

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**ORDER NO. R9-2026-0003, WASTE DISCHARGE REQUIREMENTS FOR CLOSURE
AND POST-CLOSURE MAINTANENCE AND MONITORING FOR RAMONA
LANDFILL INC., A SUBSIDIARY OF REPUBLIC SERVICES
RAMONA LANDFILL SAN DIEGO COUNTY, CALIFORNIA**

Ramona Landfill Inc. (Discharger), a subsidiary of Republic Services, Inc., as described below, is subject to the waste discharge requirements (WDRs) set forth in this Order No. R9-2026-0003, *Waste Discharge Requirements for Closure and Post-Closure Maintenance and Monitoring for Ramona Landfill Inc., a Subsidiary of Republic Services Inc., Ramona Landfill, San Diego County*, and Attachments A through D (collectively the Order).

Table 1. Discharger Information

Discharger	Ramona Landfill Inc., a subsidiary of Republic Services Inc.
Name of Facility	Ramona Landfill (Landfill)
Facility Address	20630 Pamo Road, Ramona, California 92065

Table 2. Discharge Locations

Discharge Point	Discharge Description	Discharge Point (Latitude)	Discharge Point (Longitude)	Receiving Hydrologic Area
Landfill	Non-hazardous municipal solid wastes	33.08545	-116.86330	Santa Ysabel Hydrologic Area

Effective Date

This Order was adopted by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) and is effective on <Date of adoption>.

I, David W. Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of this Order adopted by the San Diego

Water Board on <Date of adoption>.

David W. Gibson, Executive Officer

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A. FINDINGS

1. **Facility Description.** The Landfill property consists of two 80-acre parcels (**Figure 1**). The north parcel is reserved for the Landfill gas control system and scale house. The southern parcel is permitted for waste disposal, with a waste footprint of 46 acres. The eastern two-thirds of the waste footprint is unlined, while the remaining one-third of the waste footprint was lined in 1998. The area surrounding the Landfill is zoned for agriculture or open space.
2. **Waste Discharge Requirements.** This Order establishes the requirements for the closure and post-closure maintenance of the Landfill and includes a site-specific monitoring and reporting program (MRP, **Attachment A**). The Information Sheet (**Attachment B**) provides additional site-specific information, which includes the historical background, legal requirements, and technical rationale that serve as the basis for the development of this Order. The Information Sheet is incorporated into and constitutes the findings for this Order.
3. **Responsibilities of the Discharger.** The Discharger is responsible for constructing a final cover system in accordance with CCR title 27 and implementing post-closure maintenance activities to (1) ensure the containment of all wastes and waste byproducts, (2) prevent adverse impacts to groundwater and surface water quality, and (3) protect human health.
4. **Legal Authority.** This Order is issued pursuant to the Porter Cologne Water Quality Control Act (Water Code), commencing with section 13000, and implements (1) the Federal Resource Conservation and Recovery Act (RCRA), including regulations found in the Code of Federal Regulations, title 40 (40 CFR), part 258, adopted by the U.S. Environmental Protection Agency (USEPA) implementing requirements of RCRA subtitle D; (2) regulations and policies adopted by the State Water Resources Control Board (State Water Board) in CCR titles 23 and 27, and (3) applicable provisions of the California Health and Safety Code, Division 20, chapter 6.5. The MRP is issued pursuant to Water Code section 13267, which authorizes the San Diego Water Board to require the Discharger to furnish technical and monitoring program reports.
5. **Water Quality Control Plan.** The *Water Quality Control Plan for the San Diego Basin* (9) (Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. This Order implements the Basin Plan by prescribing WDRs for the design and construction of containment structures and monitoring systems, maintenance, and monitoring of the Landfill. These requirements ensure that waste contained within the Landfill does not impair the beneficial uses of surface water and groundwater or result in violations of water quality objectives.

6. **California Environmental Quality Act.** Issuance of this Order by the San Diego Water Board is a project under the California Environmental Quality Act (CEQA). The San Diego County (County) Department of Planning and Land Use, pursuant to the requirements of CEQA, certified a Negative Declaration in May 1993 and again in January 2011, when the Landfill ceased waste acceptance. The County Department of Environmental Health and Quality, Solid Waste Local Enforcement Agency (LEA) did not find any updates within the Discharger's *Final Closure/Post-Closure Maintenance Plan*¹ (Closure Plan), that contained significant new information during a 2018 permit review and the Negative Declaration remained in place. Detailed findings regarding compliance with CEQA are set forth in the Information Sheet.
7. **Antidegradation Policy.** The San Diego Water Board has considered the State Water Board's Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California*, (Resolution No. 68-16) in adopting this Order. This Order requires the Discharger to design, construct, and maintain waste containment systems that prevent discharges of waste and waste constituents to waters of the State. As explained in the Information Sheet, this Order is consistent with Resolution No. 68-16 because it requires the Discharger to manage waste and maintain waste containment systems to prevent degradation of groundwater and surface water, and to minimize odors and prohibit nuisance conditions.
8. **Rationale for Requirements.** The San Diego Water Board developed the requirements for this Order based on information submitted as part of the Closure Plan, groundwater monitoring reports, water quality control plans and policies, and other available information.
9. **Financial Assurances.** The Discharger provided proof of financial assurances to cover costs associated with closure, post-closure maintenance and monitoring, and corrective actions at the Landfill in accordance with CCR title 27 sections 22207, 22212, and 22222 in the form of a bond for closure/post-closure maintenance and corrective action and liability insurance. CCR title 27, section 22236 further requires the Discharger to recalculate and update financial assurances annually, as needed, to account for inflation. Additional details regarding the requirements for financial assurances are included in the Information Sheet.
10. **Delegation of Authority.** The San Diego Water Board, by prior resolution, delegated all eligible Board authorities to the Executive Officer, in accordance with Water Code section 13223. As such, the Executive Officer may act on the San

¹ Final Closure/Post-Closure Maintenance Plan, Ramona Landfill, April 2023; amended June 2024.

Diego Water Board's behalf on any matter within this Order unless that action is specifically prohibited under Water Code section 13223, or as otherwise explicitly stated in this Order.

11. **Notification of Interested Persons.** The San Diego Water Board notified the Discharger, local agencies, and all interested persons known to the San Diego Water Board of its intent to prescribe the requirements contained within this Order. The San Diego Water Board also provided an opportunity for all parties to submit (1) written comments prior to the public hearing and (2) oral comments and recommendations at a public hearing, for the Board's consideration. Notification details are included in **Section Q – Public Participation**, of the Information Sheet.
12. **Consideration of Public Comments.** The San Diego Water Board, in a public meeting, heard and considered all comments pertaining to this Order. Public hearing details are included in **Section Q – Public Participation**, of the Information Sheet.
13. **Severability.** The provisions of this Order are severable. If any provision of this Order, or the application of any provision of this Order to any circumstance is invalid, the application of that provision to other circumstances and the remainder of this Order will not be affected thereby.
14. **Effective Date.** This Order becomes effective on the date of adoption by the San Diego Water Board.

IT IS HEREBY ORDERED that this Order is effective upon the date of adoption. To meet the provisions contained in division 7 of the Water Code, commencing with section 13000, and the applicable regulations, it is further ordered that the Discharger comply with following:

B. PROHIBITIONS

1. The Discharger must prohibit the following discharges to, or from the Landfill:
 - a. Waste to waters of the State in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance as defined in Water Code section 13050.
 - b. Waste, including illegally dumped materials, to land, except as authorized by this Order or the terms described in Water Code section 13264.
 - c. Waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives and is expressly authorized by the San Diego Water Board.

- d. Waste to waters of the State or adjacent to waters of the State in a manner which may permit the waste to be transported into and/or by the water, except as authorized by the San Diego Water Board.
- e. Waste, including leachate, landfill gas condensate², and/or stormwater flows that have come into contact with waste to (1) the unlined portions of the Landfill or (2) stormwater conveyance systems, except as authorized by the San Diego Water Board.
- f. Waste into a natural or excavated site below historic water levels, except as authorized by the San Diego Water Board.
- g. Contaminated soils stockpiled for use in final cover maintenance.³

C. LANDFILL CLOSURE SPECIFICATIONS

1. **General Closure Specifications.** The Discharger must apply the following criteria to ensure compliance with applicable State and federal regulations for containment structures and final covers system.
 - a. **Containment Systems.** Containment systems must be designed and constructed in accordance with (1) the prescriptive standards set forth in CCR title 27, section 20330, or (2) an engineered alternative approved by the San Diego Water Board, in accordance with CCR title 27, section 20080(b).
 - i. Proposed engineered alternative containment system designs must include a demonstration that the design will offer equivalent water quality protection and meet the performance standards of a prescriptive final cover system. The Discharger must submit the proposed engineered alternative design to San Diego Water Board staff (Staff) for review. Staff will consider the Discharger's proposed engineered alternative and evaluate the need for new or amended WDRs. The Discharger must receive either written approval from Staff, or new or amended WDRs adopted by the Board, prior to implementing the proposed engineered alternative.
 - ii. Deviation from the prescriptive standards or approved engineered alternative must be justified, in writing. The Discharger must submit the justification to San Diego Water Board Staff for review. Staff will

² As defined in CCR title 27, section 20164, landfill gas condensate refers to liquids which are removed from a gas control system at a landfill, produced by the condensation of landfill gas within the conveyance system.

³ Soils that do not meet the criteria for use in final cover system maintenance. The specifications for final cover system soils are provided in Attachment C.

consider the Discharger's justification and evaluate the need for new or amended WDRs. The Discharger must receive either written approval from Staff, or new or amended WDRs adopted by the Board, prior to implementing any design or construction deviations.

Containment systems must be constructed using materials that have appropriate waste and chemical properties to ensure compatibility and the containment of waste at the Landfill.

- b. **Final Cover System Materials.** Construct the final cover system using soils that have appropriate chemical and physical properties in accordance with CCR title 27, section 20320(a). Specifically, the final cover system soil materials must:

- i. Have a maximum hydraulic conductivity of 4.0×10^{-4} and an average hydraulic conductivity of 1.6×10^{-7} centimeters per second (cm/sec) or less as determined through field and laboratory testing.
- ii. Be compacted to 90 percent of the maximum dry density.
- iii. Have a maximum particle size of less than three inches in diameter or length.
 - (1) Materials whose Grain-Size Distribution tests (American Society for Testing and Materials [ASTM] D422) indicate that the final cover soils contain particles in excess of three inches and/or have a minimum fines content (defined by No. 200 sieve) less than 37 percent for any individual test and an arithmetic mean for ten consecutive tests of less than 42 percent, must be rejected for use in the final cover system.
 - (2) Final cover soils must have a minimum of 20 percent finer than five microns for an individual test and 25 percent for the mean of ten consecutive tests.
- iv. Be free of contamination, debris, or materials that could compromise the integrity of the final cover system and meet the final cover material requirements found in **Attachment C**.

2. **Specific Closure Specifications.** The specifications described in this section apply to the removal and disposal of contaminated vegetative mulch from the Landfill final cover system. The removal of the contaminated vegetative mulch is the initial step associated with the Discharger's construction of the permanent final cover system. The Discharger must comply with the removal and disposal of existing vegetative mulch in accordance with the technical specifications and

Construction Quality Assurance Plan (CQA Plan) contained within the approved Closure Plan and the requirements of this Order.

- a. **Construction General Permit for Stormwater.** Obtain coverage for any construction activity described in this Order, which results in a land disturbance of one or more acres, in accordance with the *National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities Order WQ 2022-0057-DWQ, NPDES No. CAS000002 (CGP)*.⁴ These types of construction projects at the Landfill may include clearing, grubbing, excavation, grading, and construction of the Landfill final cover system, as proposed in the Closure Plan. The Discharger must obtain and maintain CGP coverage prior to commencing closure activities and until closure of the Landfill is certified by the San Diego Water Board.
- b. **Clearing and Grubbing.** The Discharger must comply with the clearing and grubbing specifications listed below to prepare the Landfill for the construction of the final cover system.
 - i. Remove all bushes, grasses, weeds, or other vegetative materials to ground level and drag the surface to remove roots.
 - ii. Designate areas outside the active clearing and grubbing areas to stockpile removed vegetative materials.
 - iii. Install best management practices (BMPs) around stockpiled vegetation as specified in the stormwater pollution prevention plan (SWPPP) submitted in compliance with the CGP.
 - iv. Stockpile bushes, grasses, weeds, and other vegetation removed during clearing and grubbing activities.
- c. **Removal of Vegetative Mulch.** Implement the following specifications listed below to prepare the Landfill for the final cover system.
 - i. Remove the existing vegetative mulch in accordance with the approved Closure Plan.
 - ii. Remove the top one-foot of the vegetative mulch on the Landfill cover in accordance with the approved Closure Plan.
 - iii. Track-walk the upper deck and side slopes after removal of the vegetative mulch is complete and conduct a visual inspection for signs of

⁴ Order WQ 2022-0057-DWQ, section II.A.

damage to the final cover system. Repair any damaged areas of the final soil cover and document repairs in daily field reports and in the Final Construction Report.

- d. **Management of Vegetative Mulch.** Implement the following measures to manage the removed vegetative mulch and dispose of the material in accordance with the approved Closure Plan.
- i. Designate a stockpile area outside the final cover area to store vegetative mulch prior to disposal. This can be the same stockpile as the clearing and grubbing material.
 - ii. Install BMPs around stockpiled vegetative mulch as specified in the SWPPP submitted in compliance with the CGP.
 - iii. Dispose of the vegetative mulch stockpiled materials at a licensed waste management facility.
 - iv. Submit waste manifests documenting disposal activities in the Final Construction Report.
 - v. Dispose of vegetative mulch and clearing and grubbing stockpiled materials by burning, if not disposed of at a licensed waste management facility. Prior to burning, the Discharger must:
 - (1) Obtain a winter burn permit and schedule from CALFIRE and the San Diego County Air Pollution Control District.
 - (2) Notify nearby residents of the intent to burn, the schedule for burn activities, and any measures proposed to address potential nuisance conditions.
 - (3) Submit a Sampling and Analysis Plan to the San Diego Water Board for burn ash to demonstrate the waste classification of the residual waste stream.
 - (4) Conduct burn ash sampling in accordance with the approved Sampling and Analysis Plan and submit the results to the San Diego Water Board for concurrence prior to disposal.
 - (5) Containerize burn ash to prevent unauthorized discharges of waste to land.
 - (6) Dispose of burn ash at an appropriately licensed waste management facility.

- (7) Submit copies of waste manifests documenting disposal activities in the Final Construction Report.
- e. **Final Cover System.** Construct a final cover system that is consistent with the approved Closure Plan and performance standards outlined in CCR title 27, section 20950(a)(2). The Discharger's final cover system must consist of the following elements.
- i. **Engineered Alternative Design.** The Discharger's final cover system for the Landfill is an engineered alternative to the prescriptive standard specified in CCR title 27, section 21090(a), which consists of a:
- (1) Three-foot thick monolithic cover comprised of approximately 226,000 cubic yards of off-site borrow materials were used to meet the design specifications found in the Closure Plan. The monolithic cover is placed above the existing one foot intermediate cover on the upper deck and side slopes.
 - (2) One-foot thick vegetative mulch layer, placed above the monolithic cover.
- The final cover system has a total thickness of four feet. The permeability ranges from 1.9×10^{-6} to 1.9×10^{-8} cm/sec.
- ii. **Vegetative Mulch Layer.** The Discharger must use a native seed mix of shrubs and grasses applied to the upper deck and side slopes to provide protection against soil erosion upon completion of construction of the final cover system. Only the side slopes may be irrigated, temporarily, to establish the vegetative mulch layer if needed. The vegetative mulch layer must be established on the side slopes in approximately three to five years. The Discharger must provide the San Diego Water Board with a contingency plan for providing side slope protection against erosion should the vegetative mulch layer fails to become established with five years of the initial application of the seed mix and planting of vegetation because California is facing long-term drought conditions. This contingency plan must be submitted to the San Diego Water Board ***within 180 days of completion of construction of the landfill final cover system.***
- iii. **Final Cover System Grade.** The Discharger must design and grade the final cover system to divert precipitation away from the Landfill to prevent ponding of surface water over wastes and to resist erosion as a result of precipitation events with a return frequency for a 24-hour, 100-year storm event. Any drainage layer in the final cover system must be

designed and constructed to intersect with the final drainage system for the Landfill in a manner that resists erosion from the design storm event and promotes free drainage from all portions of the final cover system in accordance with CCR title 27, sections 20365(c), 20365(d), and 20365(e). All portions of the final cover system must have a slope of at least three percent unless otherwise specified by the San Diego Water Board, in accordance with CCR title 27, section 21090(b).

3. **Construction Quality Assurance (CQA) / Quality Control.** Implement the following measures to ensure that the construction quality assurance/quality control requirements found in State⁵ and federal⁶ regulations are achieved:
- a. Develop and submit a Design Report, which includes a technical analysis and demonstration that the proposed final cover system design can be constructed and remain stable and functional.
 - b. Employ a CQA Officer independent of both the Discharger and the construction contractor, who is technically qualified to perform construction quality assurance monitoring and testing during construction activities. The third party CQA Officer will be responsible for certifying that the containment system was constructed in accordance with approved design and all applicable plan and engineering specifications.

CCR title 27, section 20324(b)(2) and the California Business and Professionals Code, sections 6735 and 7835 require the signature of appropriately licensed professionals when submitting technical or monitoring reports to the San Diego Water Board. Daily field reports monitor containment system construction activities including clearing, grading, subgrade preparation, deployment of earthen and synthetic containment system components, field sampling and testing of materials, and ensures that the final cover system is constructed in accordance with the design approved by the San Diego Water Board. These activities, as described in the approved CQA and Design Reports, must be detailed in daily field reports signed by the CQA Officer (**Reporting Requirement G.2**).

- c. Design and construct the Landfill final cover system under the direct supervision of a California licensed civil engineer or a certified engineering geologist in accordance with CCR title 27, sections 20324(b)(1) and 20310(e), and certified by that individual as meeting the design and construction standards prescribed in the applicable State and federal regulations and

⁵ CCR title 27, sections 20320, 20324, 20330, 20340, 20365, 20370.

⁶ 40 CFR, part 258.40 *et seq.* (Subtitle D).

implemented by this Order. All design documents must include a CQA Plan for the purpose of:

- i. Providing a demonstration that the proposed final cover system meets the regulatory and performance standards prescribed by CCR title 27, sections 20330 and 20340.
 - ii. Prescribing quality controls for the materials and practices used to construct the final cover system, and to prevent the use of inferior products and/or materials that do not meet the regulatory standards.
 - iii. Outlining the role and responsibilities of the CQA Officer, Construction Manager, sub-contractors, and any other personnel participating in the construction of the containment system.
- d. Select soil for use in the final cover system that has hydraulic conductivities appropriate for the proposed use of the soils. Hydraulic conductivities must be determined through laboratory analysis in accordance with CCR title 27, section 20320 and confirmed using applicable field-testing methods in accordance with CCR title 27, section 20324 *et seq.* The results of these analyses must be provided to the San Diego Water Board in the final CQA Report.
- e. Submit a Final Construction Report to the San Diego Water Board for review and comment after final cover activities are completed. Once the Final Construction Report is deemed complete, the San Diego Water Board will perform a containment structure certification inspection in accordance with CCR title 27, section 20310(e).

D. POST-CLOSURE MAINTENANCE SPECIFICATIONS

1. **Post-Closure Maintenance.** The Discharger must maintain the Landfill and all treatment, control, and containment systems used by the Discharger to achieve and maintain compliance with the requirements of this Order and CCR title 27, subchapter 5, article 2 for the closure and post-closure maintenance of the Landfill. Proper maintenance includes effective performance of the final cover system, implementation of appropriate BMPs to control erosion, run-on and run-off, and operation of treatment and control systems. The Discharger must document all maintenance activities in the Annual Site Conditions Certification Report (**Attachment D**).
2. **Duty to Use Licensed Professionals.** The Discharger must provide documentation that all plans and reports required under this Order are prepared by or under the direction of appropriately qualified professionals. CCR title 27, sections 20324(b) and (d), 20950(b), and 21090(b)(1)(C); and the California

Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgements be performed by or under the direction and supervision of licensed professionals. A statement of qualifications and license number(s) of the responsible lead professional(s) must be included in all plans and reports submitted by the Discharger. The lead professional must sign and affix their license stamp to the report, plan, or document.

