone Methyl iodide; Iodomethane 4-Methyl-2-pentanone; Methyl isobutyl ketone Styrene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Tetrachloroethylene Toluene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethylene; Trichloroethene Trichlorofluoromethane; CFC-11 1,2,3-Trichloropropane Vinyl acetate Vinyl chloride Xylenes, total

TABLE 4: MONITORING CONSTITUENTS

CATEGORY	CONSTITUENTS		
Inorganic Constituents	Arsenic	Nickel	Thallium
	Barium	Lead	Tin
	Beryllium	Antimony	Mercury
	Cadmium	Vanadium	Cyanide
	Cobalt	Zinc	Sulfide
	Chromium	Silver	
	Copper	Selenium	
Organic Constituents: *Chlorinated Herbicides*	2,4-Dichloro-phenoxyacetic acid	Silvex; 2,4,5-TP	2,4,5-Trichloro-phenoxyacetic acid
Organic Constituents: *Organochlorine Pesticides*	Aldrin alpha-BHC beta-BHC delta-BHC gamma-BHC; Lindane 4,4-DDD 4,4-DDE	4,4-DDT Dieldrin Endosulfan I Endosulfan II Endosulfan sulfate Endrin Chlordane	Endrin aldehyde Heptachlor Heptachlor epoxide Kepone Methoxychlor Toxaphene

CATEGORY	CONSTITUENTS		
Organic Constituents: *Semi-Volatile Organic Compounds*	Acenaphthene Acenaphthylene Acetophenone 2-Acetylaminofluorene 4-Aminobiphenyl Anthracene Benzo[a]anthracene Benzo[b] fluoranthene Benzo[k] fluoranthene Benzo[ghi] perylene Benzo[a] pyrene Benzyl alcohol Bis(2-chloroethoxy) methane Bis(2-chloroethyl) ether 2,2-oxybis(1-chloropropane) Bis(2-ethylhexyl) phthalate 4-Bromophenyl phenyl ether Butyl benzyl phthalate 4-Chloroaniline Chlorobenzilate 4-Chloro-3-methylphenol 2-Chloronaphthalene 2-Chlorophenol 4-Chlorophenyl phenyl ether Chrysene 2-methylphenol 3-methylphenol 4-methylphenol Diallate Dibenz [a,h] anthracene Dibenzofuran Di-n-butyl phthalate 3,3-Dichlorobenzidine 2,4-Dichlorophenol 2,6-Dichlorophenol Diethyl phthalate Thionazin	Dimethoate 4-Dimethylaminoazobenzene 7,12-Dimethylbenz[a]anthracene 3,3-Dimethylbenzidine; tolidine 2,4-Dimethylphenol Dimethyl phthalate 1,3-Dinitrobenzene 4,6-Dinitro-2-methylphenol 2,4-Dinitrophenol 2,4-Dinitrotoluene 2,6-Dinitrotoluene Dinoseb Di-n-octyl phthalate Diphenylamine Disulfoton Ethyl methanesulfonate Famphur Fluoranthene Fluorene Hexachlorobenzene Hexachlorobutadiene Hexachlorocyclopentadiene Hexachloropropene Hexachloroethane Indeno (1,2,3-cd) pyrene Isodrin Isophorone Isosafrole Methapyrilene 3-Methylcholanthrene Methyl methacrylate Methyl methanesulfonate 2-Methylnaphthalene Methyl parathion Naphthalene 1,4-Naphthoquinone 1-Napthylamine 2-Napthylamine	2-Nitroaniline 3-Nitroaniline 4-Nitroaniline Nitrobenzene 2-Nitrophenol 4-Nitrophenol N-Nitrosodi-n-butylamine N-Nitrosodiethylamine N-Nitrosodimethylamine N-Nitrosodiphenylamine N-Nitroso-N-dipropylamine N-Nitrosomethylethylamine N-Nitrosopiperidine N-Nitrosopyrrolidine 5-Nitro-o-toluidine Parathion Pentachlorobenzene Pentachloronitrobenzene Pentachlorophenol Phenacetin Phenanthrene Phenol 4-Phenylenediamine Phorate Polychlorinated biphenyls; PCBs; Aroclors Pronamide Pyrene Safrole 1,2,4,5-Tetrachlorobenzene 2,3,4,6-Tetrachlorophenol o-Toluidine 1,2,4-Trichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 0,0,0-Triethyl phosphorothioate 1,3,5-Trinitrobenzene
Organic Constituents *Volatile Organic Compounds*	Acetonitrile; Methyl cyanide Acrolein Allyl chloride Chloroprene Dichlorodifluoromethane; CFC-12	2,2-Dichloropropane; Isopropylidene chloride 1,1-Dichloropropene Ethyl methacrylate Isobutyl alcohol Methacrylonitrile	Propionitrile; Ethyl cyanide

TABLE 5: GENERAL PARAMETERS

PARAMETER	USEPA METHOD
Total Cations	1
Total Anions	1
Hydroxide (OH)	2
Specific Conductance (Electrical Conductivity)	120.1
Total Hardness	130
pH	150.1
Total Dissolved Solids	160.1
Iron (Fe)	200.7 / 236.1
Manganese (Mn)	200.7 / 243.1
Zinc (Zn)	200.7 / 289.1
Boron (B)	212.3 / 200.7
Carbonate ($CaCO_3$)	310.2
Bicarbonate (HCO_3)	310.2
Total Alkalinity	310.1
Chloride (Cl)	325
Fluoride (F)	340
Nitrate (NO_3)	353.2
Phosphate (PO_4)	365.2
Total Phosphorus	365.1/365.2
Sulfate (SO_4)	375
Chemical Oxygen Demand	410

PARAMETER	USEPA METHOD
Total Organic Carbon	415
Phenols	420.1
Total Organic Halogens	450.1

TABLE 6: TABLE OF DETECTED CONSTITUENTS

CATEGORY	CONSTITUENTS		
Inorganic Constituents	Bicarbonate Boron Chemical Oxygen Demand Hardness Iron Total Anions Total Cations	Total Organic Compounds Total Phosphorus Total Antimony Total Arsenic Total Barium Total Chromium Total Cobalt	Total Copper Total Nickle Total Selenium Total Vanadium Total Zinc
Organic Constituents *Semi-Volatile Organic Compounds*	Benzyl alcohol Bis(2-ethyl) phthalate Diethyl phthalate Dimethyl phthalate	Naphthalene Total Phenols	
Organic Constituents *Volatile Organic Compounds*	Acetonitrile Chloromethane Dichlorodifluromethane	Dichlorofluromethane Isobutyl alcohol	

ATTACHMENT B – FIGURES

FIGURE 1: MONITORING POINTS