3. **Methane and Other Landfill Gases.** The Discharger must control, adequately vent, or remove methane and other landfill gases to prevent the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration of landfill gases through the vadose zone.
4. **Landfill Gas Condensate.** The Discharger must manage landfill gas condensate generated by the Landfill in a manner that is consistent with CCR title 27, section 20340 and 40 CFR, part 258.28. The landfill gas condensate is reused in a composite lined waste management unit equipped with a leachate collection and removal system.
5. **Final Cover System Grading.** The Discharger must ensure the final cover system maintains a minimum slope of three percent to promote sheet flow and to prevent ponding and infiltration of surface water. The Discharger must provide the San Diego Water Board with documentation of the activities undertaken at the Landfill to maintain the integrity of the final cover system as part of the Annual Site Conditions Certification Report.
6. **Final Cover System Vegetation.** The Discharger must ensure that vegetation used as erosion control and to restore the aesthetic of the Landfill property (1) will have root depths that are shallower than the final cover system thickness, (2) will require minimum irrigation and maintenance, and (3) will not impair the integrity of the final cover system. Vegetation used on final cover system must meet the requirements of CCR title 27, section 21090(a)(3)(A)(1).
7. **Soil Stockpiles.** The Discharger must ensure that soils imported and stockpiled for routine maintenance of the Landfill final cover system comply with the following specifications:
 - a. Soils must meet the requirements in **Attachment C**. Soils used for cover repair in the event of differential settlement, erosion, etc. must be of the same quality as those used in initial construction of the final cover system.
 - b. Soil stockpile area(s) must be located more than 100 feet from any surface waters of the State.

- c. Effective BMPs must be implemented to prevent contact with surface water run-on and the erosion and transport of soil by surface water run-off. This includes protection against 100-year peak stream flows as defined by the local county flood control agency.
8. **Water Use.** The Discharger must limit the water used for landfill maintenance to the minimum volume of water necessary for dust control and establishing vegetation. Water may only be applied (1) by spraying, (2) on covered areas and not on trash, and (3) in quantities that do not exceed the volume of water necessary to reduce immediate dust hazards or establish and promote vegetative growth. The Discharger is encouraged to use recycled water, an identified reuse in the Statewide Water Quality Control Policy for Recycled Water⁷, to support water sustainability and mitigate the impacts of climate change.
9. **Irrigation System.** The Discharger must install an irrigation system to establish an effective vegetative cover to promote soil stability and limit erosion of the Landfill cover. The irrigation system is expected to run regularly while establishing the vegetative cover, and intermittently afterwards, as needed, to maintain vegetation on the Landfill cover. The irrigation system must be managed by a weather-based irrigation controller and must be operated based on plant needs. When operational, the duration of watering must not exceed the infiltration rate of the cover soil and cause erosion or soil loss. The irrigation system must include the following minimum elements:
- a. A tandem master valve and flow sensor, installed at the point of connection.
 - b. A mainline (supply line) providing a minimum of 30 pounds per square inch pressure throughout the system and composed of UVR-PVC pipe.
 - c. Remote control valves and secondary laterals with sprinklers on risers located across the side slopes.
 - d. The design for irrigation lines overlying waste must also include flexible connectors, secondary containment, rain sensors, and automatic shut-off valves. When not in operation, the pipes of the irrigation system must not be charged with water. The Discharger must develop and submit to the San Diego Water Board a maintenance plan describing an inspection and maintenance schedule for the irrigation system. A copy of the maintenance plan and inspection schedule must be submitted as an appendix to the Annual Site Conditions Certification Report (see **Reporting Requirement G.5**).

⁷ See State Water Resources Control Board Resolution No. 2018-0057.

- e. Once the irrigation is no longer needed, the watering system must be removed or maintained in good condition if left in place.
10. **Stormwater Management.** The Discharger must manage stormwater run-on and run-off to protect the Landfill from washout or erosion of cover materials to maintain the integrity of the containment system and protect receiving water quality and beneficial uses. The stormwater management system must be designed to manage and control run-on and run-off from a 100-year, 24-hour storm event. The definition of a 100-year, 24-hour storm event must be re-evaluated every five years to account for extensive periods of drought, seasons of heavy rain, and other effects of climate change. The Discharger must include the re-evaluation and definition of the 100-year, 24-hour storm event in the Annual Site Conditions Certification Report (**Attachment D**) for the following year. The re-evaluation must include a comparison of the newly calculated design storm, with the previously calculated design storm, and a determination that the stormwater conveyance system is adequately sized to manage stormwater run-on and run-off. Based on the results of the re-evaluation, the design and construction of stormwater conveyance and containment structures must be adjusted to accommodate higher volumes of stormwater run-on and run-off.

The Discharger must implement the following minimal measures to manage stormwater run-on and run-off at the Landfill:

- a. BMPs must be constructed and implemented prior to the start of the rainy season on **October 1** of each year. The Discharger is responsible for performing maintenance and repairs needed due to changing site conditions at any time during the rainy season.
- b. The Landfill cover must be maintained to minimize percolation of stormwater through waste.
- c. The Landfill must be graded and maintained to minimize infiltration of precipitation into the waste at the Landfill. This can be accomplished by grading to promote positive drainage, prevent ponding, prevent erosive flows resulting in exposed waste, and promote positive drainage through the implementation of structural and non-structural BMPs.
- d. Precipitation that falls within the boundary of the Landfill but does not interact with waste must be collected by a system of berms, ditches, down chutes, swales, and drainage channels, and must be diverted off the waste footprint and into an on-site detention basin.
- e. Precipitation that interacts with exposed waste resulting from erosive flows must be treated as leachate. The Discharger must collect and manage

leachate generated from precipitation in a manner consistent with this Order and CCR title 27. The Discharger must ensure that leachate generated during precipitation events does not enter the stormwater conveyance system. Any stormwater that mixes with leachate is considered wastewater and must be managed accordingly.

- f. Stormwater management structures must be sized and maintained to effectively divert sheet flow run-off laterally, or via the shortest distance, into the drainage and collection facilities. Stormwater management structures may be updated or replaced as needed to reflect changing site conditions. The Discharger must submit justification and documentation for the modifications to the stormwater management structures for Staff's review and approval, which may require an amendment to this Order.
 - g. Erosion control BMPs must be used to protect drainage conveyance features in areas where erosive flow velocities may or are known to occur. Effective erosion control BMPs must be implemented on side slopes and interim bench ditches to control erosion when necessary.
 - h. Erosion control BMPs must be implemented in areas where high stormwater flow velocities occur at terminal ends, down chutes, or where down chutes cross access roads.
 - i. Sediment accumulated in the detention basins must be removed whenever the volume of the detention basin has been reduced by 25-percent of the basin's design capacity. The Discharger must install a visual marker in all detention basins to display sediment levels relative to the percentage of each of the basin's design capacity.
 - j. Stormwater flows that accumulate in the Landfill's southeast and southwest stormwater detention basins may have overflow discharges to Pamo Creek. Both stormwater detention basins are dewatered after rain events via skimmers that remove surface water to allow for the settlement of sediment and limit sediment discharges to Pamo Creek during storm events.
11. **Precipitation and Drainage Controls.** The Discharger must design and construct the precipitation and drainage control system to, at a minimum, accommodate peak flows from surface water run-off from a 24-hour storm event, with a 100-year return frequency in accordance with CCR title 27, section 20260(c), and Table 4.1.⁸ The Discharger must use the most recent evaluation of the recurrence interval and severity of a "100-year, 24-hour" storm event to develop the design of the precipitation and drainage control system. The Discharger must also design,

⁸ Table 4.1 "Construction Standards for Units" found in CCR title 27.

construct, and maintain the precipitation and drainage control system to meet the required performance standards of CCR title 27, section 20365(c), and consider the following:

- a. The final contours for the closed Landfill.
 - b. The possible effects of the Landfill's drainage pattern on the regional watershed, and the possible effects of the regional watershed's drainage pattern on the Landfill.
 - c. The design capacity of the drainage systems of downstream and adjacent properties by providing for the gradual release of retained stormwater downstream in a manner that does not exceed the expected peak flow rate at the point of discharge as if the Landfill were not constructed.
12. **Detention and Desiltation Basins.** Apply the following minimum criteria to all basins constructed to manage stormwater run-on and run-off at the Landfill.
- a. Detention basins used to contain stormwater run-off must be designed and constructed in accordance with the findings and design criteria provided in the Closure Plan and any hydrology studies contained there, or in an update to the Closure Plan as approved by the San Diego Water Board. At a minimum, basins must be designed to contain peak stormwater flows associated with a 100-year, 24-hour storm event, as defined by the most recent evaluation of the recurrence interval and severity of a 100-year, 24-hour storm event.
 - b. Detention and desiltation basins must be designed and sited to minimize impacts and risks to waste containment structures at the Landfill. Basins must be concrete-lined and not located up-slope or immediately adjacent to other waste containment structures, because basin failure in these locations may damage the containment system and/or allow stormwater to infiltrate the waste prism.
13. **Public Notification Requirement.** The Discharger must post at least one sign clearly visible to the public (in English and Spanish), at the edge of the Landfill, listing the following minimum information:
- a. Site name.
 - b. Name and address of the Discharger.
 - c. 24-hour emergency contact information, including name, address, email, and telephone number for the Landfill.

The Discharger must post signs in additional locations and/or in languages other than English and Spanish if one sign in English and Spanish is not adequate to effectively communicate to the local community the minimum contact information prescribed in this section. Sign(s) must be maintained to remain legible and in place.

14. **Post-Closure Maintenance Period.** The Discharger must comply with the post-closure maintenance and monitoring requirements, until the San Diego Water Board determines that the remaining waste in the Landfill no longer have the potential to threaten water quality, pursuant to CCR title 27, section 20950(a)(2)(A)(2).

E. INSPECTIONS

1. **Compliance Inspections.** The Discharger must regularly inspect the Landfill during the post-closure maintenance period to document the condition of the Landfill throughout the year. The Discharger must provide a Compliance Inspection Report to the San Diego Water Board **within 2 weeks** of completing the compliance inspection.
2. **Post-Rain Inspection Report.** The Discharger must perform an inspection of the Landfill **within 24 hours** of a precipitation event that has a cumulative rainfall of one inch or greater over a 72-hour period (Storm Event) at the Landfill, as conditions allow. The Post-Rain Inspection Report must be submitted to the San Diego Water Board **within 48** hours of inspection completion. If the deadline for submitting a Post-Rain Inspection Report coincides with a holiday or non-operational day for the Discharger, the inspection report may be submitted by noon of the next business day.
3. **Post-Disaster Inspection Report.** The Discharger must submit a Post-Disaster Inspection Report **within seven days** of a naturally occurring event that has the potential to adversely impact the Landfill. These events may include, but are not limited to, seismic events, fires, landslides or mass wasting events, and floods. The Discharger must notify the San Diego Water Board if a post-disaster inspection cannot be performed in time to submit the written report within seven days of the qualifying event. The Discharger may request an extension to submit the inspection report from the San Diego Water Board's Executive Officer should the Landfill be inaccessible or unsafe due to the severity of the damage sustained during the qualifying event. The request must be made, in writing, a **minimum of 48 hours** prior to the deadline for submitting the Post-Disaster Inspection Report. The request must include the reason for the delay, and an estimated timeline for completing the inspection and submittal of the corresponding inspection report. The following are qualifying events that require a post-disaster inspection and subsequent inspection report:

- a. A seismic event strong enough to be recorded and/or felt at the Landfill.
- b. A fire that burns adjacent to, or over any portion of the Landfill property.
- c. A mass wasting event (i.e., landslide, slope failure, or washout) on or adjacent to the Landfill property that could adversely impact the integrity of waste containment structures, stormwater conveyance features, or monitoring systems.
- d. A flood caused by excessive run-on from upland areas or overtopping of streams and/or tributaries located on or adjacent to the Landfill property which could result in ponding, exposed waste, washout of cover systems, or other damage to the final cover system.

F. PROVISIONS

1. **General Provision.** The discharge of waste must, at all times, be in conformance with applicable State and federal regulations, water quality standards, including but not limited to, all applicable provisions and prohibitions contained in the Basin Plan including beneficial uses, water quality objectives, and implementation plans. This Order does not preempt or supersede the authority of municipalities, flood control agencies, or State and local agencies to prohibit, restrict, or control discharges of waste subject to their jurisdictions.
2. **Duty to Comply.** Any noncompliance with this Order constitutes a violation of the Water Code and is grounds for enforcement action, and termination, revocation and re-issuance, or modification of this Order.
3. **Revision of Waste Discharge Requirements.** The filing of a request by the Discharger for the modification, revocation and reissuance, or termination of this Order, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order. The San Diego Water Board may modify, revoke and reissue, or terminate this Order for cause including, but not limited to, the following:
 - a. Violation of any term or condition of this Order.
 - b. Obtaining this Order by misrepresenting or failure to fully disclose all relevant facts.
 - c. Changes in any condition at the Landfill that requires either a temporary or permanent reduction or elimination of the authorized discharge.
4. **Change in Ownership.** This Order is not transferrable to any person except after notice to the San Diego Water Board. The San Diego 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 under the Water Code. The Discharger must submit notice of any proposed transfer of this Order's responsibility and coverage under **Reporting Requirement G.15** of this Order. The Discharger must also inform the transferee of the status of the Discharger's annual fee account. When the Discharger notifies the San Diego Water Board of a transfer of ownership, the notification must include a proposed schedule for the succeeding owner to provide evidence of acceptable financial assurance responsibility to the San Diego Water Board.

5. **Property Rights.** This Order does not convey any property rights of any sort, or any exclusive privilege. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, State, or local laws, nor create a vested right for the owner and operator to continue the regulated activity.
6. **Entry and Inspection.** Under the authority of Water Code section 13267(c), the Discharger must allow the San Diego Water Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
 - a. Enter the Discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order.
 - b. Access and copy, at reasonable times, any records that must be 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 by this Order.
 - d. Sample or monitor, at reasonable times, any substances or parameters at any location, for the purpose of assuring compliance with this Order, or as otherwise authorized by the Water Code.
 - e. Photograph or videotape any structures, facilities, activities, or other conditions that could result in adverse impacts to water quality and that are pertinent to compliance with this Order.

G. REPORTING REQUIREMENTS

The Discharger must furnish, within a reasonable time frame, any information requested by the San Diego Water Board to determine compliance with this Order and/or whether cause exists for modifying, revoking and reissuing, or terminating this Order. The

Discharger must also furnish copies of records required by this Order, to the San Diego Water Board upon request.

1. **Report of Waste Discharge.** The Discharger must file a Report of Waste Discharge (ROWD) or amendment to the Joint Technical Document (JTD), at least **120 days** prior to the following:
 - a. Any planned change in the regulated facility or activity that may result in noncompliance with this Order.
 - b. As required for implementation of an Evaluation Monitoring Program, or a Corrective Action Monitoring Program, as required in CCR title 27, sections 20425 and 20430.
2. **Daily Field Reports.** The Discharger must submit a daily field report to the San Diego Water Board during construction of the final cover system, or during corrective action construction activities. The San Diego Water Board must receive the daily field reports **by noon** of the day following report preparation. Daily field reports must include observations, photographs, maps showing the area(s) of activity each day, records of field activities, problems identified during construction, and actions taken to correct the problems.

The Discharger must submit daily field reports for all activities planned or included in the closure of the Landfill including clearing, grubbing, grading, or construction of the final cover system. The Discharger must submit a daily field report or notify the Board for all days of proposed construction, including days when activities are not performed due to weather, supply chain issues, staffing, etc. Daily field reports must be signed by the CQA Officer.

3. **Final Construction Report.** The Discharger must submit a Final Construction Report to the San Diego Water Board after construction of the final cover system is complete. At a minimum, the Final Construction Report must include the following information:
 - a. A Final Engineering Report that includes, but is not limited to, as-built plans, specifications and descriptions of materials used to construct the final cover system as required by CCR title 27, section 21760(a)(1).
 - b. A Final CQA Report that includes a written summary of the CQA program, including the monitoring and technical oversight provided by the CQA Officer, laboratory and field testing results, analyses, and copies of the CQA Officer's original field notes, and a certification as described in CCR title 27, section 20324(d)(1)(C).

4. **Monitoring Reports.** The Discharger must submit the semi-annual Groundwater Monitoring Reports and Annual Compliance Reports according to the schedule included in the MRP, and pursuant to Water Code section 13267 and CCR title 27, section 20385. In addition, the Discharger must comply with all notice and reporting requirements of the California Department of Water Resources, and with any agency well-permitting requirements imposed by a local agency regarding the construction, alteration, destruction, maintenance, or abandonment of any monitoring wells used for compliance with this Order and the MRP, as required under Water Code sections 13750 and 13755, and local agency requirements.
5. **Annual Site Conditions Certification Report.** The Discharger must submit an Annual Site Conditions Certification Report according to the schedule included in the MRP, containing the information outlined in **Attachment D**.
6. **Significant Maintenance Activity Work Plan.** The Discharger must submit a work plan prior to any significant maintenance activities that could alter the existing surface drainage patterns or change existing slope configurations. These activities may include importing and stockpiling fill materials, the design and installation of soil borings or groundwater monitoring wells, construction of stormwater conveyance features, and other devices used for site investigation or monitoring purposes. Unless otherwise directed by the San Diego Water Board, the Discharger may initiate the activities proposed in the work plan **30 days** after the San Diego Water Board received the work plan for review and consideration. Activities associated with normal Landfill maintenance such as drainage pipe installation or track-walking a slope, are not considered significant maintenance and do not require the Discharger to submit a Significant Maintenance Activity Work Plan.
7. **Compliance Inspection Reports.** The Discharger must submit a Compliance Inspection Report **within two weeks** of completing the inspection at the Landfill in accordance with section G.1 of this Order. The Compliance Inspection Report must at a minimum include a discussion on the following:
 - a. Instances of damage, erosion, settlement, or animal burrows to the final cover system.
 - b. Instances of exposed waste.
 - c. The condition of the:
 - i. Groundwater, vadose zone and surface water monitoring wells or points.
 - ii. Landfill gas system, as applicable, including the gas probes, mainlines, headers, and flare station.

- iii. Leachate collection and removal system, as applicable, including the tanks, inspection ports, sumps, and above-ground conveyance lines.
 - iv. BMPs stormwater run-on and run-off control.
 - v. Stormwater conveyance system, including perimeter drains, down chutes, swales, and detention basins.
 - vi. Final cover system vegetation, as applicable.
 - vii. Maintenance roads and benches.
 - viii. Required signage and property security.
- d. Evidence of illegal dumping and/or vandalism at the Landfill.
 - e. Instances and/or areas of noncompliance.

The Compliance Inspection Report must also include (1) photographs documenting any of the topics identified above, and (2) an annotated map identifying the location of areas of concern, noncompliance, and/or repairs.

8. **Post Rain Inspection Reports.** The Discharger must submit a Post-Rain Inspection Report ***within 48 hours*** of a Storm Event as defined in section E.2 above. The Post-Rain Inspection Report must, at a minimum, include the following information:

- a. The start date and duration of the Storm Event recorded or measured at the Landfill.
- b. The volume of rain, in inches, recorded or measured at the Landfill for each day of the Storm Event.
- c. A narrative describing general site conditions, locations where stormwater was captured or discharged in areas other than dedicated stormwater conveyance features, the quality and effectiveness of BMPs and run-on control measures, and any erosion, ponding, or exposed waste observed during the inspection.
- d. Photographs documenting site conditions including detention basins, BMPs, the final cover system, top deck and side slopes, and any areas of damage observed during the inspection.
- e. An annotated map identifying the location(s) of any damage sustained during or after the Storm Event.

9. **Post-Disaster Notification and Inspection Report.** The Discharger must ***immediately*** notify the San Diego Water Board when the Landfill experiences a qualifying event, as described in section F.3 of this Order. The Discharger must also submit a Post-Disaster Inspection Report to the San Diego Water Board, ***within seven days*** of the qualifying event. The Post-Disaster Inspection Report at a minimum, must provide the following:
- a. A detailed description of the event, including the date(s) and duration.
 - b. A detailed summary of site conditions.
 - c. A detailed summary of Landfill conditions, including any damage sustained to the containment structures, stormwater conveyance features, monitoring systems (i.e., groundwater, landfill gas, and leachate), and ancillary landfill features.
 - i. For seismic events, the Post Disaster Inspection Report must also include at a minimum, information regarding the fault line, magnitude, and epicenter.
 - ii. For mass wasting events (i.e., landslides, slope failures or washouts), the Post Disaster Inspection Report must also include at a minimum, information regarding the type of slope movement and a description of the landfill impacted slope(s) (i.e., waste slopes, outer slopes, lined slopes, etc.).
 - d. Photographs documenting site conditions and damage to the Landfill.
 - e. An annotated map identifying the location(s) of any damage sustained during or after the qualifying event.
10. **Notification of Noncompliance.** The Discharger must notify the San Diego Water Board either orally or via email, ***within 24-hours*** of discovering any of the following conditions at the Landfill:
- a. **Endangerment of Human Health or the Environment.** The Discharger must report any noncompliance which may endanger human health or the environment.
 - b. **Damage from Maintenance Activities.** The Discharger must report any instances of damage caused by construction activities to the containment structures, leachate collection and removal system, stormwater conveyance features, or monitoring systems located at the Landfill. Construction activities may include final cover system repairs, liner and waste removal activities, liner repair activities, and implementation of structural BMPs.

- c. **Damage from Natural Causes.** The Discharger must report any instances of damage to containment structures, the leachate collection and removal system, stormwater conveyance features, or monitoring systems from natural causes, including seismic events, storm events, fires, or floods. Reportable damage includes, but may not be limited to: washout from storm events, landslides, slope creep, stress cracks or fissures, ground rupture, sinkholes, subsidence, liquefaction, ponding, exposed waste, melted monitoring systems, explosions, and uncontrolled venting of landfill gas.
 - d. **Slope Failure or Seismic Displacement.** The Discharger must report any slope failure or seismic displacement that threatens the integrity of the containment structures, the leachate collection and removal system, stormwater conveyance features, or monitoring systems.
 - e. **Seepage from the Landfill.** The Discharger must report the discovery of any previously unreported seepage from the Landfill.
 - f. **Landfill Gas Condensate Release.** The Discharger must report any release of leachate from the leachate collection and removal system or landfill gas condensate from the landfill gas collection system.
 - g. **Exposed Wastes.** The Discharger must *immediately* cover any exposed waste discovered at the Landfill and report this discovery to the San Diego Water Board.
 - h. **High Heat Events.** The Discharger must report temperature readings of 145°F or greater measured in perimeter landfill gas probes, or if a temperature reading of 170°F is measured in any area of the Landfill. Following notification, the Discharger must provide weekly written updates to Staff that include a discussion of any actions taken to reduce temperature readings and investigate the cause of the elevated temperatures in the affected area.
11. **Emergency Response.** The Discharger must submit an Emergency Response *within 48-hours*, in writing, documenting the immediate steps taken to (1) stop the release; (2) cover exposed wastes; (3) stabilize slopes; (4) repair damage; (5) reduce leachate generation; (6) mitigate a high heat event, and/or (7) address the noncompliance issues listed above and described in the Notification of Noncompliance.
12. **Emergency Response Work Plan.** The Discharger must submit an Emergency Response Work Plan *within seven days* of either discovering an area of noncompliance, or in response to a staff enforcement letter or notice of violation issued by the San Diego Water Board. The Emergency Response Work Plan must

include (1) a description of the noncompliance issues and its cause, (2) the period of noncompliance, including exact dates and times, (3) the steps necessary to investigate and evaluate the cause of the noncompliance, (4) the steps planned, or design or operational changes needed, to reduce, eliminate, or prevent recurrence of the noncompliance, (5) a map documenting the location(s) of the noncompliance, (6) the methods of analysis proposed for sampling, if applicable, and (7) a time schedule for completion of these steps. The Discharger may request an extension to submit the Emergency Response Work Plan from the San Diego Water Board's Executive Officer should the site be inaccessible or severely damaged.

13. **Emergency Response Report.** The Discharger must submit an Emergency Response Report ***within two weeks*** of completing the steps proposed in the approved Emergency Response Work Plan. The Emergency Response Report must outline the Discharger's actions taken or operations changes implemented prevent immediate impacts to human health and the environment, and also to reduce, eliminate, or prevent recurrence of the noncompliance at the Landfill.
14. **Incomplete Reports.** Where the Discharger becomes aware that it failed to submit any relevant facts or submitted incorrect information in a ROWD or JTD, groundwater monitoring report, Design Report, CQA Report, Annual Site Conditions Certification Report, or any other report submitted to the San Diego Water Board, the Discharger must promptly submit the additional facts or corrected information.
15. **Change in Ownership.** The Discharger must notify the San Diego Water Board in writing ***at least 30 days*** in advance of any transfer of the property to a new owner. The notification must include an acknowledgement that the current owner is liable for violations of this Order up to the date of transfer, and that the new owner is liable for any violations after the date of ownership of the property transfers. The notification must include an acknowledgement signed by the new owner that the new owner accepts responsibility for compliance with this Order, including financial assurances as the State may require, for implementation of maintenance and monitoring of the Landfill.
16. **Report Declaration.** All applications, reports, or information submitted to the San Diego Water Board are part of the public record and must be signed and certified as follows:
 - a. All reports required by this Order, and any other information required by the San Diego Water Board must be signed by a person designated below, or by a duly authorized representative of that person, as described in H.15.b.:

- i. For a corporation – by a principal executive officer of at least the level of vice president.
 - ii. For a partnership or sole proprietorship – by a general partner or the proprietor, respectfully.
 - iii. For a municipality, or State, federal, or another public agency – by either a principal executive officer or ranking elected official.
- b. The person designated above may defer signatory duties to a duly authorized representative. An individual is a duly authorized representative only if:
- i. The authorization is made in writing by a person described in paragraph (1) of this provision.
 - ii. The authorization specifies either an individual or a position that has responsibility for the overall operation of the regulated facility or activity.
 - iii. The written authorization is submitted to the San Diego Water Board.

The authorization, in the form of a Signature Authority Statement, must be submitted to the San Diego Water Board ***within 30 days*** from either (1) adoption of this Order, or (2) a change in the duly authorized representative.

- c. Any person signing a document pursuant to this section must make a certification statement regarding the accuracy and authenticity of the information provided in the document. The certification statement must be included as part of the transmittal letter submitted with any document referenced within this Order. The certification statement must read as follows:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.”

17. **Report Submission Procedures.** Unless otherwise directed by the Executive Officer, all correspondence and documents submitted to the San Diego Water Board must include the reference code **L10002513368:Agriculture and Waste Management Unit Supervisor.**

The Discharger must submit all paper or electronic copies of reports and notifications required by this Order, and any other information requested by the San Diego Water Board, via email to:

California Regional Water Quality Control Board, San Diego Region
sandiego@waterboards.ca.gov
Attn: Agriculture and Waste Management Unit Supervisor

All information submitted to the San Diego Water Board in compliance with this Order is required to be submitted electronically via the internet into the GeoTracker database at <http://geotracker.waterboards.ca.gov/> in accordance with CCR title 23, chapter 30, division 3, section 3890 *et seq.* The electronic data must be uploaded on, or prior to, the due dates established in this Order.

18. **On-Site Record Keeping.** The Discharger must retain and have available for review by the San Diego Water Board during normal business hours, in a location at or near the Landfill, the following documents and records:
- a. Inspection records, training procedures, and notification procedures required by this Order, and 40 CFR part 258.20.
 - b. Any Landfill design documentation for placement of leachate or gas condensate as authorized by this Order, and 40 CFR part 258.28(a)(2).
 - c. Any demonstration, certification, finding, monitoring, testing, or analytical data as required by this Order, CCR title 27, and 40 CFR, subpart E, part 258.50, *et seq.*
 - d. Closure and post-closure maintenance plans, and any monitoring, testing, or analytical data as required by this Order, CCR title 27, and 40 CFR parts 258.60 and 258.61.
 - e. Any cost estimates and financial assurance documentation as required by this Order, CCR title 27, and 40 CFR, subpart G, part 258.70 *et seq.*
 - f. Certifications from the waste generator that the analyses submitted are representative of the material to be disposed of at the Landfill.
 - g. Analytical data or Material Safety Data Sheets representative of the waste stream.
 - h. The Chain-of-Custody form(s) showing the sample's integrity was not compromised.

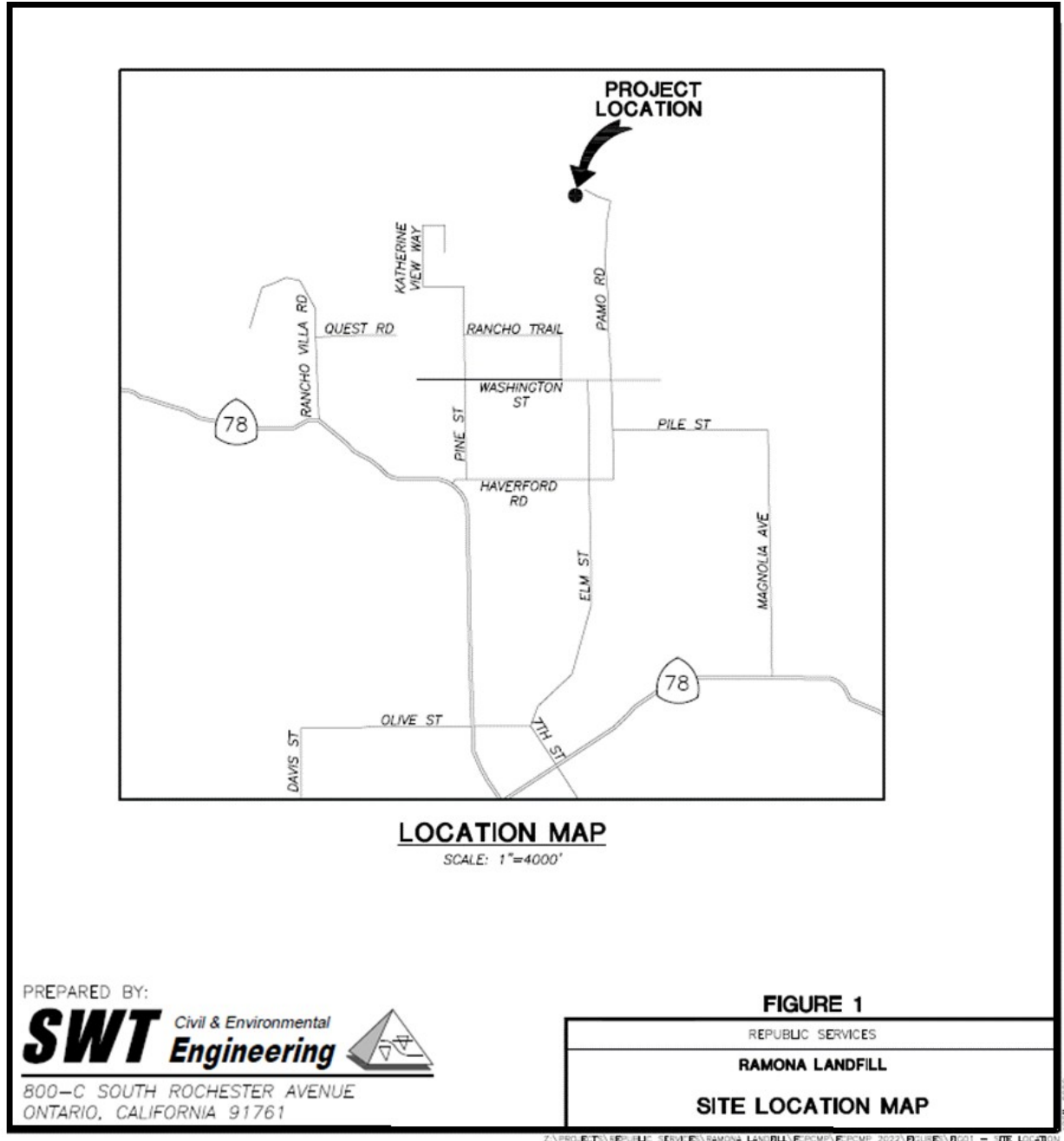
- i. The approximate volume (in cubic yards) of the waste(s) and the transporter's information.
- j. Any information required by 40 CFR part 258.29(a)(4) [placement of leachate or landfill gas condensate as allowed by 40 CFR part 258.28(a)(2), this Order], part 258.29(a)(6) [closure and post-closure plans and monitoring, testing, or analytical data as required by 40 CFR parts 258.60 and 258.61], and part 258.29(a)(7) [any cost estimates and financial assurance documentation required by 40 CFR, subpart G].
- k. Notifications from the Discharger required pursuant to CCR title 27, sections 21710(a)(4) and 21710(c), and this Order.
- l. Records required to be kept in compliance with CCR title 27, section 21720(f).
- m. The JTD and any amendments thereto prepared pursuant to CCR title 27, section 21585(a)(4) and any additional records and certifications required to be kept in compliance with this Order.

H. DECLARATIONS BY THE SAN DIEGO WATER BOARD

1. **Enforcement Actions.** Pursuant to Water Code section 13350(a), any person who is in violation of any WDRs, or prohibition issued, reissued, or amended by the San Diego Water Board, or who discharges waste, or causes or permits waste to be deposited where it is discharged into waters of the State, will be liable civilly under Water Code section 13323, and remedies may be imposed in accordance with Water Code sections 13350(d) and (e).
2. **Enforcement, Including Penalties, for Violations.** The San Diego Water Board reserves its right to take any enforcement action authorized by law for violations of the terms and conditions of this Order. Water Code section 13350 provides that any person who intentionally or negligently violates any WDR issued, or amended, by the San Diego Water Board is subject to administrative civil liability of up to 10 dollars per gallon of waste discharged, or if no discharge occurs, up to 100 dollars per day of the violations. Water Code section 13268 further provides that failure or refusal to submit technical or monitoring program reports required by this Order, is subject to administrative civil liability of up to 1,000 dollars per day of the violation. Higher monetary penalties are available through judicial enforcement of violations.
3. **Other Regulations.** The Discharger may be subject to additional federal, State, or local regulations.
4. **Administrative Review by the State Water Board.** Any person affected by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320, and CCR title 23, section

2050. The petition must be received by the State Water Board (Office of the Chief Counsel, P.O. Box 100, Sacramento, CA 95812) **within 30 days** of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.

5. **Definitions.** Definitions of terms used in this Order are set forth in CCR title 27, section 20164, and in Water Code section 13050.

FIGURE 1: Landfill location map.

ATTACHMENT A

MONITORING AND REPORTING PROGRAM FOR

ORDER NO. R9-2026-0003, WASTE DISCHARGE REQUIREMENTS FOR

CLOSURE AND POST-CLOSURE MAINTENANCE AND MONITORING FOR

RAMONA LANDFILL INC., A SUBSIDIARY OF REPUBLIC SERVICES

RAMONA LANDFILL SAN DIEGO COUNTY, CALIFORNIA

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PART I. FINDINGS

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) adopted this Monitoring and Reporting Program (MRP) pursuant to Porter-Cologne Water Quality Control Act (Water Code) section 13267, which authorizes the San Diego Water Board to require Ramona Landfill Inc., a subsidiary of Republic Services, Inc. (Discharger) to furnish technical and monitoring program reports. The San Diego Water Board finds that:

- A. LEGAL AUTHORITY.** The San Diego Water Board issued this MRP pursuant to the Water Code commencing with section 13000, and implements the: (1) regulations and policies adopted by the State Water Resources Control Board (State Water Board) in State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California*, and Resolution No. 93-62, *Policy for Regulations of Discharges of Municipal Solid Waste*, and Resolution No. 88-63, *Sources of Drinking Water*; (2) applicable State and federal regulations including California Code of Regulations (CCR), title 27 and Code of Federal Regulations, title 40 (40 CFR), parts 257 and 258; (3) all applicable provisions of Statewide Water Quality Control Plans adopted by the State Water Board and the Water Quality Control Plan, San Diego Basin (Basin Plan) adopted by the San Diego Water Board, including beneficial uses, water quality objectives, and implementation plans; (4) applicable provision of the California Health and Safety Code, division 20, chapter 6.5 (Hazardous Waste Control); and (5) relevant standards, criteria, and advisories adopted by other State and federal agencies.
- B. PURPOSE.** This MRP is necessary for the San Diego Water Board to determine the Discharger's compliance with Order No. R9-2026-0003, *Waste Discharge Requirements Ramona Landfill Inc., a subsidiary of Republic Services, Inc., Ramona Landfill, San Diego County, California* via surface water, vadose zone, and groundwater monitoring. The San Diego Water Board developed the directives of this MRP in accordance with CCR title 27, sections 20415 et seq., 20420 et seq., and 20430 et seq., which require the implementation of a Detection Groundwater Monitoring Program (DMP) and Corrective Action Monitoring Program (CAP), respectively. The DMP will ensure the early detection of a release of waste constituents and waste degradation byproducts from the Ramona Landfill (Landfill). The Discharger is implementing a CAP in response to a historical release of waste constituents and waste byproducts from the Landfill in 1992.¹ The San Diego Water Board issued Cleanup and Abatement Order No. 97-17, requiring the County of San Diego (County), former owner and operator of the Landfill, to implement a CAP and propose remedial actions to address the release.

¹ *Cleanup and Abatement Order No. 97-17, for the County of San Diego, Ramona Sanitary Landfill, San Diego County*, adopted March 7, 1997.

The County is implementing monitored natural attenuation as the preferred remedial action and has provided replacement drinking water to homeowners with impacted private supply wells. The Discharger's monitoring programs will also ensure the long-term protection of groundwater and surface water quality and beneficial uses within the Pamo Hydrologic Subarea of the Santa Ysabel Hydrologic Area of the San Dieguito Hydrologic Unit.

- C. QUALIFIED PROFESSIONALS.** Qualified professionals must prepare or directly supervise the preparation of the technical and monitoring program reports required by this MRP. The use of qualified professionals ensures that the collected data and interpretations are reliable and accurate. Professionals should be licensed where applicable, and competent and proficient in fields pertinent to the required activities. California Business and Professions Code section 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgements be performed by or under the direction of licensed professionals.
- D. CALIFORNIA ENVIRONMENTAL QUALITY ACT.** Issuance of this MRP by the San Diego Water Board is a project under the California Environmental Quality Act (CEQA). The County Department of Planning and Land Use, pursuant to the requirements of CEQA, certified a Negative Declaration in May 1993 and again in January 2011 when the Landfill ceased waste acceptance. The County Department of Environmental Health and Quality, Solid Waste Local Enforcement Agency (LEA) did not find any updates within the Landfill's Final Closure/Post-Closure Maintenance Plan that contained significant, new information during a 2018 permit review and the Negative Declaration remained in place. Detailed findings regarding compliance with CEQA are set forth in the Information Sheet (**Attachment B**).
- E. APPLICABILITY.** This MRP establishes monitoring and reporting requirements for the Landfill. The Discharger must immediately implement the requirements of this MRP upon adoption by the San Diego Water Board.

IT IS HEREBY ORDERED that, pursuant Water Code section 13267 and CCR title 27, and 40 CFR, parts 257 and 258; the Discharger must comply with the following MRP requirements.

PART II. SAMPLING AND ANALYSIS PLAN

The purpose of the Sampling and Analysis Plan (SAP) is to provide a standard set of protocols applicable to all monitoring programs, regardless of media, to detect increased levels of constituents of concern (COC) that may indicate a release of waste or waste byproducts from the Landfill. The Discharger must incorporate the following into the SAP:

A. STANDARD MONITORING PROVISIONS. The Discharger must submit an SAP that incorporates these provisions and describes the sampling and analysis protocols for groundwater, leachate, surface water, and vadose zone monitoring for the Landfill. The San Diego Water Board must receive the SAP within **90 days** of adoption of this MRP. The Discharger must receive written concurrence from San Diego Water Board staff prior to implementation of the SAP.

1. **Monitoring Systems.** Site-specific groundwater and surface water monitoring systems must comply with the detection monitoring requirements and associated performance standards included in CCR title 27, sections 20380 and 20385 et seq.
2. **Methods of Analysis.** Specific methods of analysis for use in groundwater and surface water monitoring at the Landfill must be consistent with the most current version of the U.S. Environmental Protection Agency's (USEPA) SW-846² or 40 CFR, part 136.³ The Discharger must include, as part of the SAP, the rationale to use alternative analysis methods or test procedures. The San Diego Water Board must approve all proposed changes to the SAP prior to implementation.
3. **Sampling Frequency.** All monitoring results, including results from additional sampling points or COCs⁴ that the Discharger monitors more frequently than required by this MRP, must be documented in the Semi-Annual Groundwater Monitoring Report. The Discharger must also report the increased frequency of monitoring and specific monitoring location(s) to the San Diego Water Board for staff concurrence prior to implementation.
4. **Protocols.** Sample collection, storage, and analysis must be performed in accordance with protocols included in the USEPA's SW-846 and in accordance with the approved SAP.
5. **Calibration.** All monitoring instruments and equipment must be properly calibrated and maintained as necessary to ensure accuracy of measurements.

² USEPA guidance document SW-846, "Test Methods for Evaluations of Solid Waste, Physical/Chemical Methods."

³ 40 CFR, part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants: Procedures for Detection and Quantification."

⁴ COCs are derived from 40 CFR, part 258, Appendix I. Appendix I COCs are those constituents likely to be derived from the Landfill wastes and are therefore appropriate to use as monitoring parameters when the intent of monitoring is to determine whether a release from the Landfill has occurred. The COCs from Appendix I also serve as the initial detection groundwater monitoring parameter for the Landfill.

6. **Sampling and Measurement Records.** Sampling and measurement records must include:

- a. The date, sample number, sampling location, and time of sampling and/or field measurement for groundwater, surface water, or vadose zone monitoring.
- b. The depth of groundwater at all monitoring locations.
- c. The name of the individual(s) who performed the sampling and/or field measurement at each monitoring location.
- d. The date and time that laboratory analyses of samples were started and completed for all media sampled.
- e. The laboratory analytical techniques or methods used, including method of preserving the sample and any other details requested by the San Diego Water Board, such as the identity and volumes of reagents used.
- f. The tabulated results of any measurements taken, including but not limited to laboratory analytical results, method detection limit, maximum concentration limit, depth to groundwater, and surface water flow rates, when applicable.
- g. The laboratory quality assurance results (e.g., percent recovery, response factor, etc.).
- h. The chain of custody forms.

B. RECORD RETENTION. The Discharger must retain all monitoring records, including calibration and maintenance records, and copies of all reports required by this MRP. The Discharger must maintain records for a minimum of five years from the date of sampling or measurement. The San Diego Water Board may extend this period during any unresolved litigation or when a release from the Landfill is indicated based on monitoring results.

C. STANDARD SAMPLING, ANALYSIS, AND REPORTING PROTOCOLS. The Discharger must incorporate the following standard protocols as part of the SAP:

1. The method of analysis must be appropriate for the expected concentrations.
2. Analytical results falling between the method detection limit (MDL) and the practical quantitation limit (PQL) must be reported as "trace" and must be accompanied by documents reporting both the MDL and PQL values for that analytical run.

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3. MDLs and PQLs must be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. Derived MDLs and PQLs are expected to closely agree with published USEPA MDLs and PQLs, in an interference-free laboratory.
4. The results must be flagged and reported in the Quality Assurance/Quality Control (QA/QC) report if the laboratory suspects that, due to a change in matrix or other effects, the MDL or PQL for a particular analytical run differs significantly from historic MDL or PQL values.
5. The MDL must always be calculated such that it represents a concentration associated with a 99-percent reliability of non-zero results.
6. The PQL must represent the lowest concentration at which a numerical value can be assigned with reasonable certainty.
7. All QA/QC data must be reported, along with the applicable sample results. The QA/QC information must include the method, equipment, analytical detection and quantitation limits, the recovery rates, an explanation for any recovery rate that is less than 80-percent, the results of equipment and method blanks, the results of spiked and surrogate samples, and the frequency of quality control analysis. Sample results must be reported unadjusted for blank results or spike recovery. In cases where contaminants are detected in field, trip, or laboratory blank samples, the accompanying sample results must be appropriately flagged in the tabulated data.
8. A proposed alternative statistical or non-statistical procedure may be used for determining the significance of analytical results for a constituent that is a common laboratory contaminant (e.g., methylene chloride, acetone, diethylhexyl phthalate, and di-n-octyl phthalate) during any given Reporting Period in which QA/QC samples show evidence of laboratory contamination for that constituent, upon receiving written approval from the San Diego Water Board. Analytical results involving detection of these analytes in any background or downgradient sample must be reported in the Semi-Annual Groundwater Monitoring Report summary and flagged in the results tables for easy reference by the San Diego Water Board.

D. DETECTION GROUNDWATER MONITORING. The SAP must include a DMP compliant with the specific requirements and performance standards found in CCR title 27, sections 20415 and 20420, and 40 CFR parts 258.50 and 258.54.

1. **Detection Groundwater Monitoring Program Requirements.** The DMP must include:

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- a. A sufficient number of background monitoring points installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that represent the quality of groundwater that has not been affected by a release from the Landfill.⁵
 - b. A sufficient number of monitoring points and background monitoring points installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that represent the quality of groundwater passing the Point of Compliance and allow for the detection of a release from the Landfill.⁶
 - c. A sufficient number of monitoring points installed at additional locations and depths to yield groundwater samples from the uppermost aquifer to provide the best assurance of the earliest possible detection of a release from the Landfill.⁷
 - d. A sufficient number of monitoring points and background monitoring points installed at appropriate locations and depths to yield groundwater samples from portions of the zone of saturation, including other aquifers not monitored pursuant to CCR title 27, section 207415 (b)(1)(B)(2), to provide the best assurance of the earliest possible detection of a release from the Landfill.⁸
 - e. A sufficient number of monitoring points and background monitoring points installed at appropriate locations and depths to yield groundwater samples from zones of perched water to provide the best assurance of the earliest possible detection of a release from the Landfill.⁹
 - f. Monitoring point locations and depths that include the zone(s) of highest hydraulic conductivity in each groundwater body monitored.¹⁰
2. **Detection Groundwater Monitoring Program Network.** The groundwater monitoring network for the Landfill is comprised of four background wells and five compliance wells. The background monitoring wells are ITRA-2, RAGW-1, RAGW-2, and RAGW-7. The compliance monitoring wells are ITRA-1, ITRA-5, RAGW-3, RAGW-4, and RAGW-5.

⁵ CCR title 27, section 20415(b)(1)(A).

⁶ CCR title 27, section 20415(b)(1)(8)(1).

⁷ CCR title 27, section 20415(b)(1)(8)(2).

⁸ CCR title 27, section 20415(b)(1)(8)(3).

⁹ CCR title 27, section 20415(b)(1)(8)(4).

¹⁰ CCR title 27, section 20415(b)(1)(8)(5).

3. **Detection Monitoring Program Elements.** The DMP must implement all applicable State and federal requirements¹¹ and all applicable elements of a DMP. The DMP must include the following minimum elements:
- a. The Discharger must use and maintain groundwater monitoring wells to conduct the detection groundwater monitoring program at the Landfill.
 - b. The groundwater samples must be collected, analyzed, and reported for the general chemistry parameters and COCs at the frequencies shown in **Table 1 of Part II.B**, and any additional parameters included in the approved SAP.
 - c. The static water elevation must be measured to the nearest 0.01 foot in each well prior to purging the wells for sampling.
 - d. Samples must be collected for any given monitored medium, for all monitoring points and background monitoring points, to satisfy the data analysis requirements for a given Reporting Period.
 - e. Samples must be collected in a manner that ensures sample integrity.
 - f. Samples must be collected on a consistent schedule, with sampling events evenly spaced approximately six months apart.
 - g. The Discharger must assess the well for the presence of a floating immiscible layer prior to purging and sampling of the monitoring wells. If an immiscible layer is found, the Discharger must notify the San Diego Water Board **within 24 hours** of the discovery.
 - h. Groundwater elevations must be monitored **at least quarterly**, including the times of expected highest and lowest elevations of the water level for the respective groundwater body.¹² Groundwater elevations must be measured within a period short enough to avoid temporal variations in groundwater elevations.
 - i. Groundwater sampling must also include an accurate determination of field parameters of temperature, electrical conductivity, turbidity, and pH, pursuant to CCR title 27, section 20415(e)(13).

¹¹ CCR title 27, section 20385 through 20430, and 40 CFR, part 258.58.

¹² In accordance with CCR title 27, section 20415(e)(15).

Table 1 – Groundwater Monitoring Parameters

Monitoring Parameters	Units¹³	Sampling Frequency¹⁴
pH	pH	Semi-annual
Field Conductivity	µS/cm	Semi-annual
Turbidity	NTU	Semi-annual
Total Dissolved Solids	mg/l	Semi-annual
Chloride	mg/l	Semi-annual
Sulfate	mg/l	Semi-annual
Nitrate as Nitrogen	mg/l	Semi-annual
Appendix I Volatile Organic Compounds	µg/l	Semi-annual
Appendix I Metals	mg/l	Semi-annual

4. **Lab Accreditation.** All analyses must be conducted at a laboratory accredited for such analyses by the State Water Board Division of Drinking Water (DDW), unless otherwise approved by the San Diego Water Board. Any report presenting new analytical data is required to include the complete Laboratory Analytical Report(s).
5. **Laboratory Reporting Requirements.** The Laboratory Analytical Report(s) must contain the following minimum information:
 - a. A complete sample analytical report.
 - b. A complete laboratory QA/QC report.
 - c. A discussion of the sample and QA/QC data.
 - d. A properly completed chain of custody form for the analyzed samples.
 - e. A transmittal letter, signed by the laboratory director, certifying that:
 - i. The laboratory has been accredited by the Environmental Laboratory Accreditation Program (ELAP) and has demonstrated to

¹³ Note: mg/l = milligram per liter; µg/l = micrograms per liter; NTU = Nephelometric turbidity units; µSiem = micro siemens/centimeter.

¹⁴ The San Diego Water Board Executive Officer may increase or decrease the monitoring frequency if determined to be necessary.

DDW ELAP its capacity to analyze environmental samples using approved methods.

- ii. All analytical work performed by, or on behalf of, the laboratory was supervised by the laboratory director.
 - iii. All analytical work performed by the laboratory used the most current methods for the analytes specified in this MRP or Chain of Custody submitted by the Discharger.
- f. The Laboratory Analytical Report(s) must be signed by the laboratory director if requested by the San Diego Water Board.

The DMP must specify either an inter-well or intra-well method, or a combination of the two, as the method of analysis of the groundwater monitoring data, depending on which type of analysis is the best fit for site conditions. The method of analysis cannot be changed once implemented without the written approval of the San Diego Water Board.

6. **Establishing Background Values for New COCs.** The Discharger must establish a reference background value in groundwater following the procedures required in the regulations¹⁵ for each 40 CFR part 258 Appendix II (Appendix II) constituent that is added to the Landfill's COC list as described in **Part II.G**. The Discharger must include the data as a separate item in the next Semi-Annual Groundwater Monitoring Report submitted once this reference set of background data is collected.

The San Diego Water Board may substitute inorganic surrogates in the Landfill's list of monitoring parameters and include 40 CFR part 258 Appendix I (Appendix I) metals replaced by surrogates in the Landfill's COC list at the request of the Discharger. The San Diego Water Board will only make this substitution for Appendix I metals detected and verified through the Landfill's leachate monitoring program.

7. **Narrowing the Monitoring List of COCs.** This MRP allows the Discharger to remove COCs that are added to the COC list once detected and verified as part of the Leachate Monitoring or Five-Yearly COC Scan, in **Part II.F** and **Part II.G**, respectively. An Appendix II COC added to the COC list signifies a new release from the Landfill and may require modification of the CAP to address the new release. Once the Discharger completes corrective actions to the satisfaction of the Board, the Discharger may designate a previously added COC for removal from the COC list. The COC designated for removal must be undetected or below its respective concentration limit through a

¹⁵ CCR title 27, section 20415, et seq.

successful proof period of at least three years, or six Semi-Annual Groundwater Monitoring Reports, as defined by CCR title 27, section 20430(g) and 40 CFR, part 258(e)(2).

E. CORRECTIVE ACTION GROUNDWATER MONITORING. The SAP must include a CAP compliant with the specific requirements and performance standards found in CCR title 27, sections 20415 and 20430, and 40 CFR parts 258.50, 258.55, and 258.56.

1. **Corrective Action Groundwater Monitoring Program Requirements.** The CAP must include:

- a. A sufficient number of background monitoring points installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that represent the quality of groundwater that has not been affected by a release from the Landfill.¹⁶
- b. A sufficient number of monitoring points and background monitoring points installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that represent the quality of groundwater passing the Point of Compliance at other locations in the uppermost aquifer to provide the data needed to evaluate the effectiveness of the correction action program.¹⁷
- c. A sufficient number of monitoring points and background monitoring points installed at appropriate locations and depths to yield groundwater samples from portions of the zone of saturation, including other aquifers, not monitored pursuant to CCR title 27, section (b)(1)(D)(1).¹⁸
- d. A sufficient number of monitoring points and background monitoring points installed at appropriate locations and depths to yield groundwater samples from portions of the zones of perched water to provide the data needed to evaluate the effectiveness of the corrective action program.¹⁹
- e. Water Quality monitoring must be conducted semi-annually at all compliance wells in accordance with CCR title 27, section 20415(e)(12)(B).

2. **Corrective Action Program Groundwater Monitoring Network.** The groundwater monitoring network for the Landfill is comprised of four

¹⁶ CCR title 27, section 20415(b)(1)(A).

¹⁷ CCR title 27, section 20415(b)(1)(D)(1).

¹⁸ CCR title 27, section 20415(b)(1)(D)(2).

¹⁹ CCR title 27, section 20415(b)(1)(D)(3).

background wells and five compliance wells. The background wells are ITRA-2, RAGW-1, RAGW-2, and RAGW-7. The compliance wells are ITRA-1, ITRA-5, RAGW-3, RAGW-4, and RAGW-5.

3. **Evaluation of Corrective Action Program.** The Discharger must comply with the following requirements when the Landfill has and continues to have, measurably significant concentration of COCs in groundwater, to bring the site into compliance with the applicable State and federal regulations.²⁰
 - a. The Discharger must submit technical reports evaluating the effectiveness of the corrective action program as an appendix to the Semi-Annual Monitoring Reports required by this MRP.
 - b. The Discharger must submit revised Corrective Action Measures in the next Semi-Annual Monitoring Report if the San Diego Water Board or the Discharger determines that the current corrective action measure is ineffective.
4. **Corrective Action Groundwater Monitoring Program Elements.** The CAP must implement all applicable State and federal requirements²¹ and all applicable elements of a federal Assessment Monitoring Program (AMP) and a State Corrective Action Program, concurrent with the requirements for the detection groundwater monitoring program as described above. The CAP must include the following minimum elements:
 - a. Implement statistical or non-statistical data analysis at any given compliance well outside of the release, for those COCs that are in Detection Mode at that well.
 - b. Provide graphical representation of groundwater monitoring data collected from compliance wells. The graphs should include concentration-versus-time graphs, for any given monitoring point within the release and for all COCs that are in Tracking Mode at that well.
 - c. Utilize an initial scan for all Appendix 11²² constituents at all compliance wells involved in the release to be sure that the monitoring parameter list for each well includes all Appendix II constituents detectable in groundwater.
 - d. Utilize a periodic (five-yearly) presence/absence screening of all COCs rather than statistical/non-statistical data analysis, at all appropriate

²⁰ CCR title 27, section 20430 and 40 CFR, part 258.58.

²¹ CCR title 27, section 20385 through 20430, and 40 CFR, part 258.58.

²² Hereinafter, all references to Appendix I or II will be to 40 CFR, part 258.

wells to keep the monitoring parameter list updated to include all constituents detectable in groundwater after the initial scan.

- e. Utilize annual leachate sampling for all non-COC. Appendix II constituents to keep the COC list updated to include all Appendix II constituents that the Landfill could release; and
- f. Implement an automatic update procedure to ensure that the monitoring parameter and COC lists remain current.

F. SURFACE WATER MONITORING. The SAP must include a surface water monitoring plan compliant with the specific requirements and performance standards found in CCR title 27, section 20415(c) and 40 CFR part 258.27.

1. **Surface Water Monitoring Program Requirements.** The surface water monitoring program must include:
 - a. A sufficient number of background monitoring points established at appropriate locations and depths to yield samples from each surface water body that represent the quality of surface water that has not been affected by a release from the Landfill.
 - b. A sufficient number of monitoring points established at appropriate locations and depths to yield samples from each surface water body that provide the data to evaluate compliance with the Water Standard and to evaluate the effectiveness of the detection monitoring program.
 2. **Surface Water Monitoring Network.** The Dischargers must add additional monitoring points as necessary to supplement existing monitoring points to meet the performance requirements found in CCR title 27, section 20415(c).
 3. **Surface Water Monitoring Program Elements.** Surface water monitoring must be conducted semi-annually at springs and established surface water monitoring points when there is sufficient water to collect a sample to satisfy the requirements of CCR title 27, section 20415(c). Every five years, coincident with the five-year COC scan, the Discharger must analyze surface samples for the constituents listed on the most current COC list. The point of compliance for surface water monitoring must be the closest spring or established surface water monitoring point that is downgradient of waste contained in the Landfill.
- G. LEACHATE MONITORING.** The SAP must include a leachate monitoring plan, for the lined portion of the Landfill that contains a leachate collection and removal system (LCRS), to identify the COCs being produced from the Landfill that would likely appear in groundwater should a breach of the liner system of the Landfill occur.

1. **Collection of Leachate Samples.** The Discharger must collect a liquid sample of the leachate from the LCRS and analyze the sample for all constituents listed in Appendix II that are not yet on the COC list for the Landfill in September of each year. The COC list must consist of all waste constituents listed in this MRP and include each constituent listed in Appendix II that is not already a COC for the Landfill and that is both:
 - a. **Detected in a sample of the Landfill's leachate.** The Discharger must submit the analytical results to the San Diego Water Board office no later than **5:00 pm on October 30** and include an identification of all detected Appendix II constituents that are not currently on the Landfill's COC list.
 - b. **Detected in a retest of a leachate sample collected the following March.** The Discharger must sample and analyze this retest sample only in cases where the annual leachate sample identifies non-COCs. The retest sample must be analyzed only for the non-COCs detected in the September sample. The Discharger must submit a report of the results to the San Diego Water Board **no later than 5:00 pm on April 30** during any year in which a March leachate retest is conducted. The April 30 report must also include an amended COC list that includes the Appendix II constituents that were newly detected in both the September and March leachate samples. The revised COC list must be noted in the Landfill's Operating Record within **14 days**, permanently adding the constituent(s) to the Landfill's COC list. Within **seven days** of amending the Landfill's Operating Record pursuant to this section, the Discharger must also provide written notification to the San Diego Water Board indicating that the Discharger has made the amendment.
- H. **FIVE YEARLY COC SCAN.** The SAP must include a Five-Yearly COC Scan²³ to create a "COC List" of constituents present in groundwater at each well. Any unknown peaks on the chromatographs must be reported along with an estimate of the concentration of the unknown analyte(s) as part of a Five-Yearly COC Scan. A second column or second method confirmation procedure must be performed to attempt to identify and more accurately quantify the unknown analyte(s), when unknown peaks are encountered. The Discharger must resample the well and reanalyze the sample for the newly detected constituent(s) if an analyte is detected that is not yet on the COC list **within 30 days**. All newly detected COCs verified by

²³ The COC scan includes all COCs found in 40 CFR, part 258, Appendix II. Appendix II provides a comprehensive list of analytes that may exist in leachate generated from a landfill.

a retest become part of the COC list for regular detection groundwater monitoring at the Landfill when verified by a retest.

The Discharger must sample nearby surface water bodies as part of the Five-Year COC Report, if those waters could be impacted by a release of waste constituents or waste byproducts from the Landfill. All newly detected constituents must become part of the COC list for regular surface water monitoring at the Landfill when verified by a retest, as described above.

The five-yearly COC sampling and analysis must occur at alternating intervals to account for seasonal variations in the hydrogeology at the Landfill. The Discharger must alternate sampling and analysis between the winter-spring and summer-fall timeframes. The Discharger must report the analytical results of the sampling event as an attachment to the Annual Summary Report, due **April 30** of that same year.

- I. **SCHEDULE OF ACTIVITIES.** The SAP must include a schedule for implementing all the activities described in the various monitoring programs detailed in the plan.

PART III. METHODS OF ANALYSIS

Part III of this MRP provides the requirements for the analysis of detection monitoring data collected from monitoring wells associated with the Landfill. The objective of the DMP is to ensure early detection of a new release of waste constituents from the Landfill. The DMP must be able to determine whether the release of a COC has created a measurably significant increase at any given monitoring well to accomplish this objective.

The objective of the CAP is to monitor the effectiveness of the remedial alternatives initiated and implemented by the Discharger to achieve compliance with the water quality protection standard adopted for the Landfill. The Discharger must analyze groundwater samples collected from each CAP to determine which COCs are present and how their concentrations are changing over time to achieve this objective.

- A. **DETECTION MODE MONITORING.** If COCs have not been detected in groundwater samples collected from a given well, that well will be monitored in "detection mode." In detection mode, the Discharger has the option of using either the "inter-well" or "intra-well" statistical approach when analyzing groundwater data. The inter-well and intra-well approaches are described in greater detail in the Information Sheet (**Attachment B**).
- B. **TRACKING MODE MONITORING.** The Discharger must monitor all COCs in a groundwater monitoring well in "tracking mode" when one or more COCs are detected in groundwater samples and there is statistically significant evidence of a release from the Landfill. In tracking mode, the Discharger must analyze COC

concentrations in groundwater by plotting the concentrations in groundwater samples collected from a given well over time. The graphical representation of the groundwater data will be used to track trends in COC concentrations over time and assist in evaluating the impacts of COCs on groundwater quality.

C. WATER QUALITY PROTECTION STANDARD. The Landfill is in violation of its water quality protection standard (Water Standard) any time a COC in a groundwater well monitoring in "detection mode" exhibits a measurably significant increase over the applicable background data set.²⁴ All groundwater wells monitored in "tracking mode" remain in violation of the Water Standard and are subject to corrective action monitoring²⁵ until completion of a successful proof period of three consecutive years or six consecutive Semi-Annual Groundwater Monitoring Reports.²⁶ The Water Standard for the Landfill consists of the following components:

1. **Constituents of Concern.** The Discharger must provide a list of COCs for the Landfill, including any updates, in each Semi-Annual Groundwater Monitoring Report. Statistical and non-statistical data analysis is limited to only those COCs that are on the current COC list.²⁷
2. **Concentration Limits.** For each COC detected in compliance monitoring wells, the Discharger must propose one of the following:
 - a. A concentration limit equivalent to the background dataset; or
 - b. A concentration limit greater than background, justified through a statistical analysis of the background dataset and other relevant data, and a demonstration that background concentrations would not be technologically or economically feasible for the COCs for a given monitoring well.²⁸ A concentration limit greater than background will only be considered for COCs present in monitoring wells associated with a corrective action monitoring program.²⁹
3. **Compliance Period.** The Landfill's compliance period must include the remaining years of the Landfill's active life and the Landfill's closure period. The Discharger must continue to monitor and maintain the Landfill until the

²⁴ CCR title 27, section 20415(e)(7).

²⁵ CCR, title 27, section 20430(g), and 40 CFR, part 258.58(e).

²⁶ CCR title 27, section 20430(g), and 40 CFR, part 258.58(e)

²⁷ CCR title 27, section 20395.

²⁸ CCR title 27, section 20400(c)

²⁹ CCR title 27, section 20400(h).

San Diego Water Board determines that the Landfill no longer poses a threat to water quality.³⁰

D. VALIDATION OF BACKGROUND DATASETS. The Discharger may need to validate an intra-well background dataset for COCs at an existing well if there have not been enough sampling events at that well to create a background dataset, and for each new well installed as part of the DMP. The Discharger must report the validated background dataset, specifying the COCs and monitoring well(s) affected, in the next scheduled Semi-Annual Groundwater Monitoring Report if the Discharger uses an intra-well approach.

1. **Accelerated Background Data Procurement.** The Discharger must implement the accelerated data procedure prior to initiating the intra-well background dataset validation procedure described below if there are less than ten sampling points for a given COC at any well. Background concentrations for new wells or COCs may be determined by collecting and analyzing samples quarterly from each affected well until there are at least ten data points. The Discharger must submit an alternative sampling plan to the San Diego Water Board for approval if quarterly sampling would not provide representative data for the site.
2. **Intra-Well Background Validation for New COCs.** A background dataset can be established, and the intra-well analytical approach may be implemented once ten data points are available.
 - a. **Commonly Quantified Constituents.** The Discharger must validate the intra-well background data at each compliance well for any COC that, absent the Landfill's existence, would usually be detected in groundwater at concentrations exceeding the COC's PQL. A compliance well's data cannot be used for an intra-well comparison if the constituent's median concentration exceeds the 75th percentile of the pooled data. Inter-well comparisons must be used for these wells. Datasets from a COC whose data's median is less than the pooled background plot's 75th percentile may be used as the initial background dataset for intra-well comparisons for that well or COC.
 - b. **Rarely Quantified Constituents.** The Discharger must identify the highest value in the pooled dataset from all background wells that have passed validation or, in a case where all applicable upgradient well data is non-detect, the MDL, for a COC that, absent the Landfill's existence, would seldom be detected in groundwater (e.g., synthetic constituents). The Discharger must use this value as a basis of comparison to validate

³⁰ CCR title 27, section 20950(a)(2).

the data points in the proposed intra-well background dataset. The initial intra-well background dataset for that downgradient well must consist of all data points in the proposed intra-well background dataset that are less than this value.

3. **Validate Upgradient Data for Synthetic Organic Appendix II COCs.** Synthetic organic constituents should not be present at detectable concentrations in groundwater samples collected from background monitoring wells. Detections of synthetic organic constituents indicate that the constituent comes from the Landfill or from another source or is an analytical error. If synthetic organic constituents are detected in more than ten-percent of analyses in background monitoring wells, the Discharger must investigate the source of the organic constituents in accordance with the requirements in **Part III.F** of this MRP.
4. **Performance Standards.** All statistical or non-statistical data analysis methods must meet the applicable State and federal requirements.³¹
5. **Regular Retest Method.** Regular retesting is required to validate data that indicates increasing COC concentrations. For wells in detection mode, the Discharger must conduct up to two retests whenever test results signify an increased concentration, to verify the initial data.³² If the first retest validates the preliminary indication, a second retest must be conducted. A measurably significant increase exists if both retest samples validate the preliminary indication.
6. **Limited Retest Method.** The Discharger may perform the verification procedure only for those COCs that have shown a preliminary indication of a release at that well for that reporting period for any given DMP groundwater monitoring point.

E. CALIFORNIA NON-STATISTICAL DATA ANALYSIS METHOD. The following section describes the California non-statistical data analysis method that the Discharger must use to evaluate and validate detection groundwater monitoring data collected from the Landfill.

1. **Non-statistical Method for Detection Mode COCs Seldom Found in Background.** The Discharger must use this data analysis jointly for each constituent that exceeds its MDL in less than 10-percent of its background dataset. A measurably significant indication of a release occurs in a given sample when:

³¹ CCR title 27, section 20415(e)(9) and 40CFR, part 258.53.

³² CCR title 27, section 20415(e)(8)(E)(2).

- a. Two or more of the Detection Mode COCs exceed their respective MDLs; or
 - b. One or more of the COCs equals or exceeds its respective PQL.
2. **Discrete Retest.** The Discharger must perform a discrete retest³³ to verify the results³⁴ if an approved data analysis method provides a preliminary indication that there has been a measurably significant³⁵ increase for a COC in a given monitoring well. The Discharger must take the following steps in conducting a retest:
 - a. The Discharger must notify the San Diego Water Board by phone or e-mail **within 24-hours** and must collect a new independent retest sample from the indicating compliance well **within 60 days** of the original sampling event.
 - b. The Discharger must include only the laboratory analytical results for those constituents indicated in that well's original test for the retest sample. The Discharger must apply the same test, for only those COCs with a tentative indication of a release, to separately analyze each of the two suites of retest data at that compliance well, as soon as the retest data is available.
 - c. If the retest sample also has a measurably significant indication of a release as defined in 1(a) and 1(b) of this section, then there is a measurably significant increase at that well for the constituent(s) indicated in the validating retest sample. Thereafter, the Discharger must monitor all constituents in "tracking mode" instead of "detection mode" at the well and must highlight the conclusion about the measurably significant increase at the well and document the changes to the monitoring program in the next scheduled Semi-Annual Groundwater Monitoring Report.

F. SYNTHETIC ORGANIC COCS IN BACKGROUND WELLS. An "excessive proportion" of a COC exists when 10-percent or more of the COC data collected from a given background well are reported to have concentrations equal to or greater than the MDL. An "excessive frequency" exists when a COC is reported to have concentrations equal to or greater than the MDL for two consecutive sampling events. The Discharger must notify the San Diego Water Board **within 30 days** of the determination that either an "excessive proportion" or "excessive

³³ CCR title 27, section 20415(e)(8)(E)(1) et seq.

³⁴ CCR title 27, section 20415(e)(8)(E).

³⁵ CCR title 27, section 20164.

frequency" exists. Furthermore, **within 180** days of the determination, the Discharger must submit a report to the San Diego Water Board that evaluates whether the COC is from the Landfill and propose appropriate changes to the monitoring program. Based on the evaluation, if the San Diego Water Board concludes that the organic constituent originated from a source other than the Landfill, then the Discharger must do the following:

1. **Determination of a New Source.** The Discharger must make appropriate changes to the monitoring program, such as using an appropriate statistical "inter-well" comparison procedure with a suite of background data that reflects the expected concentration for that constituent. The Discharger must complete the following:
 - a. List the constituent(s) as a COC in the next scheduled Semi-Annual Groundwater Monitoring Report if it is not already listed and note this change in the Transmittal Letter.
 - b. Include this background well as part of the release for that COC and monitor this well as a compliance well.
 - c. **Within 180 days**, install a new upgradient or cross-gradient background well in a portion of the aquifer that will provide data representative of background conditions for the Landfill's compliance wells.
2. **Ongoing Background Well Test.** The Discharger must continue to monitor background wells for each COC each time that COC is monitored at downgradient wells, excluding retests. New background well data must be included in the Annual Summary Report and included on a time-versus-concentration plot for that "background" well and constituent.³⁶ Any time such a plot for a given well and constituent shows two successive data points in excess of the MDL for any organic constituent that has not already been investigated at that well, the Discharger must notify the San Diego Water Board **within 30 days** of the sampling event by phone or email, and must initiate an investigation **within 180 days** of noting this condition, in accordance with **Part III.F** of this MRP.

PART IV. REPORTS TO BE FILED WITH THE SAN DIEGO WATER BOARD

Part IV provides a description of the reports required to be submitted to the San Diego Water Board.

- A. SEMI-ANNUAL GROUNDWATER MONITORING REPORTS.** The Discharger must submit Semi-Annual Groundwater Monitoring Reports to the San Diego

³⁶ CCR title 27, section 20415(e)(14).

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Water Board semi-annually, no later than ***April 30 and October 30*** of each year. The Reports must contain, at a minimum, the following information:

1. **Topographic Map.** A topographic map (or copy of an aerial photograph), at an appropriate scale, identifying the maximum lateral extent of wastes in the Landfill, the locations of observation stations, monitoring points, background monitoring points, and the groundwater elevation contours with interpreted groundwater flow direction and gradient. Maps must also be updated to show the maximum extent of any waste constituent or waste degradation product in groundwater.

The information contained on the topographic map must also be provided in a Geographic Information System (GIS) shape file that must be submitted as part of the Semi-Annual Groundwater Monitoring Report. The shape file must be polygons and include two Global Positioning Systems (GPS) points for each line of the polygon, with a minimum of 10 points. GIS metadata must also be submitted.

2. **COC List.** A list of COCs for each detection monitoring well/point.
3. **Detection Limits.** Detection limits of laboratory testing and monitoring equipment.
4. **COC Concentrations.** A table that contains the concentrations of COCs in samples collected during the reporting period.
5. **Groundwater Elevations.** The method and time of groundwater elevation measurements, a description of the method used to purge the well and collect groundwater samples, and QA/QC procedures used.
6. **Leachate Production.** The total volume of leachate collected each month during the monitoring period and the method of disposal of the leachate (i.e., reused at the Landfill for dust control, sent offsite for treatment).³⁷
7. **Field Logs.** Field logs used during well purging and sampling. At a minimum, the field logs should include the following:
 - a. The well number.
 - b. The sampling date and time.

³⁷ As required by CCR title 27, section 20340(h)

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- c. The method of monitoring field parameters and calibration of equipment used to monitor field parameters.
 - d. The purge method. If a pump is used, include the depth of pump placement in each well and the pumping rate.
 - e. 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.
8. **Graphical Display.** For each downgradient monitoring well and background monitoring well, a graphical display of all the groundwater data collected within at least the previous five calendar years as required by CCR title 27, section 20415(e)(14). Each graph must plot the concentration of one or more constituents on a semi-log scale. The San Diego Water Board may direct the Discharger to carry out a preliminary investigation to determine whether a release is indicated based on observed trends on graphical displays.
9. **Method of Analysis.** Documentation of statistical and non-statistical data analysis at each monitoring well, for those COCs that have not previously been identified in a release at the well.
10. **Background Data.** Updates to the background data set.
11. **Summary of Groundwater Conditions.** A written summary of the monitoring results and any changes to the groundwater monitoring system since the previous Semi-Annual Groundwater Monitoring Report. The written summary must include a discussion of the groundwater flow rate and direction, the appearance of trends or other information that may indicate a potential change in the hydrogeologic conditions beneath and adjacent to the Landfill.
12. **Evaluation of Groundwater Data.** An evaluation of the detection and corrective action groundwater monitoring data analyzed according to the methods described in **Part III** of this MRP, and whether the analysis indicates a release of waste constituents or waste degradation products from the Landfill.
13. **Evaluation of Corrective Actions.** A written summary that includes a discussion and evaluation of the effectiveness of corrective action measures implemented at the site to mitigate the release of waste constituents from the Landfill.

14. **Data Tables.** All data obtained during the current and previous four semi-annual reporting periods presented in tabular form. Any electronic files submitted to the San Diego Water Board in accordance with Order No. R9-2026-0003 and this MRP, must not be password protected.
15. **Site Inspections.** A copy of any site inspection report produced by the Discharger, the LEA, or other regulatory agencies. Inspection reports may be included as an appendix to the Semi-Annual Groundwater Monitoring Report.

B. ANNUAL SUMMARY REPORT. The Discharger must submit³⁸ an Annual Summary Report comprised of the DMP, CAP, surface water monitoring program, and the landfill gas monitoring program data collected during the past year, and evaluations of that data. The Annual Summary Report, covering the previous monitoring and reporting year, must be received by the San Diego Water Board no later than **5:00 p.m. on April 30** of each year, and must contain the following minimum information:

1. **Sampling and Analysis Plan.** Include the current version of the SAP as an attachment or appendix.
2. **Semi-Annual Groundwater Monitoring Report.** Include the Semi-Annual Groundwater Monitoring Report due annually on **April 30**. This report may be submitted as an attachment to the Annual Summary Report.
3. **Groundwater Monitoring Data Summary.** Include a written summary of the groundwater monitoring results from both DMP wells and any corrective action monitoring wells, indicating any changes made or observed since the previous Annual Summary Report. Additionally, all analytical data obtained during the previous two six-month reporting periods must be presented in tabular form.
4. **Surface Water Monitoring Data Summary.** Include a summary of all surface water data collected during the past year.³⁹ The Surface Water Monitoring Data Summary must also contain a brief discussion of the findings and observations made during the past year regarding surface water sampling,

³⁸ By upload in electronic file format to the State Water Board's GeoTracker database, or any future database that replaces GeoTracker. Alternatively, the Discharger may email the files to the San Diego Water Board.

³⁹ Surface water monitoring data includes surface water samples collected as part of the CAP or in compliance with Order No. WQ 2014-0057-DWQ, National Pollutant discharge Elimination System (NPDES) Order No. WQ 2014-0057-DWQ, General Permit for Storm Water Discharges Associated with Industrial Activities.

and any recommendations concerning future modifications to the surface water monitoring system.

5. **Leachate Data Summary.** Include a Leachate Data Summary consisting of the monthly total volume of leachate collected during the reporting year, from the LCRS and any other leachate collection systems, to demonstrate the effectiveness of the leachate collection and removal system. The Leachate Data Summary must contain a brief discussion of the leachate sampling results and volume produced and how the leachate was disposed of during the reporting period. The Leachate Data Summary must also include a table consisting of the last five years of leachate data collected at the Landfill.
6. **Landfill Gas Data Summary.** Include a summary of all landfill gas data collected during the past year in accordance with the requirements set forth by the Department of Resources Recycling and Recovery and the LEA. The Landfill Gas Data Summary must also contain a brief discussion of the findings and observations made during the past year regarding landfill gas production, migration, and/or any issues with the landfill gas monitoring system noted during the previous year.
7. **Site Conditions Summary.** Include a Site Conditions Summary consisting of a comprehensive discussion regarding the condition of the Landfill, including, but not limited to:
 - a. Any interim or final cover areas,
 - b. Any excavation and construction areas,
 - c. Soil stockpiles,
 - d. Maintenance roads,
 - e. Desiltation and detention basins,
 - f. Erosion and drainage control measures implemented to control run-on and run-off; and
 - g. The monitoring systems include groundwater monitoring wells, piezometers, landfill gas probes, surface water monitoring points, and any other monitoring device located at the Landfill.

The discussion must also highlight any areas of noncompliance observed and repaired during the previous year and should be documented with photographs and inspection reports.

8. **Compliance Summary.** Include 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 Order No. R9-2026-0003 or this MRP.
9. **Topographic Map.** Include a topographic map or copy of an aerial photograph, at an appropriate scale, identifying all the surface water and groundwater monitoring points, background monitoring points, the groundwater elevation contours with interpreted groundwater flow direction and gradient. Maps must also be updated to show the maximum extent of any waste constituent or waste degradation product in groundwater.
10. **Graphical Display of Data.** Include a graphical display for all data collected within at least the previous five years for each monitoring well and background monitoring well.⁴⁰ Each graph must plot the concentration of one or more constituents over time for a given monitoring point. For any given constituent, the scale for all plots should be the same semi-log plot to facilitate comparison and identification of trends. The San Diego Water Board may direct the Discharger to carry out a preliminary investigation, in accordance with **Part III.F** of this MRP, to determine whether a release is indicated based on the presence of outliers noted in the plotted data. Trend analyses must include the identification of current trends, a comparison to previously identified trends, and a discussion of any significant changes in the trends. Trend analyses must be prepared for groundwater, surface water, seeps, springs, and any vadose zone monitoring points including subdrains, lysimeters, or landfill gas.

C. OTHER REPORTS TO BE FILED. The following reports must be submitted to the San Diego Water Board, in addition to the Semi-Annual Groundwater Monitoring Reports and Annual Summary Report, as described below.

1. **Leachate Monitoring Report.** The Discharger must complete leachate sampling each September, and the sampling data must be provided in a report that includes an identification of all detected Appendix II constituents that are not on the Landfill's COC list. The Discharger must submit the leachate monitoring report to the San Diego Water Board no later than **5:00 p.m. on October 30**.

For leachate sampling requiring a retest, a report must be received by the San Diego Water Board office no later than **5:00 p.m. on April 30** of the following calendar year. This report must identify all constituents that were detected in both the previous calendar year's September sample and in the

⁴⁰ CCR title 27, section 20415(e)(14).

- March retest sample and must add these constituents to the Landfill's COC list, and for at least two years, must also add them to the monitoring parameter list. The report must also include an updated COC list that includes the Appendix II constituents that are newly detected in both the September and March leachate samples.
2. **Five Year COC Reports.** The Discharger must complete a COC analysis on groundwater and surface water samples to update and verify the COC list included in the Semi-Annual Groundwater Monitoring Report every five years. The COC analysis must include all COCs found in Appendix II. The next COC Report must be received no later than **5:00 p.m. on April 30, 2026**. Subsequent COC reports must be submitted every fifth year, as an attachment to the Annual Summary Report.
 3. **Violation Reports.** The Discharger must notify the San Diego Water Board office by phone **within 24 hours**, if the Discharger determines there has been a violation of any requirements of this MRP. The San Diego Water Board may, depending on the severity of the violation, require the Dischargers to submit a separate technical report regarding the violation **within five working days** of the request of the San Diego Water Board.
 4. **Significant Maintenance Activity Work Plan.** The Discharger must submit a work plan for San Diego Water Board staff review and concurrence prior to any significant maintenance activities that could alter the existing surface drainage patterns or change existing slope configurations. These activities may include importing and stockpiling final cover system materials, the design and installation of soil borings or groundwater monitoring wells, construction of stormwater conveyance features, and other devices used for site investigation or monitoring purposes. Unless otherwise directed by San Diego Water Board staff, the Discharger may initiate the activities proposed in the work plan **30 days** after the San Diego Water Board received the work plan for review and consideration.
 5. **Post-Rain Inspection Reports.** The Discharger must submit a Post-Rain Inspection Report **within 48 hours** of a rain event with a cumulative rainfall of 1-inch or greater over a 72-hour period. The Post-Rain Inspection Report must include the date(s) of the rain event, how much precipitation was received each day of the rain event, a narrative describing where run-off was captured, the quality and effectiveness of BMPs, and any erosion, ponding, or exposed waste observed during the inspection. The Post-Rain Inspection Report must also include photographs of the detention basins, BMPs, stormwater conveyance features, top deck, side slopes, and any areas where damage is observed during the inspection.

6. **Post-Disaster Inspection Report.** The Discharger must submit a Post-Disaster Inspection Report ***within seven days*** of a naturally occurring event that has the potential to adversely impact the Landfill. These events may include, but are not limited to, seismic events, fires, landslides or mass wasting events, and floods. The Discharger must notify the San Diego Water Board if a post-disaster inspection cannot be performed in time to submit the written report within seven days of the qualifying event. The Discharger may request an extension to submit the inspection report from the San Diego Water Board's Executive Officer should the Landfill be inaccessible or unsafe due to the severity of the damage sustained during the qualifying event. The request must be made, in writing, a ***minimum of 48 hours*** prior to the deadline for submitting the Post-Disaster Inspection Report. The request must include the reason for the delay, and an estimated timeline for completing the inspection and submittal of the corresponding inspection report. The Post-Disaster Inspection Report must include dates of the fire, flood, or landslide event, the details of the fire, flood, or landslide event including size, location, and any other details available regarding the event. The Post-Disaster Inspection Report must also include a detailed description of any damage sustained by containment structures; monitoring systems including wells, probes, mainlines and headers; detention basins; leachate tanks; condensate tanks; ancillary features; stockpiles; access roads; the flare station; stormwater conveyance features; or any slope failure on outer slopes. The Discharger must include photographs documenting site conditions and an annotated map documenting the locations of any damage sustained during or after the disaster. The following are qualifying events that require a post-disaster inspection and subsequent inspection report:
 - a. A seismic event strong enough to be recorded and/or felt at the Landfill.
 - b. A fire that burns adjacent to, or over any portion of the Landfill property.
 - c. A mass wasting event (i.e., landslide, slope failure, or washout) on or adjacent to the Landfill property could adversely impact the integrity of waste containment structures, stormwater conveyance features, or monitoring systems.
 - d. A flood caused by excessive run-on from upland areas or overtopping of streams and/or tributaries located on or adjacent to the Landfill property which could result in ponding, exposed waste, washout of final cover systems, or other damage to the final cover system.
7. **Notification of Noncompliance.** The Discharger must notify the San Diego Water Board either orally or via email, ***within 24-hours*** of discovering any of the following conditions at the Landfill:

- a. **Endangerment of Human Health or the Environment.** The Discharger must report any noncompliance which may endanger human health or the environment.
- b. **Damage from Construction Activities.** The Discharger must any instances of damage caused by construction activities to the liner system, final cover system, LCRS, landfill gas system, or stormwater conveyance features at existing or new construction areas. Construction activities may include liner repairs, liner and waste removal activities, liner construction activities, and blasting conducted to prepare an area for construction.
- c. **Damage from Natural Causes.** The Discharger must report any instances of damage to the liner system, final cover system, LCRS, monitoring systems, or stormwater conveyance features, from natural causes including seismic events, storm events, or fires. This damage includes washout from storm events, landslides, slope creep, stress cracks or fissures, ground rupture, sinkholes, subsidence, liquefaction, ponding, exposed waste, melted monitoring systems, explosions, and uncontrolled venting of landfill gas.
- d. **Slope Failure or Seismic Displacement.** The Discharger must report any slope failure or seismic displacement that threatens the integrity of the liner system, final cover system, LCRS, monitoring systems, or structures that control surface drainage or erosion, and/or stormwater conveyance systems.
- e. **Seepage from the Landfill.** The Discharger must report the discovery of any previously unreported seepage from the Landfill.
- f. **Leachate Release to Groundwater or Surface Water.** The Discharger must report the discovery of a release of leachate to groundwater, determined during regular groundwater and/or surface water monitoring events.
- g. **Leachate and Landfill Gas Condensate Release.** The Discharger must report any release of leachate from the LCRS or landfill gas condensate from the landfill gas capture system.
- h. **Exposed Wastes.** The Discharger must *immediately* cover any exposed waste discovered at the Landfill.
- i. **High Heat Events.** The Discharger must report temperature readings of 145°F or greater in perimeter landfill gas probes, or if a temperature reading of 170°F is measured in any area of the Landfill. Following

notification, the Discharger must provide weekly updates to the San Diego Water Board that include a discussion of any actions taken to reduce temperature readings and investigate the cause of the elevated temperatures in the affected area.

- j. **Post-Rain and Seismic Event Noncompliance.** The Discharger must report significant maintenance issues discovered during post-rain inspection reports and post-seismic event inspection reports, including ponding, erosion, and damage to containment systems or stormwater conveyance systems.
 - k. **Petroleum Spills.** The Discharger must report any discharges of petroleum products from above ground or underground storage tanks, vehicles, or heavy machinery used for final cover system construction or maintenance of the Landfill, to land, surface water, groundwater, or stormwater conveyance systems.
8. **Emergency Response.** The Discharger must submit an Emergency Response ***within 48-hours***, in writing, documenting the immediate steps taken to (1) stop the release; (2) cover wastes; (3) stabilize slopes; (4) repair damage; (5) reduce leachate generation; (6) mitigate a high heat event, and/or address the noncompliance issues listed above and described in the Notification of Noncompliance.
9. **Emergency Response Work Plan.** The Discharger must submit an Emergency Response Work Plan ***within seven days*** of either discovering an area of noncompliance, or in response to a staff enforcement letter or notice of violation issued by the San Diego Water Board. The Emergency Response Work Plan must include (1) a description of the noncompliance issues and its cause; (2) the period of noncompliance, including exact dates and time; (3) the steps necessary to investigate and evaluate the cause of the noncompliance; (4) the steps planned, or design or operational changes needed, to reduce, eliminate, or prevent recurrence of the noncompliance; (5) a map documenting the location(s) of the noncompliance; (6) the methods of analysis proposed for sampling, if applicable; (7) and a time schedule for completion of these steps. The Discharger must receive written concurrence from San Diego Water Board staff prior to implementation of the Work Plan. The Discharger may submit a written request to the San Diego Water Board Executive Officer for an extension to submit the Emergency Response Work Plan should the site be inaccessible or severely damaged.
10. **Emergency Response Report.** The Discharger must submit an Emergency Response Report to the San Diego Water Board ***within two weeks*** of completing the steps proposed in the Emergency Response Work Plan. The

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Emergency Response Report must outline the Discharger's actions taken or operations changes implemented prevent immediate impacts to human health and the environment, and to reduce, eliminate, or prevent recurrence of the noncompliance at the Landfill.

D. REPORTING SCHEDULE

Reports must be received in the San Diego Water Board office ***no later than 5:00 p.m.*** on the due date shown in the following table:

Report Type	Report Frequency	Reporting Period	Report Due Date
First Sampling and Analysis Plan ^A	N/A	N/A	90 days from the date of adoption of the Order
Semi-Annual Groundwater Monitoring Report	Semi-Annual	October – March	April 30
Semi-Annual Groundwater Monitoring Report	Semi-Annual	April – September	October 30
Annual Summary Report	Annual	April – March	April 30
Leachate Monitoring Report	Annual	October – September	October 30
Leachate Retest Monitoring Report ^B	Annual	March	April 30
Groundwater COC Report	Every Five Years	June 1 – September 30, or October 1 – April 30	April 30 ^C
Surface Water COC Report	Every Five Years	October 1 – March 30, or April 1 – September 30	April 30 ^D
Revised JTD and Design Plans	Periodic	N/A	At least 120 days prior to the commencement of construction of a new phase
Construction Quality Assurance Report	Periodic	N/A	Upon completion of closure

^A Subsequent SAPs must be submitted as an attachment to the Annual Summary Report.

^B As necessary, based on the results of the Annual Leachate Monitoring.

^C The Discharger's next five-year Groundwater COC Report is due April 30, 2026. COC list data must be collected in alternating seasons to account for seasonal variations. For

example, if the previous COC sampling event occurred in the wet season (October 1 – April 30), the next COC sampling event should occur in the dry season (June 1 – September 30).

^D The Discharger's next five-year Surface Water COC Report is due April 30, 2028. COC list data must be collected in alternating seasons to account for seasonal variations. For example, if the previous COC sampling event occurred in the wet season (October 1 – April 30), the next COC sampling event should occur in the dry season (June 1 – September 30).

E. STANDARD REPORTING REQUIREMENTS. Standardized protocols for reporting are discussed below. There are protocols for submission procedures, use of licensed professionals, electronic data submission, and transmittal letters.

1. **Submission Procedures.** The Discharger must submit all reports required under this MRP in a text-searchable, electronic, Portable Document Format (PDF). Larger documents must be divided into separate files at logical places in the report to keep the file sizes under 150 megabytes. The Discharger must provide a paper copy of all figures larger than 8.5 inches by 14 inches to the San Diego Water Board. All correspondence and documents submitted to the San Diego Water Board must include the reference code "Site Restoration and Waste Management Unit Supervisor" in the header or subject line, where "Site Restoration and Waste Management Unit Supervisor" is the first initial and last name of the San Diego Water Board case manager. If the Discharger has any questions regarding the submittal of electronic data files, contact the San Diego Water Board's Mission Support Services Unit at (619) 516-1990.
2. **Use of Licensed Professionals.** The Discharger must use appropriately licensed professionals for any report submitted in compliance with CCR title 27, and Order No. R9-2026-0003 that proposes a design or design change that might affect the Landfill's containment features or monitoring systems. The information contained in these reports must be approved by a civil engineer or a certified engineering geologist appropriately licensed by the State of California in accordance with CCR title 27, section 21710(d). The Discharger must provide documentation that indicates all plans and reports required under this MRP are prepared by or under the direction of appropriately qualified professionals. CCR title 27, sections 20324(b), 20415(e)(1) and (e)(2), and 21090(b)(1)(C); and the California Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgements be performed by or under the direction of licensed professionals. A statement of qualifications and license numbers of the lead professionals responsible must be included in all plans and reports submitted by the Dischargers. The lead professional must sign and affix their license stamp to the report, plan, or document.

3. **Electronic Data Submittals.** The State's Electronic Reporting Regulations⁴¹ mandate the electronic submission of any report or data required by a regulatory agency for any discharge of waste to land subject to CCR title 27. All information submitted to the San Diego Water Board in compliance with this MRP is also required to be submitted electronically via the internet into the GeoTracker database at <http://geotracker.waterboards.ca.gov/>. The electronic data must be uploaded on or prior to the regulatory due dates set forth in this MRP or addenda thereto. To comply with CCR title 23, section 3893(b), the Discharger must upload into the GeoTracker database the following information:
- a. **Laboratory Analytical Data.** Analytical data (including geochemical data) for all soil, vapor, and water samples in Electronic Deliverable File (EDF) format.⁴² Water, soil, and vapor data including analytical results of samples collected from monitoring wells, boreholes, LFG probes, LFG extraction wells, soil vapor wells, piezometers, surface water, stockpiles, and drinking water wells, if applicable.
 - b. **Location Data.** The latitude and longitude of any permanent monitoring well for which data is reported in EDF format, accurate to within one meter and referenced to a minimum of two reference points from the California Reference System (SCRSH), if available.
 - c. **Monitoring Well Elevation Data.** The surveyed elevation relative to a geodetic datum of any permanent monitoring well. Elevation measurements must be made at the top of groundwater well casings for all detection groundwater monitoring wells.
 - d. **Depth-to-Water Data.** The depth-to-water in monitoring wells even if groundwater samples are not actually collected during the sampling event.
 - e. **Monitoring Well Screen Intervals.** The depth to the top of the screened interval and the length of screened interval for any permanent monitoring well.
 - f. **Landfill Map.** A map or maps which display discharge locations, streets bordering the Landfill, and sampling locations for all soil, water, and vapor samples. The sample map is a stand-alone document that may be

⁴¹ CCR title 23, chapter 30, division 3, section 3890 et seq.

⁴² See GeoTracker database:

http://www.swrcb.ca.gov/water_issues/programs/ust/electronic_submittal/docs/edf_gr_v1_2i.pdf.

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submitted in various electronic formats. An updated map may be submitted at any time.

- g. **Boring Logs.** Boring logs, as searchable PDF documents, prepared by an appropriately licensed professional.
 - h. **Electronic Report.** A complete, searchable PDF copy of all Joint Technical Documents, technical reports, workplans, CQA Reports, plans, and monitoring reports, including the signed transmittal letter, professional certifications, and all data presented in the reports.
4. **Transmittal Letter.** A letter summarizing the significant findings must be submitted with each report. The transmittal letter must also include the following minimum information:
- a. **Summary of Non-Compliance.** A summary of any areas of non-compliance with this MRP or Order No. R9-2026-0003, incurred during the reporting period. The summary may include verbal and written notices of violations from State and local regulatory agencies regarding monitoring and/or maintenance deficiencies or violations noted by the Discharger, such as the exceedance of Water Quality Protection Standards, failure to conduct monitoring as required by this MRP or Order No. R9-2026-0003.
 - b. **Certification Statement.** The person signing the transmittal letter must make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations."
 - c. **Signatory Designation.** All documents submitted to the San Diego Water Board must be signed by either a principle executive officer or ranking elected official, or by a duly authorized representative of the Discharger. An individual is a duly authorized representative only if:
 - i. The authorization is made in writing by an authorized representative of the Discharger.

- ii. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated Landfill or activity.
- iii. The authorization is submitted in writing to the San Diego Water Board.

The Discharger must submit to the San Diego Water Board **within 30 days** of adoption of this MRP, an updated signatory designation, identifying those persons authorized to sign reports.

PART V. EVALUATION OF CHANGING WATER QUALITY CONDITIONS

In the event the Discharger discovers a release from the Landfill, the Discharger must notify the San Diego Water Board within the timeframes listed below.

A. EVALUATION OF A RELEASE. If the Discharger determines that a release from the Landfill to groundwater or surface water has occurred, the following actions must be taken:

1. The Discharger must sample for all COCs at all monitoring wells in both the detection and corrective action groundwater monitoring networks, if applicable, and at surface water monitoring locations, and submit the samples for analysis **within 30 days** of the determination that the release is not based upon direct monitoring of the COCs. The Discharger must notify the San Diego Water Board by certified mail, of the concentrations of all COCs at each monitoring point sampled **within seven days** of receiving the laboratory analytical results. Because this scan is not to be statistically tested against background, only a single datum is required for each COC at each monitoring well.
2. The Discharger must submit an Amended Report of Waste Discharge (ROWD) proposing an Evaluation Monitoring Program that meets the requirements of CCR title 27, sections 20415(b)(2), 20420(k)(5), and 20425 et seq., **within 90 days** of determining there is measurably significant evidence of a release. The Discharger must receive concurrence from San Diego Water Board staff prior to implementation of the evaluation monitoring program.
3. The Discharger must, **within 180 days** of discovering the release, submit to the San Diego Water Board a preliminary engineering feasibility study report to the San Diego Water Board that meets the requirements of CCR title 27, section 20420(k)(6). The Discharger must receive concurrence from San Diego Water Board staff prior to implementing the preferred remedial alternative identified in the engineering feasibility study report.

B. EVALUATION OF EXCESSIVE LEACHATE PRODUCTION

The Discharger must evaluate significant increases in leachate production from the Landfill. A significant increase is defined by leachate generation at or over 85-percent capacity of the LCRS, or an increase in the volume of fluid in any unsaturated zone monitoring system, pursuant to CCR title 27, section 21710(c)(3). When a significant increase in leachate production is identified, the Discharger must:

1. Cease the use of leachate for onsite dust control, operations water, or any other purpose that adds leachate back into the lined areas of the Landfill **within 24-hours** of the Discharger's determination that there is evidence of a significant increase in leachate production. All leachate produced after determination of a significant increase has been made, must be containerized or sent offsite for treatment until the source of the increase in leachate has been identified and the San Diego Water Board agrees that it is appropriate to reuse leachate at the Landfill.
2. Submit an Amended ROWD **within 90 days** of the Discharger's determination that there is evidence of a significant increase in leachate production. The Amended ROWD must include a technical evaluation that identified the source(s) of the increase in leachate production and potential adverse impacts to the Landfill's waste containment, LCRS, and landfill gas detection/removal systems. The Amended ROWD must propose corrective actions and highlight a preferred alternative for addressing the impacts to the containment, LCRS, and landfill gas detection/removal systems, as needed. The Discharger must receive concurrence from San Diego Water Board staff prior to initiating corrective actions in response to an increase in leachate production.

D. EVALUATION OF A RELEASE BEYOND THE FACILITY BOUNDARY. If the Discharger determines that a release has been discovered to extend beyond the facility boundary, the Discharger must:

1. Develop a Public Participation Plan and submit it for review and comment by the San Diego Water Board **within 90 days** of determining that a release extends beyond the facility boundary.
2. Provide notification of the release to all affected persons (i.e., individuals, and private and public entities) who either own or occupy property that overlies the release. The initial notification must include a description of the Discharger's current knowledge of the nature and extent of the release.
3. Provide updates to all affected people.

4. Provide the San Diego Water Board a copy of the current mailing list of affected persons and copies of the notification and updates ***within seven days*** of sending such notifications.

PART V. NOTIFICATIONS

The San Diego Water Board hereby notifies the Discharger of the following information.

- A. ENFORCEMENT DISCRETION.** The San Diego Water Board reserves its right to take any enforcement action authorized by law for violations of the terms and conditions of this MRP.
- B. STATE WATER BOARD ADMINISTRATIVE REVIEW.** Any person affected by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320, and CCR title 23, California Code of Regulations, section 2050. The petition must be received by the State Water Board (Office of Chief Counsel, P.O. Box 100, Sacramento, CA 95812) ***within 30 days*** of the date of adoption of this MRP. Copies of the law and regulations applicable to filing petitions will be provided upon request.
- C. DELEGATION OF AUTHORITY.** The San Diego Water Board has delegated to the Executive Officer by resolution, all the powers and authority that may be delegated pursuant to Water Code section 13223. The San Diego Water Board intends for the Executive Officer to make modifications or revisions when appropriate, to this MRP. The Board further directed the Executive Officer to exercise discretion in determining whether proposed modifications and revisions should be considered for approval by the Board.

Ordered by:

David W. Gibson
Executive Officer

ATTACHMENT B

INFORMATION SHEET

ORDER NO. R9-2026-0003, WASTE DISCHARGE REQUIREMENTS FOR CLOSURE AND POST-CLOSURE MAINTENANCE AND MONITORING FOR RAMONA LANDFILL INC., A SUBSIDIARY OF REPUBLIC SERVICES RAMONA LANDFILL, SAN DIEGO COUNTY, CALIFORNIA

This Information Sheet includes the legal requirements and technical rationale that serve as the basis for the waste discharge requirements (WDRs) and monitoring and reporting program (MRP, **Attachment A**) in Order No. R9-2026-0003, *Waste Discharge Requirements for Closure and Post-Closure Maintenance and Monitoring for Ramona Landfill Inc., A Subsidiary of Republic Services, Ramona Landfill, San Diego County, California* (Order).

The Order establishes design requirements for the final cover system of the Ramona Landfill (Landfill). The Order also establishes WDRs for the monitoring and maintenance of the Landfill. The Landfill is a Class III non-hazardous, municipal solid waste (MSW) landfill subject to both State and federal regulations.¹

The Landfill is located 2.5 miles north of the unincorporated community of Ramona, which is located near the center of San Diego County, north of Highway 78 (**Figure 1**). The Landfill property encompasses 160 acres, 46 of those acres comprise the Landfill footprint. The properties surrounding the Landfill are designated for agriculture or open space. The final land use of the closed Landfill will be open space.

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) regulated the waste disposal operations at the Landfill since February 1970 when the County of San Diego Department of Public Works (County) operated the Landfill. Ramona Landfill, Inc., a subsidiary of Republic Services Inc. (Discharger) acquired the Landfill in 1997 and continued waste disposal operations until June 2009. The Discharger submitted a Final Closure/Post-Closure Maintenance Plan (Closure Plan) to the San Diego Water Board in October 2009, which was later revised in May 2010. Construction of the final cover system began in April 2011 and was completed in June 2012. San Diego Water Board staff (Staff) denied concurrence with the final cover system construction due to inert waste observed throughout the top layer of vegetative mulch during the construction certification inspection. The Discharger employed “pickers” to manually remove the inert waste, but after more than a decade of these activities, the Discharger decided to replace the top layer of the final cover system and to make repairs as needed. Therefore, the Discharger proposes to reconstruct the uppermost layer of the final cover system at the Landfill (Figure 2). The Discharger

¹ MSW Landfills in California are subject to CCR title 27 and Code of Federal Regulations (CFR) title 40.

submitted an updated Closure Plan² in 2024, to reflect the final cover system design and improvements for the final closure of the Landfill. The new final cover system will allow the Discharger to meet the cover requirements set forth in California Code of Regulations (CCR) title 27, division 2.

A. GEOLOGY AND HYDROLOGY OF THE SITE

The geologic and hydrologic characteristics of the site that are pertinent to the findings and requirements of the Order are described below.

Geologic Setting and Hazards.

The Landfill is underlain by the following lithologies:

- Cretaceous granitic bedrock – consists primarily of highly weathered and fractured quartz diorite (tonalite), with fractures and joints trending northeast-southwest through the Landfill.
- Quaternary stream alluvium – consists of clayey and silty fine to coarse sand. The alluvium, which ranges in thickness from 30 to 40 feet, is deposited in swales adjacent to the Landfill, at the bottom of two creeks southwest of the Landfill, and adjacent to the eastern boundary of the Landfill.

The Landfill is impacted by potential geologic hazards as described below:

- Temescal Fault – located 1.3 miles north of the Landfill in Pamo Valley.

Local Hydrology and Groundwater Use

Groundwater at the Landfill occurs within the fractured and highly weathered portions of the Cretaceous granitic bedrock. The overall direction of groundwater flow at the Landfill is to the east and south. There is one groundwater supply well located within a one-mile radius of the Landfill property. The supply well is approximately 0.85 miles south of the Landfill and is currently not in use for drinking water purposes, due to the historical release of Volatile Organic Compounds (VOCs) from the Landfill in 1992. The release occurred when the Landfill was owned and operated by the County. Remediation of the release is currently regulated under Clean-up and Abatement Order No. 97-17 and requires the County to supply drinking water to the affected residents.

² Final Closure/Post-Closure Maintenance Plan, Ramona Landfill, April 2023; Amended November 2018, April 2023, and June 2024.

B. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the Order are based on State statutes, regulations, applicable federal regulations,³ and authorities described in this section.

Legal Authorities.

The Order is issued pursuant to the Water Code commencing with section 13000, and all applicable portions of CCR titles 23 and 27, the applicable provisions of the Health and Safety Code, division 20, chapter 6.5 (Hazardous Waste Control), and the Code of Federal Regulations title 40 (40 CFR), Part 258.

Water Quality Control Plans.

The *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed in the plan. The beneficial uses of groundwater designated for the Santa Ysabel Hydrologic Area (5.50) of the San Dieguito Hydrologic Unit are municipal and domestic supply. The beneficial uses for surface waters in the Santa Ysabel Hydrologic Area are agricultural supply, industrial service and process supply, contact and non-contact water recreation, warm and cold freshwater habitat, and wildlife habitat.

The Landfill is comprised of both lined and unlined waste management units, which may produce leachate and landfill gas with the potential to degrade water quality and impact beneficial uses. The Order implements the Basin Plan by prescribing WDRs for the Landfill cover design, maintenance, and groundwater monitoring program. The Discharger's adherence to these requirements will ensure that pollutants produced from the degradation of the waste will not impair beneficial uses of groundwater or surface waters or result in violations of water quality objectives. The Order also implements applicable requirements of CCR title 27 and 40 CFR for active MSW landfills.

California Environmental Quality Act.

The discretionary decision to issue WDRs is a project under the California Environmental Quality Act (CEQA).⁴ The San Diego County Department of Planning and Land Use, pursuant to the requirements of CEQA, certified a Negative Declaration in May 1993 and again in January 2011 when the Landfill ceased waste acceptance. The San Diego County Department of Environmental Health and Quality, Solid Waste Local Enforcement Agency did not find any updates within the Landfill's Closure Plan that contained significant, new information during a 2018 permit review and the Negative Declaration remained in place. The San Diego Water Board is a responsible agency under CEQA. As such, the San Diego Water Board has reviewed and considered the Second Supplemental Environmental Impact Report and Final

³ CFR, title 40, part 258.

⁴ Public Resources Code, section 21000 et seq.

Environmental Impact Report and the project's environmental effects as described therein.

Antidegradation Policy.

The Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. As discussed below, the Order is consistent with the antidegradation policy.

C. COMPLIANCE WITH THE ANTIDEGRADATION POLICY

The State Water Board established California's Antidegradation Policy in Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*. The Antidegradation Policy requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. All disposal of waste into waters of the State is required to be regulated to achieve the highest water quality with the maximum benefit to the people of the State. The Antidegradation Policy requires that higher quality water will be maintained until it has been demonstrated to the State that:

- any change will be consistent with the maximum benefit to the people of the State,
- will not unreasonably affect present and anticipated beneficial use of the water, and
- will not result in water quality less than that prescribed in the Basin Plan.

The Order is consistent with the Antidegradation Policy because it requires construction of a monolithic cover system to prevent the degradation of waste which will protect groundwater and surface water beneficial uses. The Discharger is also required to design and implement groundwater, surface water, and landfill gas monitoring programs to monitor potential impacts to human health and the environment. The partial composite liner system and Leachate Collection and Removal System (LCRS) are designed to prevent any further degradation of groundwater beyond the historical release from the Landfill.

D. RATIONALE FOR DISCHARGE PROHIBITIONS

Water Code section 13243 provides that a Regional Water Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste, or certain types of waste are prohibited. The Basin Plan waste discharge prohibitions are applicable to any person, as defined by section 13050(c) of the Water Code, who is a citizen, domiciliary, or political agency or entity of California whose activities in California could affect the quality of waters of the State within the boundaries of the San Diego Region. The Discharge Prohibitions listed in section B of the Order are based upon the waste discharge prohibitions established in Chapter 4 – Implementation of the Basin Plan.

E. RATIONALE FOR CLEARING AND GRUBBING AND STOCKPILING REQUIREMENTS

Clearing and grubbing is required to prepare the Landfill for reconstruction of the final cover system. Shrubs will be removed, and the surface will be dragged to remove the one-foot layer of vegetative mulch. Repairs to the final cover system will be performed in the event that clearing and grubbing activities damage the final cover system and the entire site will be track-walked to confirm the final cover system's integrity. The Discharger proposes to store the clearing grubbing materials, which includes the vegetative mulch, in one stockpile at the staging area on the flare station pad, located northwest of the Landfill. The Discharger intends to dispose of all stockpiled materials at Sycamore Landfill or another acceptable disposal site. Alternatively, the Discharger may choose to store the clearing and grubbing materials on-site until a winter burn permit is approved and burn ash will be transported off-site and disposed at an appropriate facility.

F. RATIONALE FOR BURN REQUIREMENTS

Burn ash does not pose a significant threat to water quality, but burning vegetative mulch poses air quality concerns. Therefore, additional measures are required if the Discharger chooses to burn the vegetative mulch on-site to protect human health and the environment, which includes: 1) obtaining burn permits from CAL FIRE and the San Diego County Air Pollution Control District, 2) notifying residents, 3) submitting a sampling and analysis plan and the subsequent results to demonstrate burn ash classification, and 4) containerizing the burn ash, and disposal of burn ash at a licensed waste management facility.

G. RATIONALE FOR DESIGN SPECIFICATIONS

The United States Environmental Protection Agency (USEPA) promulgated federal regulations that apply to dischargers who own or operate landfills that accept, have previously accepted, or will continue to accept non-hazardous wastes on or after October 9, 1991. The federal regulations, referred to as 40 CFR,⁵ establish the minimum federal criteria for the siting, design, operation, monitoring, and closure of MSW landfills, and implements the statutory requirements of Subtitle D of the Resource Conservation and Recovery Act (RCRA). The regulations found in 40 CFR, Subtitle D encourage states to develop and implement comprehensive solid waste management plans and sets the minimum standards for liners, leachate collection systems, groundwater monitoring, daily cover, and final cover systems.⁶

⁵ CFR, title 40, part 258.

⁶ The federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), authorized the development of nationwide standards for MSW disposal sites.

The federal regulations require dischargers to design and construct final cover systems to: 1) minimize infiltration through the Landfill by the use of an infiltration layer that contains a minimum 18-inches of earthen material, 2) minimize erosion of the final cover system by the use of an erosion layer that contains a minimum six-inches of earthen material that can support native plant growth, and 3) have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present or no greater than 1×10^{-5} centimeters per second (cm/sec), whichever is less. 40 CFR also allows for an alternative final cover system design that includes an infiltration layer, an erosion layer, and additional requirements established by the director of an approved State that considers the climatic and hydrogeologic conditions, unique characteristics of small communities, and the protection of human health and the environment. Dischargers may propose engineered alternative final cover systems if a demonstration can be made so that the alternative design meets all applicable conditions and performance standards found in the federal regulations.

The USEPA requires states to implement the federal regulations for MSW landfills that were in operation after October 9, 1991. The State Water Resources Control Board (SWRCB) adopted Resolution No. 93-62, *Policy for Regulation of Discharges of Municipal Solid Wastes* on March 31, 1993, requiring regional water quality control boards to update or issue new WDRs to include directives for implementing 40 CFR Subtitle D requirements for containment systems. Subsequently, CCR, title 27 was developed and became effective on July 18, 1997.

CCR title 27⁷ establishes standardized environmental protection requirements regarding solid waste management and disposal. CCR title 27 provides prescriptive final cover system requirements that are more stringent than the federal regulations described above. The prescriptive design criteria for a final cover system consists of a layered cover system. From bottom to top, the prescriptive design includes a minimum two-foot foundation layer overlain by a one-foot low-hydraulic conductivity layer with a hydraulic conductivity of 1×10^{-6} cm/sec or less, and topped with a one-foot erosion resistant layer that is capable of sustaining native plant growth. Similar to the federal regulations, CCR title 27 also allows for engineered alternative final cover systems as long as the design plan meets the minimum final cover system performance criteria of CCR title 27. The Discharger constructed an engineered alternative final cover system consisting of a three-foot thick monolithic cover, overlaying the existing one-foot thick intermediate cover. A one-foot thick vegetative layer comprises the top of the cover system resulting in a four-foot thick final cover system. The permeability of the soil used for the monolithic cover ranges from 1.9×10^{-6} to 1.9×10^{-8} cm/sec, has an average hydraulic conductivity of 1.6×10^{-7} cm/sec, and a maximum hydraulic conductivity of 4.0×10^{-4} cm/sec. The design and construction specifications included in the Order are derived from the Closure Plan. Based on the information provided, Staff determined that the engineered alternative cover meets the required and performance-based standards

⁷ CCR title 27, section 21090(a)(1-3).

consistent with the prescriptive final cover system criteria found in both State and federal regulations.

H. RATIONALE FOR POST-CLOSURE MAINTENANCE SPECIFICATIONS

The San Diego Water Board is requiring post-closure maintenance specifications. The intent of this requirement is to ensure the Landfill adheres to all applicable regulations for final cover system maintenance into perpetuity. CCR title 27 establishes the minimum requirements for maintenance of the Landfill and groundwater monitoring. The post-closure maintenance specifications protect water quality by ensuring the long-term integrity of the Landfill cover system, the long-term containment of solid wastes, and minimizes the generation of waste degradation byproducts.

I. RATIONALE FOR CLIMATE CHANGE IMPACT MITIGATION

The Order requires the Discharger to re-evaluate 100-year, 24-hour storm events every five years to account for variations in the frequency and intensity of storms due to climate change. The Discharger's design and sizing of detention basins and stormwater conveyance features is based on the most recent calculation of a 100-year, 24-hour storm event. As the calculation of the event is based on past data, the impacts from climate change may not be realized and accounted for in a one-time calculation at the time the Discharger designs the stormwater conveyance system. The San Diego Water Board's requirement in the Order to reevaluate 100-year, 24-hour storm events every five years ensures the stormwater conveyance system is appropriately sized to manage increases in rainfall due to more frequent and intense storm events.

J. RATIONALE FOR PROVISIONS

The standard provisions contain language that allows the San Diego Water Board to enforce the Order. The standard provisions include the need for inspections, implementation of corrective actions, monitoring and maintaining the Landfill property or real property located adjacent to the Landfill. The standard provisions apply to all WDRs and are consistent with San Diego Water Board findings. Special provisions that apply to landfills are derived from CCR title 27.

K. RATIONALE FOR FINANCIAL ASSURANCE REQUIREMENTS

State law requires operating landfills to provide financial assurance mechanisms for costs associated with closure, post-closure maintenance, and corrective actions. The Discharger provided proof of financial assurances to the San Diego Water Board in the form of a series of bonds for closure activities, post-closure monitoring and maintenance, and implementation of corrective action in response to a release of waste constituents from the Landfill. This information was submitted as part of the Closure Plan, and meets the requirements of CCR title 27, section 22205.

The Discharger estimated in 2025, that the cost to implement closure activities at the Landfill will be approximately \$1.5 million – 2 million. This estimate includes, but is not limited to, costs associated with the construction of the final cover system, and installation of erosion and drainage control systems. The Order requires the Discharger to update, as necessary, financial assurance estimates to account for inflation and ensure that adequate funds are available to cover the costs associated with closure and post-closure activities. The Discharger estimates that annual post-closure maintenance and monitoring costs will be approximately \$8.4 million – 9 million over the course of a minimum of 30 years. Annual post-closure maintenance and monitoring costs include, but may not be limited to:

- Grading of the final cover system to promote sheet flow and positive drainage to stormwater control features.
- Ensuring equipment for groundwater, surface water, and landfill gas monitoring is functional and accurate.
- Installing and repairing best management practices, in preparation for the rainy season and throughout year.

L. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

When a Regional Water Board determines that groundwater or surface water monitoring is necessary to evaluate impacts or potential impacts from landfill wastes, dischargers are required to implement one of the monitoring programs outlined in the regulations.⁸ The Monitoring and Reporting Program (**MRP, Attachment A**) requires the Discharger to conduct a detection monitoring program and a corrective action monitoring program.

The MRP requires the Discharger to furnish certain technical and monitoring program reports to demonstrate compliance with the WDRs in the Order. The San Diego Water Board's authority to require submission of the reports is found in both Water Code section 13267 and in CCR title 27. Water Code section 13267 provides that the San Diego Water Board may require the Discharger to furnish technical or monitoring reports, provided that the burden, including costs, of these reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring these reports, the San Diego Water Board must provide the person with a written explanation regarding the need for the reports and must identify the evidence that supports requiring that person to provide the report. Based on the nature and possible consequences of the discharge, as described in the following sections, the burden of providing the required reports, including the costs which are estimated to be between \$100,000 to \$250,000, bears a reasonable relationship to the need for the reports, and the benefits to be obtained from the reports.

⁸ CCR title 27, section 20385 – Required Programs.

1. Basis for Detection Groundwater Monitoring.

Regional Water Boards are authorized by CCR title 27, section 20080(d) to issue monitoring and reporting requirements to landfills if site conditions indicate that impairments or potential impairments to water quality and/or beneficial uses may be caused by a landfill. The MRP requires the Discharger to implement groundwater monitoring programs designed to provide the earliest possible detection of subsequent releases from the Landfill (Detection Monitoring).⁹ The monitoring programs prescribe a standard set of monitoring and reporting requirements consistent with CCR title 27, sections 20385 and 20420 et seq. Results of the groundwater monitoring programs must be provided in the semi-annual groundwater monitoring reports.

The detection monitoring program requires dischargers to have a sufficient number of wells, including background and compliance monitoring wells, to evaluate the quality of water upgradient and downgradient of a landfill. The Discharger has the discretion to determine how many wells are necessary to provide adequate groundwater monitoring information to make this evaluation. An adequate monitoring program includes both background and compliance monitoring wells. The following descriptions apply to the two types of monitoring wells:

- a. Background monitoring wells are located up-gradient or cross-gradient from a landfill and are used to evaluate the quality of water outside the area of influence of the Landfill that are unlikely to be impacted by a release to groundwater from the Landfill. Background monitoring wells are installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that represents the quality of water that has not been impacted by a release from the Landfill.
- b. Compliance monitoring wells are used to detect constituents of concern (COCs) as they leave the Landfill and enter the groundwater aquifer. The data collected from these wells are used to provide early detection of a release of waste constituents or track the concentrations of those constituents over time. Compliance monitoring wells are placed at locations immediately downgradient of the Landfill to detect a release of waste constituents (release) as soon as it occurs. Similar to background monitoring wells, compliance monitoring wells are installed at depths to yield groundwater samples from the uppermost aquifer. Some of the compliance wells at the Landfill may be located within the pollutant plume from a release from the Landfill. Should a release from the Landfill occur, the Discharger may need to install additional compliance monitoring wells to further delineate the

⁹ CCR title 27, section 20415(b) – Groundwater Monitoring Systems.

pollutants and assess impacts to water quality and beneficial uses of groundwater downgradient of the Landfill.

The Discharger may propose to implement one of two statistical approaches for the long-term detection of any release(s) of waste from the Landfill. These two approaches are known as an Intra-Well Analysis and an Inter-Well Analysis.

An intra-well analysis compares groundwater data collected from a given well to historical groundwater data collected at that same well for the previous two-year timeframe. This method of analysis minimizes the adverse effects of geographic and hydrogeographic variation at the Landfill, thereby reducing the likelihood of a false positive indication of a release. If an intra-well analysis method is used for detection mode monitoring, then prediction limits will be used to establish a range of concentrations for monitoring parameters, within which future groundwater monitoring data should fall. These prediction limits will be used to evaluate if there is a statistically significant change in concentration of monitoring parameters in groundwater. Every two years, Dischargers may retire the COC's oldest two years of background data points, thereby creating a background dataset that is representative of current and recent groundwater conditions at the Landfill.

An inter-well analysis compares groundwater data collected from background wells with groundwater data collected from compliance wells to determine whether there is statistical evidence of a release from the Landfill. This approach may be affected by variability in groundwater quality due to geographic and hydrogeographic conditions and may result in higher frequencies of false indications of a release. Therefore, Dischargers should use caution when choosing to implement this type of groundwater data analysis.

2. **Basis for Corrective Action Groundwater Monitoring**

The MRP requires the Discharger to implement a corrective action groundwater monitoring program (CAP) designed to monitor groundwater quality impacted by a historical release of VOCs from the Landfill.¹⁰ The release occurred in 1992 when the Landfill was owned and operated by the County. Remediation of the release is currently regulated under Clean-up and Abatement Order No. 97-17, which requires the County to supply drinking water to all affected residents. The CAP allows the San Diego Water Board, the County, and the Discharger to continue monitoring the release, evaluate the effectiveness of remedial actions, and monitor any potential future releases.

The CAP requires the Discharger to have a sufficient number of wells, including monitoring points and background monitoring points, to evaluate the quality of water passing the point of compliance and at other locations in the uppermost aquifer. The Discharger will use the data collected from the monitoring points to

¹⁰ CCR title 27, section 20415(D) – Corrective Action Program.

evaluate the effectiveness of the CAP. The Discharger has the discretion to determine how many wells are necessary to provide adequate groundwater monitoring information to make this evaluation, which includes both monitoring and background monitoring points. Monitoring points and background monitoring points follow the same definitions as compliance wells and background monitoring wells, respectively, as described above in section L.1.a. and b.

3. **Basis for Landfill Gas Monitoring**

The Discharger is required to comply with the requirements prescribed by the County Solid Waste Local Enforcement Agency (LEA) for oversight of the landfill gas monitoring system and program. CCR title 27 gives the authority for oversight of landfill gas monitoring and systems to California Department of Resources Recycling and Recovery and its assigned local enforcement agencies. The MRP requires the Discharger to report the results from the landfill gas monitoring in the Annual Summary Compliance Report, if landfill gas data is proposed for use to satisfy the requirements for vadose zone monitoring.

M. RATIONALE FOR ANNUAL SITE CONDITIONS CERTIFICATION REPORTS

The San Diego Water Board is prescribing requirements for the submittal of an Annual Site Conditions Certification Report. The intent of the additional requirements is to ensure that the closed Landfill is compliant with this Order and CCR title 27. The requirements found in **Attachment D** to this Order, require the Discharger to submit an Annual Site Conditions Certification Report that provides site-specific information including 1) site maps, 2) written and photographic documentation of maintenance activities undertaken throughout the year, 3) the installation or repair of best management practices for precipitation and drainage control, 4) the status of the final cover system, 5) the condition of landfill gas, groundwater and surface water monitoring networks, 6) documentation of inspections performed by the Discharger throughout the year, 7) a record of any and all areas of noncompliance that occurred during the previous year and the actions taken by the Discharger to bring the Landfill back into compliance.

N. RATIONALE FOR NOTIFICATIONS

Notifications are included in the Order to inform the Discharger of administrative issues regarding this Order.

O. OTHER PERMITS REQUIRED

No other permits are required by the San Diego Water Board for the closed Landfill based on the proposed final land use.

P. PRACTICAL VISION

The issuance of the Order establishes requirements for the closure and final cover maintenance of the Landfill is consistent with the goal to provide water resources protection, enhancement and restoration while balancing economic and environmental impacts as stated in the Practical Vision of the San Diego Water Board. The Order implements the goal of the Practical Vision to maintain healthy waters in the San Diego Region by establishing proper management and long-term containment of solid wastes in the landfill, ensuring protection of groundwater and surface water quality.

Q. PUBLIC PARTICIPATION

Two of the four values embraced by the San Diego Water Board in its Practical Vision are communication and transparency. Public participation in the decision-making process of the Board is a hallmark of the board governmental structure in California and essential to this Board's success. The San Diego Water Board's process to encourage public participation in the adoption of the Order is discussed in the following paragraphs.

Notification of Interested Parties.

Consistent with Water Code section 13167.5, and CCR title 27 sections 21730(a) and (b), the San Diego Water Board provided a 45-day notice to the Discharger and interested agencies and persons, of its intent to adopt waste discharge requirements for the expansion of the Landfill and made a copy of the Order is available on its website. Furthermore, the San Diego Water Board provided the public an opportunity to submit written comments and recommendations. Notification was provided through posting on the San Diego Water Board website and in the board meeting agenda publication.

Written Comments.

The staff determinations are tentative. Interested people are invited to submit written comments concerning this tentative Order. Written comments must be submitted in text searchable Portable Document Format (PDF) or Microsoft Word format via email to sandiego@waterboards.ca.gov by **5:00 p.m. on Monday February 16, 2026**. Written comments must include a signed cover/transmittal letter. Comments should include a topic line "Ramona Landfill Tentative Order" and be addressed to the attention of Erin Schmitt.

Comments received by **5:00 p.m. on Monday February 16, 2026**, will be included in a written response from staff and provided to the San Diego Water Board for

consideration prior to the hearing. Written comments received after the due date will not be considered.

Petitions.

Any aggrieved person may petition the State Water Board to review the decision of the San Diego Water Board regarding the final Order. The petition must be submitted ***within 30 days*** of the San Diego Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

Information and Copying.

The Order, written comments received, and other related documents are on file and may be inspected at the San Diego Water Board's address listed above, at any time **between 8:30 a.m. and 4:45 p.m., Monday through Friday**. Copying of documents may be arranged through the San Diego Water Board by calling (619) 516-1990.

Register of Interested Persons.

Any person interested in being placed on the mailing list for information regarding the Order should contact the San Diego Water Board, reference this facility, and provide a name, address, phone number, and email address.

Additional Information.

Requests for additional information or questions regarding the Order should be directed to Erin Schmitt at (619) 521-5898 or at Erin.Schmitt@waterboards.ca.gov.

FIGURE 1

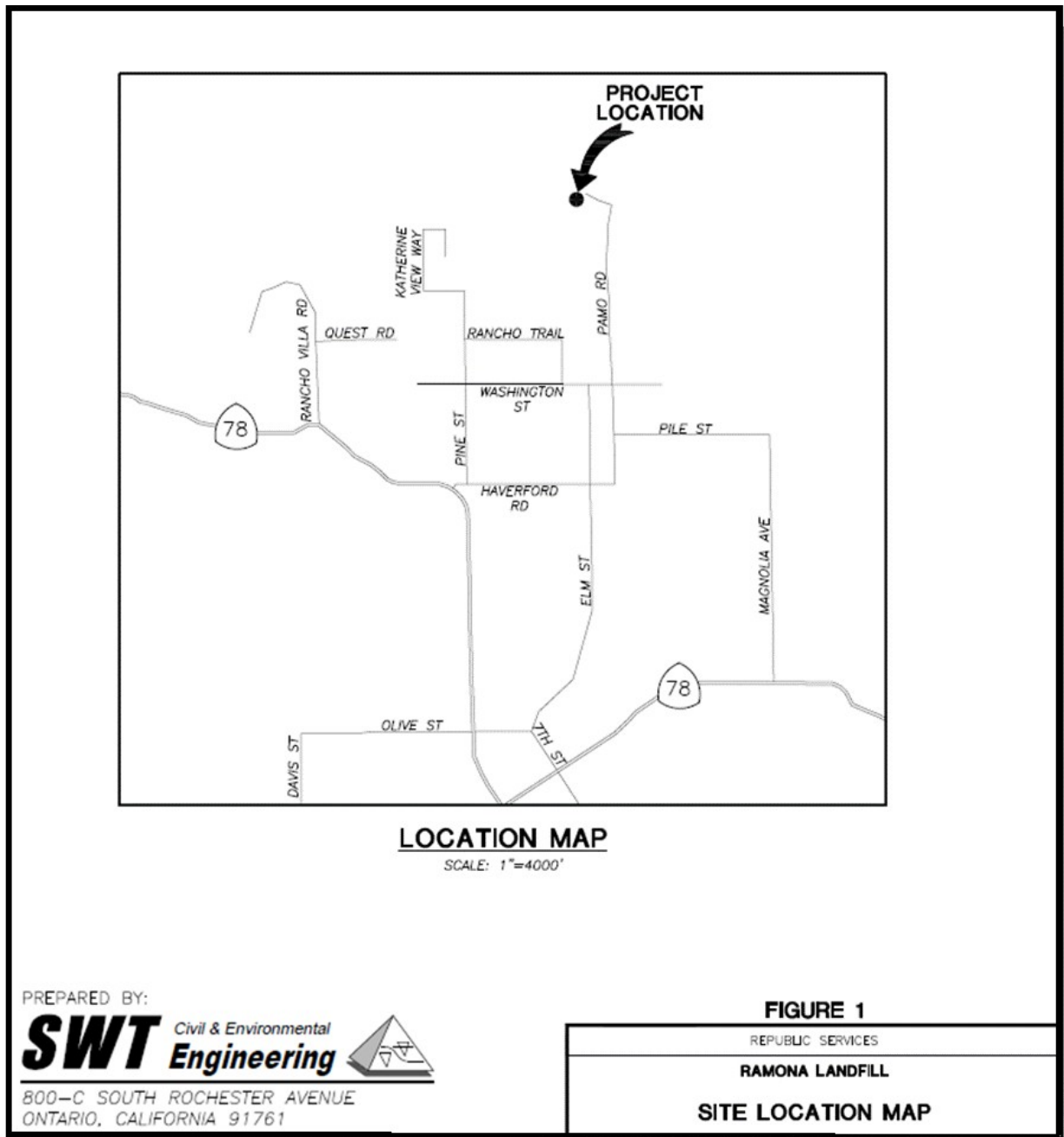


Figure 1: Location map prepared by SWT Civil & Environmental Engineering and submitted by the Discharger in the Closure Plan. The Landfill is located north of Highway 78, off Pamo Road.

The figure is a detailed topographic map of the Ramona Landfill site. The map shows the 'FINAL CLOSURE AREA' in the center, surrounded by various infrastructure and natural features. Key elements include:

- Infrastructure:** 'DUMP ROAD' running horizontally across the middle, 'ROAD TO GAS FLARE' on the left, and 'RAMO ROAD' on the right. A 'SCALE HOUSE' is located near the center-left.
- Water Features:** 'SOUTH WEST SEDIMENTATION BASIN' at the bottom left, 'EAST SEDIMENTATION BASIN' at the bottom right, and 'LORS SUMP & STORAGE TANKS' at the bottom center.
- Monitoring and Extraction Points:** Several points are marked with symbols and labels: 'RACM-1', 'RACM-2', 'RACM-3', 'RACM-4', 'RACM-5', 'RACM-6', 'RACM-7', 'RACM-8', 'RACM-9', 'RACM-10', 'RACM-11', 'RACM-12', 'RACM-13', 'RACM-14', 'RACM-15', 'RACM-16', 'RACM-17', 'RACM-18', 'RACM-19', 'RACM-20', 'RACM-21', 'RACM-22', 'RACM-23', 'RACM-24', 'RACM-25', 'RACM-26', 'RACM-27', 'RACM-28', 'RACM-29', 'RACM-30', 'RACM-31', 'RACM-32', 'RACM-33', 'RACM-34', 'RACM-35', 'RACM-36', 'RACM-37', 'RACM-38', 'RACM-39', 'RACM-40', 'RACM-41', 'RACM-42', 'RACM-43', 'RACM-44', 'RACM-45', 'RACM-46', 'RACM-47', 'RACM-48', 'RACM-49', 'RACM-50', 'RACM-51', 'RACM-52', 'RACM-53', 'RACM-54', 'RACM-55', 'RACM-56', 'RACM-57', 'RACM-58', 'RACM-59', 'RACM-60', 'RACM-61', 'RACM-62', 'RACM-63', 'RACM-64', 'RACM-65', 'RACM-66', 'RACM-67', 'RACM-68', 'RACM-69', 'RACM-70', 'RACM-71', 'RACM-72', 'RACM-73', 'RACM-74', 'RACM-75', 'RACM-76', 'RACM-77', 'RACM-78', 'RACM-79', 'RACM-80', 'RACM-81', 'RACM-82', 'RACM-83', 'RACM-84', 'RACM-85', 'RACM-86', 'RACM-87', 'RACM-88', 'RACM-89', 'RACM-90', 'RACM-91', 'RACM-92', 'RACM-93', 'RACM-94', 'RACM-95', 'RACM-96', 'RACM-97', 'RACM-98', 'RACM-99', 'RACM-100'.
- Topography:** Contour lines are shown throughout the map, indicating elevation changes.
- Legend:** A legend is located in the bottom right corner, defining symbols for 'PROPERTY LINE', 'APPROXIMATE LIMIT OF REFUSE', 'GROUNDWATER EXTRACTION WELL / MONITORING WELL', and 'SURVEY MONUMENT'.
- Scale and Orientation:** A scale bar at the bottom left indicates a distance of 100 feet. A north arrow is located in the bottom right corner.

FIGURE 3
 REVISION: SERVICES
 RAMONA LANDFILL
 CURRENT TOPOGRAPHY SITE PLAN

PREPARED BY: **SWT Engineering**
 CIVIL & ENVIRONMENTAL
 800-C SOUTH ROCHESTER AVENUE
 ONTARIO, CALIFORNIA 91761
 DATE OF TOPOGRAPHY: JANUARY 31, 2022

B-15

ATTACHMENT C

REQUIREMENTS FOR FINAL COVER AND FILL SOIL

ORDER NO. R9-2026-0003, WASTE DISCHARGE REQUIREMENTS FOR CLOSURE AND POST-CLOSURE MAINTENANCE AND MONITORING FOR RAMONA LANDFILL INC., A SUBSIDIARY OF REPUBLIC SERVICES RAMONA LANDFILL SAN DIEGO COUNTY, CALIFORNIA

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) designated the Ramona Landfill (Landfill), as a closed nonhazardous municipal solid waste landfill in accordance with Code of Federal Regulations, title 40 (40 CFR), part 257.2, and California Code of Regulations (CCR) title 27, section 20164. 40 CFR and CCR title 27 establish the prescriptive and performance standards for closure and post-closure maintenance of landfills to prevent the degradation of water quality from unauthorized discharges of waste. Ramona Landfill Inc., a subsidiary of Republic Services (Discharger) is the owner and former operator of the Landfill and is responsible for maintaining the Landfill's final cover system in accordance with CCR title 27, sections 21090 and 20950.

The Discharger constructed an engineered alternative final cover system consisting of a three-foot thick monolithic cover, overlaying the existing one-foot thick intermediate cover. A one-foot thick vegetative layer comprises the top of the cover system resulting in a four-foot thick final cover. The permeability of the soil used for the monolithic cover ranges from 1.9×10^{-6} to 1.9×10^{-8} centimeters per second (cm/sec), an average hydraulic conductivity of 1.6×10^{-7} cm/sec and a maximum hydraulic conductivity of 4.0×10^{-4} cm/sec.

The Discharger must ensure that soils used for final cover system construction and maintenance are free of chemical, physical or biological contaminants (wastes) and suitable for use in the maintenance and repair of final cover system, and protective of human health and the environment. The Discharger must demonstrate that soils which are classified as an inert waste will not be a threat to water quality and are appropriate for use as fill for unrestricted reuse. Additionally, soil imported for reuse must meet the grain size, permeability, and compaction of the site specific cover system. The Discharger must comply with the following requirements for final cover system construction and maintenance at the Landfill.

- A. Clean Soil.** The Discharger must use soils that do not contain any waste for the uppermost one foot of the soil layer of the final cover system. Soil sourced from a quarry or a site with no prior land use or discharges of waste may be classified as clean soil. The Discharger must provide a demonstration to the San Diego Water Board staff that the soil proposed for use for final cover system is sourced from a site that, according to property records, has no known contamination from residential, agricultural, commercial, or industrial uses, or other historical waste discharges. Staff must provide concurrence that the soil is appropriate for use as final cover prior to importing and/or stockpiling soil at the Landfill for final cover system construction or maintenance. If the Discharger previously received Staff concurrence that a soil source is appropriate for use as final cover, the Discharger is not required to re-submit a demonstration or submit a Sampling and Analysis Plan (SAP) for materials imported from the site.
- B. Sampling and Analysis Plan.** The Discharger must submit an SAP to determine if any waste is present in soil that is proposed for use in final cover system construction, or to be stockpiled onsite for future cover maintenance and repairs, prior to importation or placement on the final cover system to demonstrate compliance with CCR title 27. Importation of any soil prior to completing the soil characterization activities outlined below may be characterized as an unauthorized waste discharge and may result in reclassification of the Landfill from closed to active, subject to closure requirements of CCR title 27, in the event that the sampling and analysis classifies the soil as a waste and not appropriate for use as final cover materials.

The SAP must include the following minimum information:

1. **Source Location and Prior Land Use.** The Discharger must include a map of the source location of the soils proposed for use and include the site address and prior land use(s) for the location proposed as the source of potential cover materials.
2. **Proposed Volume of Soil.** The Discharger must include the approximate volume of soil proposed for use.
3. **Sampling Constituents.** The Discharger must sample for the following suites of constituents:
 - Total concentrations of metals listed in Table II of CCR title 22, division 4.5, section 66261.24.
 - Total petroleum hydrocarbons.
 - Polychlorinated biphenyls.

- Volatile and semi-volatile organic compounds.
- Pesticides.

4. **Sampling Frequency.** The Discharger must provide a sampling frequency at the appropriate rate indicated by the table below:

Volume of Soil	Required Number of Samples
<100 cy	4 samples
e	4 samples, plus 1 sample for every additional 25 cy over 100 cy
500 cy <5,000 cy	20 samples, plus 1 sample for every additional 500 cy
5,000 cy or more	29 samples, plus 1 sample for every additional 1,000 cy over 5,000 cy

5. **Hydraulic Conductivity.** The Discharger must demonstrate that soils used for the final cover system maintenance have a maximum hydraulic conductivity of 1×10^{-5} cm/s.
6. **Grid Pattern.** The Discharger must include a grid pattern to visually display the proposed soil sampling points.
7. **Segregate and Dispose.** The Discharger must segregate, remove, and dispose of contaminated materials encountered during sampling. The removal area must extend to a minimum radius of one foot around the original sample location, then re-sample the area, following the protocols in B.8 below, to confirm all waste are removed for any samples found to contain the waste constituents listed in section B.1. The Discharger may choose to remove material around the sample area at a larger radius than the one-foot minimum prior to re-sampling. The Discharger must dispose of any soil segregated and removed from the source area due to contamination, at a permitted waste disposal facility. The Discharger must include copies of the disposal manifests as an attachment to the Sampling and Analysis Final Report, as described below.
8. **Soil Re-Sampling.** The Discharger must re-sample an area when contaminated soils have been detected and removed during the initial sampling event, to confirm that all waste and contaminated soil have been removed and the remaining soil is appropriate for use in maintenance and

repairs to the final cover system. The purpose of re-sampling is to ensure all soils proposed for use are clean and meet the definition of an inert waste.

C. Sampling and Analysis Final Report. The Discharger must submit a Sampling and Analysis Final Report summarizing the soil characterization sampling activities and provides the analytical results for San Diego Water Board staff consideration. The Sampling and Analysis Final Report must include the following minimum information:

- Map of the soil source site with sample area grid pattern that has been updated to include any re-sampling or additional samples collected.
- Copy of analytical data from a laboratory with Environmental Lab Accreditation Program (ELAP) accreditation.¹
- Demonstration of hydraulic conductivity compliance.
- Description of soil segregation and disposal activities for any samples containing waste.
- Copy of waste manifests, if applicable.
- Updated volume of soil proposed to be imported to the site.
- Approximate timeline for importing the soil to the site.
- Map where the proposed stockpile will be located on site, if applicable.

D. Fill Soil Requirements. The Discharger may use soils with inert waste² for backfill of the final cover system below the uppermost one foot of cover material. CCR title 27 section 20230(a) defines “inert waste” as “that subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives and does not contain significant quantities of decomposable waste.” Inert waste cannot contain any free liquids, as defined by CCR title 27, section 20164. The Discharger must submit a demonstration to San Diego Water Board staff to support the inert waste classification of the soil, including an SAP as described above. Staff must approve the demonstration and concur with the inert waste classification prior to import, stockpiling, and/or use of the soils with inert waste as backfill material.

¹ [Environmental Laboratory Accreditation Program \(ELAP\) | California State Water Resources Control Board](#)

² CCR title 27, section 20230(a) defines “inert waste” as the subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives and does not contain significant quantities of decomposable waste.

ATTACHMENT D

REQUIREMENTS FOR ANNUAL SITE CONDITIONS CERTIFICATION REPORTING

**ORDER NO. R9-2026-0003, WASTE DISCHARGE REQUIREMENTS FOR CLOSURE
AND POST-CLOSURE MAINTENANCE AND MONITORING FOR RAMONA
LANDFILL INC., A SUBSIDIARY OF REPUBLIC SERVICES
RAMONA LANDFILL
SAN DIEGO COUNTY, CALIFORNIA**

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) designated the Ramona Landfill (Landfill), as a closed nonhazardous municipal solid waste landfill in accordance with Code of Federal Regulations, title 40 (40 CFR), part 257.2 and California Code of Regulations (CCR) title 27, section 20164. 40 CFR and CCR title 27 establish the prescriptive and performance standards for closure and post-closure maintenance of landfills, to prevent the degradation of water quality from unauthorized discharges of waste. Ramona Landfill Inc., a subsidiary of Republic Services (Discharger) is the owner and former operator of the Landfill and is responsible for the closure and post-closure maintenance activities and ensuring the Landfill is prepared for the rainy season as defined in Order No. R9-2026-0003, Waste Discharge Requirements for Closure and Post-Closure Maintenance and Monitoring for Ramona Landfill, Inc, a Subsidiary of Republic Services, Ramona Landfill, San Diego County, California (Order).

The Order directs the Discharger to submit an Annual Site Conditions Certification Report (Report) by **October 30** of each year. The Report must describe the maintenance activities undertaken throughout the reporting year to ensure compliance with the closure and post-closure maintenance specifications in CCR title 27 and this Order. The Report must include the following minimum elements.

- A. Transmittal Letter.** The transmittal letter must be signed by the Discharger's duly authorized representative.
- B. Site Information.** The reported site information must at a minimum, include:
 - 1. The person, company, or agency that is responsible for each aspect of landfill maintenance, along with their business address, phone number, and email address.
 - 2. Site map(s) showing the location of the following:
 - a. Landfill property boundaries.
 - b. Existing limits of waste.

- c. Internal roads.
 - d. Soil stockpile areas.¹
 - e. Detention and desiltation basins.
3. Monitoring and control systems, including drainage and erosion control systems, groundwater monitoring wells, surface water monitoring points/locations, and landfill gas monitoring and control systems.

C. Site Conditions. The reported site conditions must include, at a minimum, a description of the:

- 1. Final cover system, including any areas of concern noted in inspection reports from the San Diego Water Board, the San Diego County Department of Health and Quality Solid Waste Local Enforcement Agency (LEA), or inspection reports drafted by the Discharger during routine or post-rain inspections.
- 2. Monitoring and control systems, including any broken or damaged monitoring wells, vaults, landfill gas lines, leachate tanks, and/or sumps used to collect waste degradation byproducts and monitor potential impacts to water quality or human health from the Landfill.
- 3. Fences and gates that are used for site security.
- 4. Maintenance roads.
- 5. Soil stockpiles.
- 6. Structures that house equipment or materials used to maintain the Landfill cover.
- 7. Precipitation and drainage controls, including drains, swales, down-chutes, basins, perimeter drains, and any other structural or non-structural best management practices (BMPs) used to precipitation that falls on the Landfill cover, and to control stormwater run-on or run-off.

D. Observed Deficiencies and Violations. The reported deficiencies and violations must include, at a minimum, the following:

¹ Areas used to stockpile soils temporarily during active maintenance work do not need to be included on the site map. A temporary stockpile is one that will be on-site for 90-days or less.

1. A detailed description of any deficiencies or violations observed by the Discharger during routine inspections, post-rain inspections, or documented in inspection reports issued by the San Diego Water Board or LEA.
2. Photographic documentation of any deficiencies or violations included in the Report.
3. A site map illustrating where the deficiencies or violations were observed at the Landfill throughout the reporting period.

E. Best Management Practices. The reported BMPs must include, at a minimum, the following:

1. A description of implemented structural and non-structural BMPs to promote surface water drainage and minimize the erosion of all Landfill cover surface materials in areas undergoing containment system construction and/or maintenance.
2. A description of BMPs implemented based on changing site conditions. BMPs may include, but are not limited to, the use of bonded fiber matrix, anchored fiber rolls, fiber blankets, hydroseeding/vegetating, or other equivalent engineered alternative approved by San Diego Water Board staff.
3. A description of any other activities implemented to maintain all areas of the Landfill cover system, including surface water drainage courses, to minimize erosion and the percolation of liquids through waste.

F. Soil Stockpile Source. The reported soil stockpile source information must, at a minimum, include the following:

1. Name and address of the soil supplier.
2. Address or coordinates of the soil source location.
3. Volume of soil obtained from that source.
4. Documentation that evaluates the source location and supports the conclusion that the soil is appropriate for use at the Landfill.

G. Landfill Gas Data. The reported landfill gas data must include copies of Landfill gas data collected by the Discharger or the LEA during the reporting period.

H. Inspection Reports. The reported inspection records must include, at a minimum, copies of the following inspection reports:

1. LEA inspection reports documenting site conditions throughout the reporting year.
2. Other inspection reports completed by the Discharger throughout the reporting year to ensure compliance with the post-closure maintenance and reporting requirements of this Order.

I. Maintenance and Repairs. The Report must include, at a minimum, a thorough discussion of the following:

1. All routine maintenance activities completed during the dry season to prepare the Landfill for the upcoming rainy season.
2. All repair activities completed throughout the year to ensure compliance with the post-closure maintenance requirements outlined in this Order.
3. All structural and non-structural BMPs repaired or replaced to prepare for the upcoming rainy season.

J. Demonstration of Compliance. The Report must include a demonstration that the Landfill cover, monitoring and control systems are compliant with CCR title 27 and this Order. The demonstration must include, at a minimum, the following information:

1. A summary of the maintenance activities undertaken by the Discharger to ensure the Landfill final cover, monitoring and control systems are protective of water quality.
2. Photographic documentation of the Landfill after the repairs of deficiencies or violations, as described in the Report, demonstrating compliance with CCR title 27 and this Order.
3. A penalty of perjury statement certifying that the information contained in the Report is a true and accurate depiction of Landfill conditions.

K. Certification Statement. The Report must include the name, license, and stamp of the individual responsible for collecting the data and producing the Report, or a duly authorized representative appointed by the Discharger. The individual responsible must also make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the

Attachment D
Order No. R9-2026-0003

information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations."