CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

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waterboards.ca.gov/coloradoriver/

ORDER R7-2021-0026

Order Information

Discharger:	Imperial County Department of Public Works
Facility:	Hot Spa Waste Management Facility
Address:	10466 Spa Road, Niland, California 92257
County:	Imperial County
WDID:	7A130301041
GeoTracker ID:	L10009821173
Prior Order(s):	R7-2017-0003; R7-2007-0005; 97-022; 88-029; 83-017; 70-64

I, PAULA RASMUSSEN, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 15, 2021.

Original signed by
PAULA RASMUSSEN
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER R7-2021-0026

WASTE DISCHARGE REQUIREMENTS
FOR
IMPERIAL COUNTY DEPARTMENT OF PUBLIC WORKS
OWNER/OPERATOR
HOT SPA WASTE MANAGEMENT FACILITY
NILAND, IMPERIAL COUNTY

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) hereby makes the following Findings:

1. The Imperial County Department of Public Works (Discharger), 115 South 11th Street, El Centro, CA 92243, owns and maintains the closed Hot Spa Waste Management Facility (Facility). The Facility was formerly used for the disposal of municipal solid waste at a Class III waste management unit. The Facility location is depicted in **Attachment A**, Location Map, made part of this Order by reference. The Facility layout is depicted in **Attachment B**, Site Layout Map, made part of this Order by reference.

2. These Waste Discharge Requirements (WDRs) regulating the Facility are issued pursuant to state and federal laws and regulations, including but not limited to: California Code of Regulations, title 27, section 20005 et seq.; Water Code section 13000 et seq; 40 Code of Federal Regulations parts 257 and 258 (a.k.a., "Subtitle D"); State Water Resources Control Board (State Water Board) Resolution 93-62, *Policy for Regulation of Discharges of Municipal Solid Waste*.

3. The Facility is located in southern California in Imperial County, approximately ¾-mile southeast of the community of Hot Spa. The specific location of the site is the Southwest quarter of the Southeast quarter of Section 12, Township 9 South, Range 12 East, San Bernardino Basin & Meridian. The latitude and longitude of the site are 33° 41528' N, 115° 67611' W, respectively.

4. The Facility is identified in the California Integrated Water Quality System (CIWQS) database with Waste Discharger Identification (WDID) No. 7A130301041 and in the GeoTracker database by the Global Identification L10009821173.

5. The Facility was previously regulated by several orders, including:
   a. Order 70-064, adopted 12-10-70, issued to Imperial County Department of Public Works, landowner Bureau of Land Management;
   b. Order 83-017, adopted 5-18-83, issued to the Imperial County Department of Public Works, landowner Bureau of Land Management;

c. Order 88-029, adopted 1-27-88, issued to the Imperial County Department of Public Works;

d. Order 97-022, adopted 3-26-97, issued to the Imperial County Department of Public Works;

e. Order R7-2007-0050, adopted 5-16-07, issued to Imperial County Department of Public Works; and

f. Order R7-2017-0003, adopted 6-30-17, issued to Imperial County Department of Public Works.

6. In response to a request by Regional Water Board staff, the Discharger submitted a Report of Waste Discharge (ROWD), dated February 23, 2021. As detailed further below, the Facility started operation as a sanitary landfill in the mid-1960s and landfilling operations ceased on July 29, 2018. Construction of a final cover is estimated to begin in April 2022.

7. This Order updates the WDRs to comply with current laws and regulations as well as incorporates applicable closure requirements set forth in title 27 of the California Code of Regulations and the closure and post-closure regulations of 40 Code of Federal Regulations part 258. Accordingly, this Order supersedes Order R7-2017-0003 upon the effective date of this Order, except for enforcement purposes.

Facility Usage

8. The Facility occupies a 40-acre parcel of land. Approximately 6.4 acres were used as disposal areas. The disposal areas were not lined and had no leachate collection and removal systems. No hazardous or liquid waste was knowingly accepted at the Facility. All disposal areas have been closed since July 2018.

9. The Discharger reports that the Facility received approximately 2.9 tons per day of the following types of waste:

   a. Household Waste,

   b. Agricultural Solid Waste,

   c. Construction/Demolition Waste, and

   d. Commercial Solid Waste.

10. In July 2018, CalRecycle issued notification permit (13-AA-0120), which allows the Discharger to utilize the site as a limited volume transfer station, electronic transfer station, and tire transfer station.

11. Other activities currently occurring at the site also include routine maintenance and monitoring.

Hydrogeologic Setting

12. The Facility is located on the east side of the Salton Sea, approximately ¾ of a mile south-southeast of the community of Hot Spa and northeast of the community of Bombay Beach, near the base of the Chocolate Mountains. This eastern margin of the Imperial Valley occupies a lowland in the northwestern part of the Salton Trough, Colorado Desert physiographic province. Much of the Imperial Valley's land surface is below sea level with predominant drainage patterns toward the Salton Sea.

13. The Salton Trough is a landward extension of the depression filled by the Gulf of California, from which it is separated by the broad, fan-shaped subaerial delta of the Colorado River. The Salton Trough is a structural, as well as a topographic, depression resulting from tectonic stresses associated with the San Andreas Fault. The Salton Trough is bounded by the San Andreas Fault zone on the north and east sides; the discontinuous San Jacinto Fault zone on the west; and the Elsinore Fault zone further west and southwest.

14. Subsurface borings, completed during the Solid Waste Assessment Test (SWAT) investigation of 1988, revealed that the Facility is underlain by two general soil types: site surficial soils are composed primarily of a relatively thin veneer (up to six feet thick) of coarse-grained alluvium composed of sand and gravel, underlain by predominantly Holocene and Pleistocene deposits consisting of clay with interbedded lenses of fine to coarse sand with gravel from existing grade to the maximum depths drilled (approximately 140 feet). Below the alluvial cover of Imperial Valley lies an unexposed succession of Tertiary and Quaternary sedimentary rocks thought to be at least 20,000 feet thick.

15. The depth to upper-most groundwater beneath the site ranges from approximately 84 to 96 feet below ground surface (bgs). Groundwater flows to the east beneath the central-southern portion of the site and to the south-southwest in the eastern portion of the site. Except for monitoring well HS-MW5, which is consistently 10 feet lower than the other wells (potentially indicative of a groundwater barrier at the site), differences in groundwater elevation at the site are generally less than about 0.033 feet per foot, and the groundwater flow direction has remained relatively consistent over time. Groundwater velocity is interpreted to be about 0.018 feet per day, or about 6 to 7 feet per year.

16. Elevations across the Facility range between 80 feet below mean sea level (msl) at the northeast end and 112 feet below msl at the southwest end. Two (2) washes are located to the south and west of the Facility. Both washes drain toward the Salton Sea to the southwest. The final surface drainage system includes down drains and associated catch basins, energy dissipators, diversion berms, unlined v-ditches, and an underground culvert/piping system.

17. Annual averages for evaporation and precipitation in the area are 78 inches and less than 3.0 inches, respectively.

18. The 100-year, 24-hour precipitation event for the site is 3.293 inches.

19. The site is not located within the limits of any known floodplain.

20. The Coachella Canal, an irrigation canal created to deliver water from the Colorado River to the Coachella Valley, is upgradient of the Facility, located approximately one-mile northeast of the site.

21. There are no drinking water wells or manmade structures within a one (1) mile radius of the site. The Facility lies within areas zoned for open space/recreation (S-1) and government/special public uses (G/S).

Operational History

22. The 6.4-acre portion of the Facility that was used as a landfill for disposal of Class III municipal, non-hazardous, solid waste has the following history:
    a. In the 1960s, the Facility began operation as a solid waste landfill and serviced a radius of approximately 30 miles. The maximum permitted capacity for the Facility was 233,150 cubic yards (cy). The area cut-and-fill method was traditionally used for waste disposal at the site.
    b. From 1998 till closure, the Facility was open two days a week and received approximately 2.9 tons of waste per day.
    c. In 2002, the Discharger received a land patent from the US Bureau of Land Management.
    d. In 2010, the Discharger installed a landfill gas (LFG) monitoring system at the direction of CalRecycle. The system consists of three perimeter LFG migration monitoring probes (P1-P3).
    e. In July 2018, the Facility stopped accepting waste. The estimated final volume of in-situ waste within the landfill area is estimated to be 191,600 cy; approximately 41,550 cy of capacity available.

23. The Imperial County Public Health Department, who acts as the Local Enforcement Agency (LEA) for CalRecycle, CalRecycle, and the Discharger have agreed to a Stipulated Notice and Order Regarding Financial Assurance Compliance for Closure Costs (Stipulated Notice and Order) regarding several landfills that the Discharger operates, including this Facility. The Stipulated Notice and Order was approved in January 2019 and allows for annual contributions to the Final Closure Account for the Facility (as part of the Enterprise Fund the Discharger has established for the landfills named within it, including this Facility).

Closure Activities

24. The Discharger submitted a Final Closure/Post-Closure Maintenance Plan (FCPCMP) on November 19, 2020. These WDRs include the implementation of

the final closure activities described in the FCPCMP, which was approved by the Regional Water Board on December 11, 2020.

25. Closure will begin upon full funding of the Final Closure Account, as agreed to in the Stipulated Notice and Order. The closure construction process will begin after completion of final construction-level design, preparation of a construction-level drawing set and bid package, the bidding and award to a qualified contractor, and the subsequent issuance of notice to proceed. The estimated time frame for completion of all of the construction activities for closure of the site is approximately 2 to 3 months. Closure activities are estimated to begin in April 2022.

26. For closure of the landfill, the following will be installed by the Discharger, as described in the FCPCMP:

    a. Final Cover – the Discharger proposes to install multilayered soil cover as an engineered alternative to the prescriptive cover. The multilayered soil cover consists of, in ascending order:

        i. A minimum 1-foot-thick foundation layer composed of soil materials;

        ii. A minimum 1-foot-thick layer of onsite fine grain soil material;

        iii. A minimum 3-foot-thick layer of onsite coarse grain soil material; and

        iv. Top decks and slopes will be protected from erosion with a biodegradable, transparent, liquid copolymer soil binder.

    b. Final Grading – Final grades are designed to prevent ponding, accommodate anticipated future settlement, and reduce runoff velocities. Final grades are constructed with a maximum parameter slope of 2-to-1 and a minimum grade of three (3) percent on the top deck. Other features include:

        i. Construction of drainage diversion berms along the crest of some landfill slopes to divert stormwater to drainage control features;

        ii. Placement of engineered fill and grading in the depression area directly north and west of the Facility to provide drainage to the landfill stormwater conveyance system; and

        iii. Grading of the borrow area east of the Facility to provide positive drainage away from the landfill.

    c. Waste relocation – Waste excavated to achieve design grades will be relocated to the top deck of the landfill. Relocated waste will be placed in areas of the existing top deck to promote positive drainage and limit cover soil placement. The volume of waste material that will be relocated during closure construction is estimated to be approximately 250 cy.

    d. Settlement – Settlement of the refuse is monitored by installation of a minimum of two (2) additional permanent monuments to serve as reference points and by aerial photography of the entire permitted site at the end of the closure

activities, and every five (5) years throughout the post-closure maintenance period.

e. Final Drainage – The final surface drainage system includes down drains and associated catch basins, energy dissipators, diversion berms, unlined v-ditches, and an underground culvert/piping system. In general, the surface water from the top deck will drain to one of three catch basins, where the water will be diverted off of the landfill surface in down drains. Surface water drains to one of two culverts. Areas south and east of the Facility surface drain to a culvert located beneath the site entrance, and areas north and west of the Facility surface drain to a culvert located in the west side of the site at the southern boundary of the former depression area. Both culverts discharge to the southwest corner of the site.

f. Slope Protection and Erosion Control – Due to the arid climate and infrequent rainfall and the usage of native soil for the five (5)-foot thick final cover, no vegetation layer was proposed as slope protection or erosion control. Earthen berms will be constructed around the toe of slopes to divert stormwater towards the drainage system.

g. Groundwater Monitoring – The existing ground water monitoring wells listed in Monitoring and Reporting Program (MRP) R7-2017-0003, will remain in service throughout the closure and post-closure maintenance period, or until waste no longer poses a threat to groundwater as determined by the Regional Water Board's Executive Officer. Monitoring Well HS-MW-3 will be extended in accordance with state and local regulations.

h. Land Use – The closed landfill will be non-irrigated open space and may be utilized as a waste transfer station for the Imperial County Public Works Department, in accordance with local regulations. The proposed site end use is consistent with the current surrounding open space/recreation land use designation.

27. The Discharger proposed the following for post-closure maintenance, as described in the FCPCMP:

a. Inspection – Routine and periodic inspections will be conducted by the Discharger. At least twice a year and immediately after special events such as earthquakes, storms and fires, a thorough and comprehensive inspection will be conducted by the Discharger.

b. Final Cover/Grading – A post-closure maintenance program will be implemented at the Facility to ensure that the landfill final cover and final grades retain their integrity and effectiveness. The final cover areas will be routinely evaluated and inspected for:

i. Evidence of erosion,

ii. Visible depressions,

iii. Ponded water,

iv. Odor,

v. Exposed refuse,

vi. Cracks,

vii. Settlement and subsidence,

viii. Slope failure, and

ix. Leachate seeps.

Deficiencies, damages to, and failure of the final cover and final grades will be repaired and restored within 30 days to design conditions and in accordance with construction specifications.

c. Settlement – A mitigation plan was included in the FCPCMP.

d. Drainage System – Drainage inlets and down drains will be cleaned of sediments at least annually. Drainage channels will be maintained to permit free flow and sealed or repaired to maintain structural integrity of the system. Any damage to the system will be repaired within 30 days.

e. Groundwater Monitoring System – All groundwater monitoring wells will be inspected for signs of failure or deterioration during each sampling event. If damage is discovered, the nature and extent of the problem will be recorded. A decision will be made to replace or repair the well. If a well needs to be replaced, it will be properly decommissioned. Damaged wells will be scheduled for repair or replacement within one (1) month after identifying the problem.

Monitoring and Enforcement

28. In 1994, four groundwater monitoring wells, labeled HS-MW-1, HS-DW-2, HS-MW-3, and HS-MW-4 were installed. Groundwater gradient measurements found that well HS-MW-3 was upgradient of the Facility while wells HS-MW-1, HS-DW-2, and HS-MW-4 were downgradient.

29. In 1999, a fifth groundwater monitoring well was installed designated HS-MW-5. The groundwater elevation measured in one of the wells, HS-MW-5, is consistently 10 feet lower than the elevation measured in the other wells at the Facility. The consistent difference in elevation could be indicative of a partial groundwater barrier between HS-MW-5 and the rest of the site.

30. On September 15, 1993, the WDRs were amended when Order 93-071, incorporating the Resource Conservation and Recovery Act (RCRA), Subtitle D, was adopted by the Regional Water Board.

31. On October 9, 2002, the Regional Water Board's Executive Officer issued Cleanup and Abatement Order (CAO) R7-2002-0206, *A Moratorium on the Disposal of Decommissioned Materials to Class III and Unclassified Waste Management Units,* to all Class III WMFs in the Colorado River Basin Region, including Hot Spa WMF. Finding 8 of CAO R7-2002-0206 states: "Decommissioned materials are radioactive materials in excess of local background levels that have been released for unrestricted use as part of a decommissioning action by the appropriate state or federal agency." CAO R7-2002-0206 is active and prohibits the Facility from accepting decommissioned waste for disposal.

32. The monitoring wells installed at the Facility are currently in the Detection Monitoring Program, and are summarized as follows:

    a. Well HS-MW-3 and HS-DW-2 are considered upgradient wells and are monitored annually.

    b. Wells HS-MW-1, HS-MW-4, and HS-MW-5 are considered downgradient compliance wells and are monitored annually.

    Well locations are shown on Attachment B.

33. Groundwater chemistry at the site is characterized by elevated concentrations of chloride, sulfate, and total dissolved solids (TDS). Historical groundwater elevations depict a long-term decreasing trend of depth to groundwater in all the monitoring wells at the Facility. Groundwater chemistry data at the site tend to show seasonal variations, though with little long-term change over the history of monitoring. The historical data from background and compliance wells suggests that the concentrations of inorganic constituents, particularly chloride, sulfate, and TDS, are naturally occurring and not indicative of a release.

    Historical water quality data for selected chemicals are summarized below:

Table 1. Historical Groundwater Data

COC	Units	Maximum	Well	5-yr Average	10-yr Average	Running average (2020)	MCL
Chloride	mg/l	6,760	HS-MW-1	5,520	5,565	5,522	Not established
Sulfate	mg/l	2,270	HS-MW-5	1,890	2,100	2089.66	Not established

COC	Units	Maximum	Well	5-yr Average	10-yr Average	Running average (2020)	MCL
Total Dissolved Solids	mg/l	15,226	HS-MW-1	12,000	11,368	12,077	500

Basin Plan and Other Regulatory Considerations

34. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan), adopted on November 17, 1993 and most recently amended on January 8, 2019, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Pursuant to Water Code section 13263, subdivision (a), WDRs must implement the Basin Plan and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.

35. The Facility is located in the Brawley Hydrologic Area of the Imperial Hydrologic Unit designated in the Basin Plan. The beneficial uses of groundwater in the Imperial Hydrologic Unit are:

    a. Municipal supply (MUN), and

    b. Industrial supply (IND).

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

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

38. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring the

Discharger to maintain waste containment systems that prevent discharges of waste to waters of the state.

39. These WDRs also implement state regulations applicable to the discharge of solid/designated waste to land found in California Code of Regulations, title 27, division 2, subdivision 1, commencing with section 20005 ("Consolidated Regulations for Treatment, Storage, Processing or Disposal of Solid Waste"). These regulations contain classification criteria for wastes and for disposal sites, and prescribe minimum standards for the siting, design, construction, monitoring, and closure of waste management units.

40. This Order further implements the applicable federal regulations for discharges of solid waste to land. On October 9, 1991, USEPA promulgated federal municipal solid waste regulations under RCRA, Subtitle D, codified in 40 Code of Federal Regulations parts 257 and 258. State Water Board Resolution 93-62 (as amended on July 21, 2005) requires that the regional water boards implement the applicable provisions of the federal municipal solid waste regulations in WDRs, particularly the provisions that are either more stringent than or that do not exist in title 27 of the California Code of Regulations.

41. Consistent with Water Code section 13241, the Regional Water Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:

    a. Past, present, and probable future beneficial uses of water;

    b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto;

    c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;

    d. Economic considerations;

    e. The need for developing housing within the region; and

    f. The need to develop and use recycled water.

42. Water Code section 13267 authorizes the Regional Water Board to require technical and monitoring reports. Monitoring and Report Program (MRP) R7-2021-0026 establishes monitoring and reporting requirements to implement state requirements and demonstrate compliance with this Order and to identify the Facility's impact, if any, on receiving waters. The State Water Resources Control Board's (State Water Board) electronic database, GeoTracker Information Systems, facilitates the submittal and review of facility correspondence, discharger requests, and monitoring and reporting data. The burden, including costs, of the

MRP bears a reasonable relationship to the need for the information and the benefits to be obtained from that information.

43. Pursuant to Water Code section 13263, subdivision (g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

Antidegradation Analysis

44. State Water Board Resolution 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California* (Resolution 68-16), generally prohibits the Regional Water Board from authorizing discharges that will result in the degradation of high quality waters, unless it is demonstrated that any change in water quality will: (a) be consistent with maximum benefit to the people of the state, (b) not unreasonably affect beneficial uses, and (c) not result in water quality less than that prescribed in state and regional policies (e.g., the violation of one or more water quality objectives). The discharger must also employ best practicable treatment or control (BPTC) to minimize the degradation of high quality waters. High quality waters are surface waters or areas of groundwater that have a baseline water quality better than required by water quality control plans and policies.

45. The disposal of any additional municipal solid waste at the Facility is prohibited. This Order complies with Resolution 68-16 by requiring the Discharger to maintain a cover on the closed landfill to minimize the potential for generating leachate that could discharge to waters of the state. Minimal degradation of groundwater by some waste constituents is consistent with the maximum benefit to the people of the state. Accordingly, the discharge as authorized is consistent with the antidegradation provisions of Resolution 68-16.

Stormwater

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

47. The State Water Board adopted Order 2014-0057-DWQ (NPDES No. CAS000001), *General Permit for Storm Water Discharges Associated with Industrial Activities* (Industrial General Permit), which became effective on July 1, 2015. The Industrial

General Permit regulates discharges of stormwater associated with certain industrial activities, excluding construction activities, and requires submittal of a Notice of Intent (NOI) to be covered under the permit. The Facility is assigned the SMART's (Storm Water Multiple Application and Reporting Tracking System) database ID number 713I025690.

48. The State Water Board also adopted Order 2009-0009-DWQ (NPDES NO. CAS000002), *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit), which regulates Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. If appropriate, the Discharger must enroll in the Construction General Permit during closure construction activities.

Financial Assurances

49. The State Water Board-promulgated provisions of title 27 of the California Code of Regulations require maintenance of appropriate financial assurance mechanisms to cover all expenses related to the following:
    a. Closure Activities (Cal. Code Regs., tit. 27, § 22207) – in at least the amount of the current closure cost estimate;
    b. Post-closure Maintenance (Cal. Code Regs., tit. 27, § 22212) – in at least the amount of the current post-closure cost estimate; and
    c. Corrective Action (Cal. Code Regs., tit. 27, § 22222) – for initiating and completing corrective action for all known or reasonably foreseeable corrective action.
50. The Discharger maintains an enterprise fund in accordance with California Code of Regulations, title 27, section 22241, a pledge of revenue agreement in accordance with section 22245, and a Certificate of Liability Insurance in accordance with section 22251.

CEQA and Public Participation

51. Imperial County is the lead agency under the California Environmental Quality Act (CEQA; Public Resources Code, § 21000 et seq.) for closure activities at the Facility. In April 2020, an Initial Study and Mitigated Negative Declaration (IS/MND) evaluating potential environmental impacts resulting from the proposed final closure of the Facility (State Clearinghouse No. 2001051081) was prepared by Geosyntec on behalf of Imperial County. On July 29, 2020, the Imperial County Planning Commission adopted a revised IS/MND for final closure activities and filed a Notice of Determination with the State Clearinghouse on September 25, 2020.

52. As a responsible agency under CEQA, the Regional Water Board has considered the IS/MND, and in making its determinations and findings, must presume that the

adopted environmental document comports with the requirements of CEQA and is valid. (Pub. Resources Code, § 21080.1(a).21167.2.). The Regional Water Board has reviewed and considered the environmental document and finds that it addresses the project's impacts within the scope of the Regional Water Board's discretionary approval. (Cal. Code Regs., tit. 14, § 15096, subds. (f), (h).)

53. Alternatively, the Regional Water Board finds that pursuant to California Code of Regulations, title 14, section 15301, the issuance of these WDRs, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of CEQA.

54. The Regional Water Board has notified the Discharger and all known interested agencies and persons of its intent to issue WDRs for this discharge and provided them with an opportunity for a public meeting and to submit comments.

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

IT IS HEREBY ORDERED, pursuant to section 13263 and 13267 of the California Water Code, that Order R7-2017-0003 is rescinded, except for the purposes of enforcement, and in order to meet the provisions contained in division 7 of the Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

A. Discharge Prohibitions

1. The disposal of any additional municipal solid waste or other waste at the Facility is prohibited.

2. The Discharger shall not cause or contribute to an increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil, or other geologic materials outside of the waste management unit if such waste constituents could migrate to waters of the state, in either the liquid or the gaseous phase, and cause, or threaten to cause, a condition of contamination or pollution.

3. The Discharger shall not cause the release of pollutants or waste constituents in a manner that could cause, or threaten to cause, a condition of contamination or pollution to occur, as indicated by the most appropriate statistical (or non-statistical) data analysis method and retest method listed in California Code of Regulations, title 27, section 20415 through 20425.

4. The Discharger shall not cause the concentration of any Constituent of Concern (including Monitoring Parameters), as defined in the MRP and incorporated herein by reference, to exceed its representative concentration limit in any monitoring medium (i.e., exceed the Water Quality Protection Standard (WQPS)). The concentration limit for each constituent will be set in accordance with the MRP. Data analysis shall be performed in accordance with the MRP.

B. Closure and Post-Closure Specifications

1. The Discharger shall comply with all applicable provisions of title 27 (Cal. Code Regs., tit. 27, § 20005 et seq.), even if not specifically referenced in this Order.

2. The Discharger shall comply with the Final Closure/Post-Closure Maintenance Plan (FCPCMP) and any revisions thereto as approved by the Regional Water Board's Executive Officer.

3. Post-closure maintenance shall be conducted to ensure the integrity of the final cover and environmental control systems. The landfill shall be maintained and monitored for a period of no less than 30 years after the completion of closure of the entire unit and for as long as wastes pose a threat to water quality.

4. All changes to post-closure land uses at the Facility, other than non-irrigated open space, shall be submitted to the Regional Water Board for review and approval.

5. The Discharger shall ensure the integrity of final slopes under both static and dynamic conditions to protect public health and safety and prevent damage to post-closure land uses, roads, structures, utilities, gas monitoring and control systems, and leachate collection and control systems to prevent public contact with leachate, and prevent exposure of waste. Slope stability analyses shall be conducted and reported pursuant to the requirements of California Code of Regulations, title 27, section 21750(f)(5).

6. Closed waste management units shall be provided with at least two permanent monuments installed by a licensed land surveyor or a registered civil engineer, from which the location and elevation of wastes, containment structures, and monitoring facilities can be determined throughout the post-closure maintenance period.

7. Upon completion of all closure activities for the landfill, the Discharger shall conduct an aerial photographic survey (or alternative survey under California Code of Regulations, title 27, section 21090(e)(3)) of the closed portions of the waste management unit and of its immediate surrounding area, including at least the surveying monuments.

8. In spite of differential settlement, the final cover of the closed landfill shall be designed, graded, and maintained to prevent ponding and to prevent soil erosion due to high run-off velocities.

9. Prior to conducting periodic grading operations on the closed landfill, the Discharger shall note on a map of the landfill the approximate location and outline of any areas where differential settlement is visually obvious. Each five-yearly iteration of the settlement map shall show all areas where differential settlement has been noted since the previous map submittal and shall highlight areas of repeated or severe differential settlement. Map notations and delineations need

not be surveyed, so long as all areas where differential settlement was visually identifiable prior to regrading can be relocated. Such notation and delineation shall be made by, or under the supervision of, a registered civil engineer or registered geologist.

10. Construction on the site shall maintain the integrity of the final cover, drainage and erosion control systems, and gas monitoring and control systems. Any proposed modification or replacement of the low permeability layer of the final cover requires approval by the Regional Water Board.

11. The Discharger shall moderate the application rate of liquids discharged to the cover for dust control, irrigation of any vegetative layer, or other non-disposal purpose in a manner that minimizes the potential for throughflow to the underlying waste.

12. The Discharger shall promptly notify the Regional Water Board of any slope failure occurring at a waste management unit. The Discharger shall promptly correct any failure which threatens the integrity of containment features or the unit in accordance with the method approved by the Regional Water Board's Executive Officer.

13. The Discharger shall maintain visible monuments identifying the boundary limits of the entire Facility. Public contact with material in the waste management units shall be precluded through fences, signs, or other appropriate alternatives.

14. Objectionable odors originating at this Facility shall not be perceivable beyond the boundaries of the Facility.

C. Stormwater Specifications

1. Surface and subsurface drainage from outside of a waste management unit shall be diverted around or away from the unit.

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

3. Diversion and drainage facilities shall be designed, constructed, and maintained to:

   a. Accommodate the anticipated volume of precipitation and peak flows from surface runoff;

   b. Effectively divert sheet flow runoff laterally, via the shortest distance, into the drainage and collection facilities;

c. Prevent surface erosion through the use of energy dissipators and other erosion control measures as needed to decrease the velocity of runoff and protect the slope from erosion;

d. Control and intercept run-on in order to isolate uncontaminated surface waters from water that might have come into contact with waste;

e. Take into account:

i. For closed waste management units and for closed portions of units, the expected final contours of the closed unit, including its planned drainage pattern;

ii. For operating portions of waste management units other than surface impoundments, the unit's drainage pattern at any given time;

iii. The possible effects of the waste management unit's drainage pattern on and by the regional watershed; and

iv. The design capacity of drainage systems of downstream and adjacent properties by providing for the gradual release of retained water downstream in a manner which does not exceed the expected peak flow rate at the point of discharge if there were no waste management facility.

f. Preserve the system's function. The Discharger shall periodically remove accumulated sediment from sedimentation or detention basins, as needed, to preserve the design capacity of the system.

4. Collection and holding facilities associated with precipitation and drainage control systems shall be emptied following each storm, as needed, to maintain the design capacity of the system.

D. Construction Specifications

1. Closure construction, including construction of the final cover system, shall be performed in accordance with a Construction Quality Assurance Plan that complies with California Code of Regulations, title 27, section 20324 and is prepared by a registered civil engineer or certified engineering geologist.

2. The Construction Quality Assurance (CQA) program, including all relevant aspects of construction quality control, shall provide evidence that materials and procedures utilized in the placement of any containment feature at any waste management unit will be tested and monitored to assure the structure is constructed in accordance with the design specifications approved by the Regional Water Board.

3. **Preconstruction Notice.** At least **60 days** prior to the commencement of construction, the Discharger shall submit a technical report to the Regional Water Board that includes any changes to the design or process for approval by the Executive Officer, which shall include a plan showing in detail the proposed construction. Any portion of the 60-day requirement may be waived in writing by the Executive Officer at the request of the Discharger.

4. **CQA Final Report.** Within **90 days** of the completion of construction, the Discharger shall submit a final Construction Quality Assurance (CQA) report documenting the construction process and containing the quality assurance documentation described in the ROWD and required by section 20324(d) of title 27 of the California Code of Regulations.

E. Monitoring Specifications

1. The Discharger shall implement MRP R7-2021-0026 and any revisions thereto to detect at the earliest opportunity unauthorized discharges of waste constituents from the Facility, or any impairment of beneficial uses that result from discharges of waste to the Facility. The Discharger shall report the results of all onsite monitoring in accordance with MRP R7-2021-0026 and revisions thereto.

2. The Discharger shall implement a water quality monitoring and response program in accordance with MRP R7-2021-0026 and any future amendments thereto, including:

    a. Detection Monitoring. The Discharger shall institute a detection monitoring program pursuant to California Code of Regulations, title 27, section 20420.

    b. Evaluation Monitoring. The Discharger shall institute an evaluation monitoring program under California Code of Regulations, title 27, section 20425:

        i. Whenever there is “measurably significant” (as defined in section 20164) evidence of a release from the waste management unit under the detection monitoring program; or

        ii. Whenever there is significant physical evidence of a release from the waste management unit. Significant physical evidence of a release includes unexplained volumetric changes in surface impoundments, unexplained stress in biological communities, unexplained changes in soil characteristics, visible signs of leachate migration, and unexplained water table mounding beneath or adjacent to the unit and any other change to the environment that could reasonably be expected to be the result of a release from the unit.

    c. Corrective Action Monitoring. The Discharger shall institute a corrective action program under California Code of Regulations, title 27, 20430 when the Regional Water Board determines that the assessment of the nature and extent

of the release and the design of a corrective action program have been satisfactorily completed.

3. **Sample Collection and Analysis Plan.** Within **90 days** of the adoption of these WDRs, the Discharger shall submit, for review and approval by the Regional Water Board's Executive Officer, a comprehensive Sample Collection and Analysis Plan (SCAP) that shall describe in detail the methods used to perform all monitoring activities for all onsite features, including:

   a. Sample collection procedures describing purging techniques, sampling equipment, and decontamination of sampling equipment;

   b. Sample preservation information and shipment procedures;

   c. Sample analytical methods and procedures;

   d. Sample quality assurance/quality control (QA/QC) procedures;

   e. Chain of custody control; and

   f. Sample analysis information including sample preparation techniques to avoid matrix interferences, method detection limits (MDLs), practical quantitation limits (PQLs) and reporting limits (RLs), and procedures for reporting trace results between the MDL and PQL.

   Once the SCAP is approved, the Discharger may request changes to the approved SCAP, as needed, but shall use the procedures described in the approved SCAP until such changes are authorized by the Regional Water Board's Executive Officer.

F. Corrective Action Specifications

1. The Discharger shall implement all corrective measures necessary to remediate the release and to ensure that the Discharger achieves compliance with the WQPS (as defined in the MRP) adopted for that unit for all waste management units in a corrective action program. The Discharger shall complete the demonstration required under California Code of Regulations, title 27, section 20430(g) to show cleanup of all water bearing media affected by the release.

2. The cessation of any corrective action measure (e.g. landfill gas, leachate, and groundwater extraction) is prohibited without written approval from the Regional Water Board's Executive Officer. If routine maintenance or a breakdown results in cessation of the corrective action for greater than **24 hours**, the Discharger shall notify Regional Water Board staff.

3. Following an earthquake that generates significant ground shaking (Modified Mercalli Intensity Scale V or greater) at or near the Facility, the Discharger shall

submit a detailed post-earthquake inspection and corrective action plan. The plan shall address damage to and corrective measures for: containment structures; leachate control and stormwater management systems; wells and equipment to monitor groundwater and landfill gas; and any other system/structure potentially impacted by static and seismic deformations of the waste management unit. The Discharger shall notify the Regional Water Board Executive Officer immediately, but no later than **24 hours**, of damage to the Facility due to an earthquake, and provide a post-earthquake inspection report within **15 business days**.

G. Financial Assurances Specifications

1. The Discharger shall obtain and maintain adequate assurances of financial responsibility for closure, post-closure maintenance, and corrective action for all known and reasonably foreseeable releases from a waste management unit at the Facility in accordance with California Code of Regulations, title 27, sections 20380(b) and 20950 and subchapter 2 ("Financial Assurance Requirements") of division 2, subdivision 1, chapter 6 of title 27.

2. The Discharger shall demonstrate to the Regional Water Board that it has established acceptable financial assurance mechanisms described in subchapter 3 ("Allowable Mechanisms") of California Code of Regulations, title 27, division 2, subdivision 1, chapter 6 in at least the amount of the cost estimates for closure, post-closure maintenance, and corrective action approved by the Regional Water Board's Executive Officer.

3. **Yearly Financial Assurances Report**. The Discharger shall submit, by June 1 of each year, a report calculating the increase in the cost estimates for closure, post-closure maintenance, and corrective action due to the inflation factor (specified in Cal. Code Regs., tit. 27, § 22236) for the previous calendar year.

4. Documents supporting the amount and active status of the required financial assurance mechanisms shall be included in the Facility's Joint Technical Document (JTD) and revisions. Annual cost estimates and inflation factors shall be submitted to the Regional Water Board as update to the JTD.

H. Standard Provisions

1. **Noncompliance.** The Discharger shall comply with all of the terms, requirements, and conditions of this Order and MRP R7-2021-0026. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.) and grounds for: (1) an enforcement action; (2) termination, revocation and reissuance, or modification of these WDRs; or (3) denial of an Order renewal application.

2. **Enforcement.** The Regional Water Board reserves the right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action.

Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to Water Code sections 13323, 13268, and 13350, a Time Schedule Order (TSO) issued pursuant to Water Code section 13308, or referral to the California Attorney General for recovery of judicial civil liability.

3. **Proper Operation and Maintenance.** The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment, and control installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes, but is not limited to, effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained and made available to the Regional Water Board on request.

4. **Reporting of Noncompliance.** The Discharger shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally to the Regional Water Board office and the Office of Emergency Services within 24 hours of when the Discharger becomes aware of the incident. If noncompliance occurs outside of business hours, the Discharger shall leave a message on the Regional Water Board's office voicemail. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. All other forms of noncompliance shall be reported with the Discharger's next scheduled Self-Monitoring Reports (SMRs), or earlier if requested by the Regional Water Board's Executive Officer.

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

6. **Material Changes.** Before initiating a new discharge or making a material change in the character, location, or volume of an existing discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board, and if required by the Regional Water Board, obtain revised requirements before any modifications are implemented. A material change includes, but is not limited to, the following:

    a. An increase in area or depth to be used for solid waste disposal beyond that specified in waste discharge requirements;

    b. A significant change in disposal method, location, or volume (e.g., change from land disposal to land treatment);

c. A change in the type of waste being accepted for disposal; or

d. A change to previously approved liner systems or final cover systems that would eliminate components or reduce the engineering properties of components.

7. **Familiarity with Order.** The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order and maintain a copy of this Order at the site.

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

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

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

   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

   d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at this location.

9. **Change in Ownership.** This Order is not transferable to any person without written approval by the Regional Water Board's Executive Officer. Prior to any change in ownership of this operation, the Discharger shall notify the Regional Water Board's Executive Officer in writing at least 45 days in advance. The notice must include a written transfer agreement between the existing owner and the new owner, as well as documentation of the financial assurance demonstrations of the new owner or operator. The transfer agreement must contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment that the new owner or operator is liable for compliance with this Order from the date of transfer. An affidavit must be provided from the new owner or operator stating that the new owner or operator has read and will comply with the governing closure and post-closure maintenance plan and that all new information submitted is correct. The Regional Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary under the Water Code.

10. **Monitoring Wells.** The Discharger shall comply with all notice and reporting requirements of the California Department of Water Resources and with any 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 accompanying MRP, as required under Water Code sections 13750 and 13755 and local agency requirements.

11. **Format of Technical Reports.** The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with California Code of Regulations, title 23, division 3, chapter 30, as groundwater raw data uploads electronically over the Internet into the State Water Board's GeoTracker database. Documents that were formerly mailed by the Discharger to the Regional Water Board, such as regulatory documents, narrative monitoring reports or materials, and correspondence, shall be uploaded into GeoTracker in the appropriate Microsoft Office software application format, such as Word or Excel files, or as a Portable Document Format (PDF) file. Large documents must be split into appropriately labelled, manageable file sizes and uploaded into GeoTracker.

12. **Qualified Professionals.** In accordance with Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports required under this Order that contain work plans, describe the conduct of investigations and studies, or contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal. Additionally, all field activities are to be conducted under the direct supervision of one or more of these professionals.

13. **Certification Under Penalty of Perjury.** All technical reports required in conjunction with this Order shall include a statement by the Discharger, or an authorized representative of the Discharger, certifying under penalty of perjury under the laws of the State of California, that the reports were prepared under his or her supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted, and that based on his or her inquiry of the person or persons who manage the system, the information submitted is, to the best of his or her knowledge and belief, true, complete, and accurate.

14. **Violation of Law.** This Order does not authorize violation of any federal, state, or local laws or regulations.

15. **Property Rights.** This Order does not convey property rights of any sort, or exclusive privileges, nor does it authorize injury to private property or invasion of personal rights.

16. **Modification, Revocation, Termination.** This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for an Order modification, rescission, or reissuance, or the Discharger's notification of planned changes or anticipated noncompliance, does not stay any Order condition. Causes for modification include, but are not limited to, the violation of any term or condition contained in this Order, a material change in the character, location, or volume of discharge, a change in land application plans or sludge use/disposal practices, or the adoption of new regulations by the State Water Board, Regional Water Board (including revisions to the Basin Plan), or federal government.

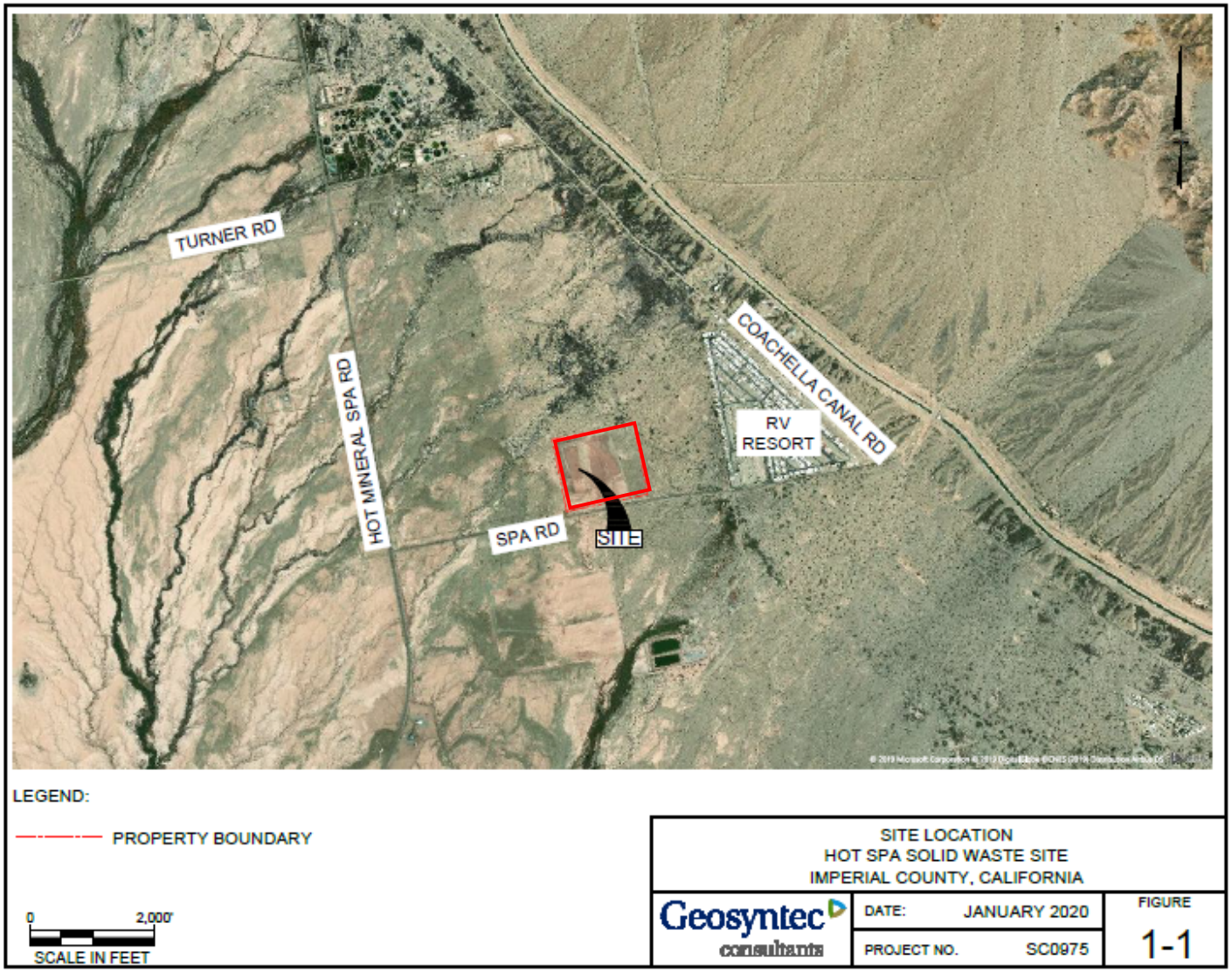
17. **Severability.** The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of these requirements shall not be affected.

Any person aggrieved by this Regional Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5:00 p.m. on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the statutes and regulations applicable to filing petitions are available on the State Water Board's website and can be provided upon request.

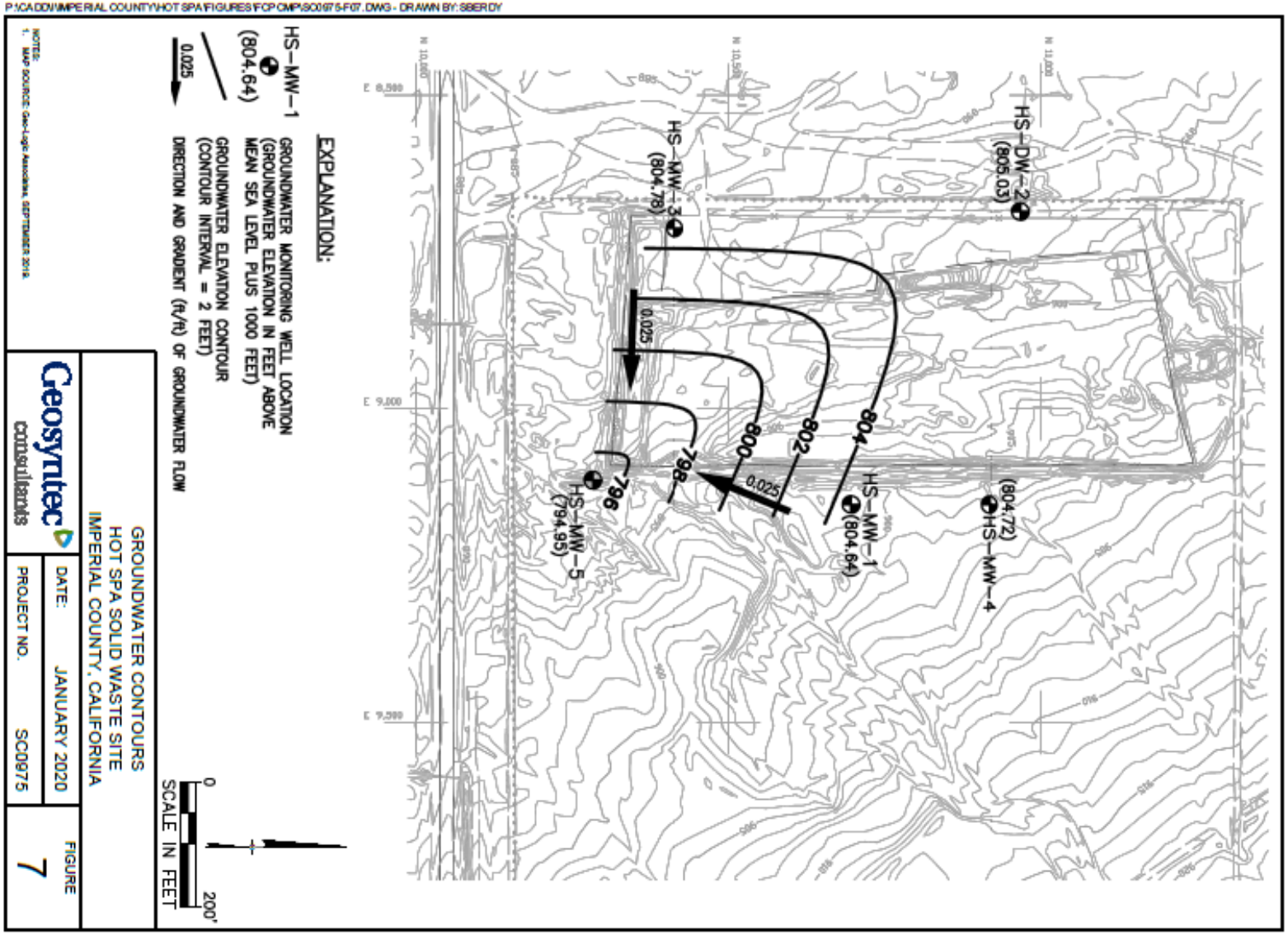
Order Attachments
Attachment A—Site Location Map
Attachment B—Site Layout Map

Monitoring and Reporting Program R7-2021-0026

Attachment A—Site Location Map



ATTACHMENT B—SITE LAYOUT MAP



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM R7-2021-0026
FOR
IMPERIAL COUNTY DEPARTMENT OF PUBLIC WORKS
OWNER/OPERATOR
HOT SPA WASTE MANAGEMENT FACILITY
NILAND, IMPERIAL COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267. Monitoring requirements in this MRP are necessary to determine if the Hot Spa Waste Management Facility (Facility) is in compliance with Waste Discharge Requirements (WDRs) Order R7-2021-0026 (Order) and to ensure early detection of any releases of waste constituents from the Facility. The Discharger shall not implement any changes to this MRP unless a revised MRP is issued by the California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) or its Executive Officer.

PART I: SAMPLING AND ANALYSIS GENERAL REQUIREMENTS

A. Sampling and Analysis General Requirements

1. As provided in Monitoring Specification E.3 of the Order, the Discharger shall submit a Sample Collection and Analysis Plan (SCAP) that incorporates the standard monitoring provisions below and describes the sampling and analysis protocols to be used for all monitoring activities. The SCAP must be received by the Regional Water Board within 90 days of adoption of the Order and this MRP.

2. Once the SCAP is approved, the Discharger may request changes to the approved SCAP, as needed, but shall use the procedures described in the approved SCAP until such changes are authorized by the Regional Water Board's Executive Officer.

B. Standard Monitoring Provisions

1. **Analytical Methods.** Specific methods of analysis for monitored waste constituents shall be identified in the SCAP. If the Discharger proposes to use methods other than those in the latest edition of the U.S. Environmental Protection Agency's (USEPA) *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods Compendium* (SW-846) or *Guidelines Establishing Test Procedures for Analysis of Pollutants*, 40 Code of Federal Regulations part 136, the SCAP must

explain the rationale for the change. The change must be approved by the Regional Water Board's Executive Officer prior to use.

2. **Monitoring Test Procedures.** The collection, preservation, and holding times of all samples shall be in accordance with protocols included in USEPA's SW-846 or 40 Code of Federal Regulations part 136, or as otherwise approved by the Regional Water Board. The Regional Water Board may, in its discretion, require methods more sensitive than those specified by USEPA.

3. **30-Day Sample Procurement Limitation.** For any given monitored medium, the samples collected from all monitoring points and background monitoring points to satisfy the data analysis requirements for a given reporting period shall all be collected within a span not to exceed 30 days, unless a longer time period is approved by the Regional Water Board's Executive Officer, and shall be collected in a manner that ensures sample independence to the greatest extent feasible. The 30-day limit does not apply to media that (1) are resampled to confirm the results of the initial round of samples, or (2) are resampled due to errors in the original sampling and analysis, but the Discharger shall conduct the resampling as expeditiously as practical.

4. **Laboratory Accreditation.** Unless otherwise approved by the Regional Water Board's Executive Officer, all analyses shall be conducted by a laboratory accredited by the State Water Resources Control Board (State Water Board), Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP).

5. **Reporting Levels.** All analytical data shall be reported with method detection limits (MDLs) and with either the reporting level or limits of quantitation (LOQs) according to 40 Code of Federal Regulations part 136, Appendix B. The laboratory reporting limit for all reported monitoring data shall be no greater than the practical quantitation limit (PQL).

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

7. **Instrumentation and Calibration**. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated, as necessary, to ensure their continued accuracy. If continuous monitoring equipment is out of service for a period greater than 24

hours, the Discharger shall obtain representative grab samples each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. The Discharger shall report the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

8. **Field Test Instruments.** Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that:

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

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

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

    d. Field calibration reports are submitted.

9. **Records Retention.** The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, for a minimum of five years from the date of the sampling or measurement. This period may be extended by request of the Regional Water Board's Executive Officer at any time. Records of monitoring information shall include:

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

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

    c. The methods used for groundwater purging/sampling;

    d. The date(s) analyses were performed;

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

    f. The analytical techniques or method used; and

    g. All sampling and analytical results, including:

        i. units of measurement used,

        ii. minimum reporting limit for the analyses,

        iii. results less than the reporting limit but above the method detection limit (MDL),

iv. data qualifiers and a description of the qualifiers,

v. quality control test results (and a written copy of the laboratory quality assurance plan),

vi. dilution factors, if used, and

vii. sample matrix type.

PART II: SITE-SPECIFIC MONITORING REQUIREMENTS

This part describes the site-specific monitoring program requirements to be implemented for the Facility and is organized by the type of monitoring to be performed. The methods used shall be as described in the approved SCAP.

The site-specific monitoring program of this MRP includes:

Table 2. Summary of Site-Specific Monitoring

Section	Monitoring Program
A	Groundwater Monitoring
B	Unsaturated Zone Monitoring
C	Surface Water Monitoring
D	Evaluation Monitoring

A. Groundwater Monitoring

The Discharger shall operate and maintain a groundwater monitoring system that complies with the applicable provisions of California Code of Regulations, title 27, sections 20415 and 20420. Monitoring shall be performed in accordance with the locations, frequencies, and parameters described below:

1. Monitoring Well Locations

Upgradient wells are considered background monitoring points. Downgradient wells where no releases have been detected are used for detection monitoring. The groundwater monitoring network shall consist of the following monitoring wells and any new monitoring wells added at the Facility (as approved by the Regional Water Board's Executive Officer):

Table 3. Monitoring Wells Summary

Wells	Gradient Direction	Monitoring Status	Sampling Frequency
HS-DW-3 HS-MW-2	Up	Detection	Annually

Wells	Gradient Direction	Monitoring Status	Sampling Frequency
HS-MW-1 HS-MW-4 HS-MW-5	Down	Detection	Annually

2. Parameters/Constituents Monitored

Groundwater samples shall be collected from the detection monitoring wells and any additional wells added as part of the approved groundwater monitoring system. The collected samples shall be analyzed for the Monitoring Parameters and Constituents of Concern specified below in accordance with the specified methods and frequencies.

"Monitoring Parameters" and "Constituents of Concern" shall have the meaning specified in California Code of Regulations, title 27, section 20164. "Monitoring Parameters" means the group of constituents specified below and includes physical parameters, waste constituents, reaction products, and hazardous constituents that provide a reliable indication of a release from a waste management unit. "Constituents of Concern" (COCs) include a larger group of waste constituents and mean any waste constituents, reaction products, and hazardous constituents reasonably expected to be in or derived from waste contained in a waste management unit.

Various Constituents of Concern are included as Monitoring Parameters, although the full list of Constituents of Concern are not included as Monitoring Parameters and need only be sampled for once every 5 years, as specified below.

a. Monitoring Parameters

"Monitoring Parameters" shall consist of the (1) Field Monitoring Parameters and (2) Laboratory Monitoring Parameters specified below:

i. Field Monitoring Parameters – During each groundwater monitoring event, [1] the following field parameters shall be measured at the wells are sampled during that monitoring event:

Table 4. Field Parameters Monitoring

Parameter	Unit
pH	pH units

[1] Pursuant to Cal. Code Regs., tit. 27, § 20415(e)(13).

Parameter	Unit
Groundwater elevation[2] (all four wells, even if not sampled)	Feet relative to sea level, plus 1000 feet (USGS Datum)
Specific conductance	Micromhos/cm
Temperature	Degrees F
Turbidity	Nephelometric Turbidity Units (NTU)
Dissolved oxygen	Milligrams per liter (mg/L) and percent saturation
Oxidation-Reduction Potential (ORP)	Millivolts (mV)

ii. Laboratory Monitoring Parameters – For annual monitoring events, groundwater samples shall be analyzed at a laboratory for the following constituents (at a minimum):

Table 5. Laboratory Monitoring Parameters Monitoring

Constituents	Units	Sample Type	Reporting Freq.
Major Cations (Calcium, Magnesium, Potassium and Sodium)	mg/L	Grab	Annually
Major Anions (Chloride, Sulfate, Bicarbonate and Carbonate)	mg/L	Grab	Annually
Total Dissolved Solids	mg/L	Grab	Annually
Nitrate and Nitrite	mg/L	Grab	Annually
Organic Nitrogen	mg/L	Grab	Annually
Volatile Organics (EPA method 8260C)	ug/L	Grab	Annually

[2] Annual measurement of groundwater elevations is approved pursuant to California Code of Regulations, title 27, section 20380(e), allowing engineered alternatives provided they achieve the goals of the monitoring program.

Constituents	Units	Sample Type	Reporting Freq.
Chloride	mg/L	Grab	Annually
Sulfate	mg/L	Grab	Annually

b. **Additional Constituents of Concern, Required Every Five Years (5-Year COCs)**

Every five years, groundwater samples from the compliance wells and the upgradient wells shall be analyzed for both the Monitoring Parameters listed above and the 5-Year COCs listed below. The next 5-year monitoring event shall be performed in 2025.

Table 6. List of 5-Year COCs

Constituents	Units	Sample Type	Reporting Freq.
Fluoride	mg/L	Grab	Five Years
Phosphate	mg/L	Grab	Five Years
Boron	mg/L	Grab	Five Years
Iron	mg/L	Grab	Five Years
Manganese	mg/L	Grab	Five Years
Antimony, total	mg/L	Grab	Five Years
Arsenic, total	mg/L	Grab	Five Years
Barium, total	mg/L	Grab	Five Years
Beryllium, total	mg/L	Grab	Five Years
Cadmium, total	mg/L	Grab	Five Years
Chromium	mg/L	Grab	Five Years
Cobalt, total	mg/L	Grab	Five Years
Lead, total	mg/L	Grab	Five Years
Mercury, total	mg/L	Grab	Five Years
Nickel, total	mg/L	Grab	Five Years
Selenium, total	mg/L	Grab	Five Years
Silver, total	mg/L	Grab	Five Years
Thallium, total	mg/L	Grab	Five Years
Tin, total	mg/L	Grab	Five Years
Vanadium, total	mg/L	Grab	Five Years

Constituents	Units	Sample Type	Reporting Freq.
Zinc, total	mg/L	Grab	Five Years
Chromium, hexavalent	mg/L	Grab	Five Years
40 CFR, Appendix II Pesticides	ug/L	Grab	Five Years
40 CFR, Appendix II Herbicides	ug/L	Grab	Five Years
40 CFR, Appendix II Semi-volatiles	ug/L	Grab	Five Years
Phenols (using EPA method 8270)	ug/L	Grab	Five Years
Cyanide	mg/L	Grab	Five Years

The results of the 5-Year COC sampling shall be reported in the Annual Monitoring Report for the year in which the samples were collected.

Note that the broader term “COCs” includes both the Monitoring Parameters and 5-Year COCs.

B. Unsaturated Zone Monitoring

The Discharger shall operate and maintain an unsaturated/vadose zone detection monitoring system that complies with the applicable provisions of California Code of Regulations, title 27, sections 20415 and 20420.

A Landfill Gas Monitoring (LGM) system was installed at the direction of CalRecycle in 2010. The system consists of three perimeter LFG migration monitoring probes (P1-P3) installed using a hollow stem auger to depths of 11 feet below grade surface (bgs), 23 feet bgs, and 21 feet bgs, respectively. The monitoring probes are spaced less than 1,000 feet around the perimeter of the landfill.

No soil pore liquid or soil moisture monitoring is required at this time.

1. Landfill Gas Monitoring

a. The Discharger shall monitor the vadose zone perimeter monitoring system annually in accordance with the most-recently approved version of the site-specific SCAP. The Discharger shall use a field screening protocol for soil-gas monitoring. A calibrated field instrument, such as a Landtec GEM 500 or equivalent, shall be used to measure total organic compounds as methane at each of the monitoring probes.

b. If a field measurement of 5% by volume or greater methane is detected, a soil-gas sample shall be collected in accordance with procedures described in the SCAP and submitted for laboratory analysis of VOCs using EPA Method TO-15, and methane, oxygen, and carbon dioxide using ASTM D1946. Nitrogen shall be calculated and reported as the balance of the gases.

Table 7. Soil Gas-Monitoring

Parameter	Reporting Freq.
CH_4	Annually
CO_2	Annually
O_2	Annually
Balance Gases	Annually
Static Pressure	Annually

C. Surface Water Monitoring

Perennial streams are not located at the Facility. The occurrence of surface water should be limited to (1) immediately after significant storm events, and (2) if seeps develop along the perimeter of a waste management unit.

1. **Observed Surface Water Monitoring.** If surface water is observed at the Facility, the source of the surface water shall be identified. If the surface water is obviously due to a storm event, no further action is needed. If the surface water may not be associated with something other than a storm event, observations of the following shall be included in the next Annual Monitoring Report:

   a. Flow rate and source of water;

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

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

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

   e. Weather conditions: Wind direction and estimated velocity, total precipitation during the previous five (5) days and on the day of observation.

2. **Seep Monitoring.** If a seep is identified in proximity to a waste management unit:

a. The location, flow rate, and other characteristics (such as color and odor) shall be orally reported to the Regional Water Board within **48 hours**, and a written report concerning the seep shall be submitted to the Regional Water Board **within seven (7) days**.

b. Flow from the seep shall be contained to preclude the seep from adversely affecting surface waters.

c. A sample of the seepage shall be collected and tested for the Field Monitoring Parameters described in Part II.A.2.a.I.

d. If the Field Monitoring Parameters indicate the seepage is not groundwater, or if it is unlikely the source of the seep is groundwater, the sample shall be analyzed for the Monitoring Parameters and 5-Year COCs described in Part II.A.2.a and b.

e. The results of all testing shall be reported to the Regional Water Board **within seven (7) days** of receipt of the written laboratory report.

f. Seeps that continue to exist for more than one reporting period shall be sampled during each reporting period and the results shall be included in the Annual Monitoring Report.

D. Evaluation Monitoring

1. Notification of a Release

Should the Discharger discover a release from the Facility, the Discharger shall:

a. Initial Notification. Notify the Regional Water Board by phone or e-mail within 24 hours, and by mail within seven days, when the Discharger determines from monitoring results that there is measurably significant evidence of a release. (Cal. Code Regs., tit. 27, § 20420(j)(1).)

b. Retest. The Discharger shall immediately initiate the verification procedure specified in Part III.B.3 to verify that there is a "measurably significant" evidence of a release of particular constituent.[3] (Cal. Code Regs., tit. 27, § 20420(j)(2).)

c. Notice to Nearby Landowners. The Discharger shall, within 14 days of confirming measurably significant evidence of a release, notify all persons who own the land or reside on the land that directly overlies any portion of the plume

[3] Under California Code of Regulations, title 27, section 20420(k)(7), the Discharger may also demonstrate that a source other than the waste management unit caused the release.

of contamination, if sampling of detection monitoring wells indicates contaminants have migrated off-site. (40 C.F.R. § 258.55(g)(1)(iii).)

2. Evaluation of a Release

If the Discharger determines that a previously unknown release from the Facility has occurred, the following actions shall be taken:

a. Non-Statistical COC Scan. If the detection was made based upon sampling and analysis for Monitoring Parameters, the Discharger shall immediately sample all monitoring points in the affected medium at that waste management unit and determine the concentration of all Monitoring Parameters and Constituents of Concern for comparison with established concentration limits. Because this scan does not involve statistical testing, the Discharger will only need to collect and analyze a single water sample from each monitoring point in the affected medium. (Cal. Code Regs., tit. 27, § 20420(k)(1).)

b. Amended ROWD for Evaluation Monitoring Program (EMP). The Discharger shall, within 90 days of confirming a measurably significant evidence of a release, submit an amended Report of Waste Discharge (ROWD) proposing an evaluation monitoring program that meets the requirements of California Code of Regulations, title 27, sections 20420(k)(5) and 20425. The evaluation monitoring program shall be designed for the collection and analysis of all data necessary to assess the nature and extent of the release and to determine the spatial distribution and concentration of each constituent throughout the zone affected by the release. (Cal. Code Regs., tit. 27, §§ 20420(k)(5) and 20425(b).) For releases from MSW landfill units, the evaluation monitoring program shall also include any additional proposals necessary to comply with 40 C.F.R. § 258.55, particularly the additional monitoring wells required by 40 C.F.R. § 258.55(g)(1)(ii). Additionally, the Discharger shall add any 5-Year COC for which there is a confirmed measurably significant release to the list of Monitoring Parameters.

c. Preliminary Engineering Feasibility Study (EFS). The Discharger shall, within 180 days of confirming a measurably significant evidence of a release, submit to the Regional Water Board a preliminary EFS report for a corrective action program that meets the requirements of California Code of Regulations, title 27, sections 20420(k)(6) and 20430. At a minimum, the feasibility study shall contain a detailed description of the corrective action measures that could be taken to achieve background concentrations for all COCs.

d. Additional Evaluation Monitoring Program (EMP) Required Actions. The Discharger shall, within 90 days of establishing an evaluation monitoring program (i.e., from the date of Regional Water Board approval of the program), complete and submit the following:

i. A report with the results and assessment/delineation of the release based on the approved evaluation monitoring program. (Cal. Code Regs, tit. 27 § 20425(b).)

ii. An updated engineering feasibility study for corrective action based on the data collected to delineate the release and data from the ongoing monitoring program required under title 27, section 20425(e). (Cal. Code Regs., tit. 27, § 20425(c).)

iii. An amended ROWD to establish a corrective action program meeting the requirements of title 27, section 20430 based on the data collected to delineate the release and based on the updated engineering feasibility study. (Cal. Code Regs., tit. 27, § 20425(d).)[4]

PART III: EVALUATION OF MONITORING DATA

Part III of this MRP provides the requirements for the analysis of detection, evaluation, and corrective action monitoring data collected from monitoring wells associated with the Facility.

A. Water Quality Protection Standard

For each waste management unit, the Water Quality Protection Standard (WQPS) consists of all COCs (under title 27, section 20395), the concentration limit for each COC (under title 27, section 20400), and the points of compliance for each monitored medium (under title 27, section 20405) for the duration of the compliance period (under title 27, section 20410).

1. Constituents of Concern (COCs)

a. The COCs are as defined above in Part II.A.2 and include both Monitoring Parameters and 5-Year COCs.

2. Concentration Limits

a. **Default Limits.** The following concentration limits shall apply, unless the Regional Water Board approves a Concentration Limit Greater than Background (CLGB), as provided in Part III.A.2.b below:

[4] The Discharger shall (for releases from MSW landfill units) discuss the results of the updated engineering feasibility study, prior to the final selection of a remedy, in a public meeting with interested and affected parties. (40 C.F.R. § 258.56(d).)

i. **Non-natural Constituents.** For COCs that are not naturally occurring, the concentration limit shall be the detection limit of the laboratory testing procedure.

ii. **Naturally Occurring Constituents**. For naturally occurring COCs, the concentration limit shall be the background concentration determined through either inter-well or intra-well comparisons.

b. **CLGB.** Use of a CLGB may be proposed by the Discharger provided it is justified through a statistical analysis of relevant data (including the background dataset) and a demonstration that background concentrations would not be technologically or economically feasible for the COCs for a given monitoring well. (Cal. Code Regs., tit. 27, § 20400, subd. (c).) A concentration limit greater than background will only be considered for COCs present in monitoring wells associated with corrective action monitoring. (Cal. Code Regs., tit. 27, § 20400, subd. (h).)

c. **Procedure for Approval of Concentration Limits.** The Discharger shall submit a report proposing applicable background concentrations for each COC under Part III.A.2.a in the next Annual Monitoring Report. The Regional Water Board will review proposed concentration limits from the Discharger and approve, modify, or disapprove each proposed limit. (Cal. Code Regs., title 27, § 20400.) Following initial approval of the concentration limits, the Discharger shall reevaluate and propose any updates to the concentration limits every five years thereafter.

3. Compliance Period

a. The compliance period for each waste management unit includes the active life of each waste management unit, the closure period, the post-closure maintenance period, and any compliance period under California Code of Regulations, title 27, section 20410.

4. Points of Compliance

a. All monitoring wells established for the detection monitoring program shall constitute the points of compliance for the WQPS.

B. Statistical and Non-Statistical Analysis of Data

1. General Requirements

a. California Code of Regulations, title 27, section 20415(e) describes a range of statistical and non-statistical data analysis methods that can be used to evaluate data collected during monitoring. In addition, USEPA published *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (EPA 530/R-09-007) in 2009.

b. The Discharger shall evaluate the data obtained during a monitoring period using either a statistical or non-statistical method described in title 27 or may propose another method for approval by the Regional Water Board's Executive Officer, as long as it achieves the goal of the monitoring program at least as well as the most appropriate method described in title 27, section 20415.

c. The Discharger shall propose data analysis methods to be used in evaluating water quality monitoring data for each COC. (Cal. Code Regs., tit. 27, § 20415(e)(7).) The specifications for each data analysis method shall include a detailed description of the criteria to be used for determining "measurably significant" (as that term is defined in title 27, 20164) evidence of any release from the waste management unit and for determining compliance with the WQPS.

d. Monitoring reports shall describe the statistical or non-statistical method used for each COC at each monitoring point.

2. Background Values

a. Pursuant to California Code of Regulations, title 27, section 20415(e)(10), the Discharger shall in a technical report justify the use of a procedure for determining the background value for each COC.

b. Inter-well comparisons may be used where upgradient and downgradient wells intercept the same aquifer and are expected to have similar concentrations of naturally occurring constituents. Intra-well comparisons shall be used where uncontaminated background wells are not present, or the chemical composition of upgradient and downgradient wells are significantly different.

c. In establishing background values for COCs, the Discharger shall ensure that sampling methods used comply with California Code of Regulations, title 27, section 20415(e)(12), including that the number and kinds of samples collected must be appropriate for the form of data analysis employed and, in the case of statistical data analysis, follow generally accepted statistical principles. The sampling method (including the sampling frequency and the interval of time between successive samples) shall be appropriate for the medium from which samples are taken (e.g., groundwater, surface water, and soil-pore liquid). (See also Cal. Code Regs., tit. 27, § 20415(e)(6).) For groundwater, sampling shall be scheduled to include the times of expected highest and lowest elevations of the potentiometric surface.

3. Determination of Measurably Significant Evidence of a Release

a. <u>Initial Determination of Measurably Significant Evidence of a Release</u>. The Discharger shall use a statistical or nonstatistical data analysis method that complies with California Code of Regulations, title 27, section 20415(e)(7)-(10) to compare the concentration of each COC with its respective background

concentration to determine whether there has been measurably significant evidence of a release from the waste management unit. Whenever a COC is detected at a detection monitoring point at a concentration that exceeds the concentration limit from the WQPS, the Discharger shall preliminarily conclude that there is measurably significant evidence of a release and follow the notification procedures in Part II.D.1. (Cal. Code Regs., tit. 27, § 20420(i)).

b. Confirmation of a Measurably Significant Evidence of a Release. If there is a preliminary indication of a release, within 30 days of such indication (Cal. Code Regs., tit. 27, § 20415(e)(8)(E)(3)), the Discharger may implement a verification procedure/retest option in accordance with California Code of Regulations, title 27, section 20415(e)(8)(E).[5]

   i. Retest Method. The verification procedure shall include either: (1) a single "composite" retest (i.e., a statistical analysis that augments and reanalyzes the data from the monitoring point that indicated a release), or (2) at least two "discrete" retests (i.e., statistical analyses, each of which analyzes only newly-acquired data from the monitoring point that indicated a release). (Cal. Code Regs., tit. 27, § 20415(e)(8)(E).) The Discharger may use an alternate method with prior approval by the Regional Water Board that complies with the requirements of title 27, section 20415(e)(8)(E) in addition to the performance standards of title 27, section 20415(e)(9).

   ii. Retest Samples. The retest samples shall be collected from the monitoring point where the release is preliminarily indicated and shall be analyzed for the constituents that caused the need for the retest. (Cal. Code Regs., tit. 27, § 20415(e)(8)(E)(7).)

   iii. Retest Reporting. The Discharger shall report to the Regional Water Board the results of both the initial statistical test and the results of the verification procedure, as well as all concentration data collected for use in these tests, within seven days of the last laboratory analysis of the samples collected for the verification procedure. (Cal. Code Regs., tit. 27, § 20415(e)(8)(E)(6).)

If the retest results of one or more of the retest data suites confirm the original indication, the Discharger shall conclude that measurably significant evidence of a release has been confirmed. The Discharger shall then follow the procedures identified in Part II.D.2.

[5] Under California Code of Regulations, title 27, section 20420(k)(7), the Discharger may also demonstrate that a source other than the waste management unit caused the release.

PART IV: REPORTS TO BE FILED WITH THE REGIONAL WATER BOARD

Part IV provides a description of the reports required to be submitted to the Regional Water Board for the Facility.

A. Required Reports

1. **Annual Monitoring Reports** – For each monitored medium, all monitoring results shall be reported annually. Annual Monitoring Reports shall include, at a minimum, the following:

    a. **Topographic Map.** A topographic map (or copy of an aerial photograph), at an appropriate scale, identifying the maximum lateral extent of wastes in the Facility, the locations of observation stations, monitoring points, background monitoring points, the groundwater elevation contours with interpreted groundwater flow direction and gradient. As part of each 5-year COC report, areas of visual settlement shall be indicated on the topographic map.

    b. **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 quality assurance/quality control (QA/QC) procedures used.

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

        i. The well number,

        ii. The sampling date and time,

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

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

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

    d. **Data Tables.** Cumulative tabulated monitoring data for all monitoring points and constituents (including the Monitoring Parameters and 5-Year COCs). Concentrations below the laboratory reporting limit shall not be reported as “ND,” unless the reporting limit is also given in the table. Otherwise, they shall

be reported "<" next to the reporting limit (e.g., <0.10). Upon request of Regional Water Board staff, data files shall be provided electronically in a file format approved by the Regional Water Board. Any electronic files submitted to the Regional Water Board in accordance with Order R7-2021-0026 and this MRP, shall not be password protected. If a 5-year COC event was performed, then these parameters shall be presented in tabular format. All analytical data obtained during the previous year shall be presented in tabular form. Upon request of the Regional Water Board, the data shall be provided electronically in a file format and media acceptable to the Regional Water Board.

e. **Graphical Display.** A graphical display for all data collected for each monitoring point and background monitoring point. Each graph shall 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 to facilitate comparison and identification of trends. On the basis of any outliers noted in the plotted data, the Regional Water Board may direct the Discharger to carry out a preliminary investigation, in accordance with Part II.F of this MRP, to determine whether a release is indicated. Trend analyses shall include identification of current trends, a comparison to previously identified trends, and a discussion of any significant changes in the trends. This shall be prepared for groundwater and any unsaturated/vadose zone monitoring points (including subdrains, lysimeters, or landfill gas).

   Each graph shall plot the concentration of one or more constituents at an appropriate scale that allows changes in concentrations to be discerned, including the use of a semi-log scale for concentrations that change by more than three orders of magnitude.

f. **Summary of Groundwater Conditions.** A written summary shall include the monitoring results and any changes to the groundwater monitoring system since the previous report. The written summary shall include a discussion of the groundwater flow rate and direction,[6] the appearance of trends or other information that may indicate a potential change in the hydrogeologic conditions beneath and adjacent to the Facility.

g. **Evaluation of Groundwater Data.** An evaluation of the 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 Facility.

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[6] The estimated quarterly groundwater flow rate and direction in the uppermost aquifer, in any zones of perched water, and in any additional zone of saturation monitored based upon water level elevations taken prior to the collection of the water quality data submitted in the report. (Cal. Code Regs., tit 27, § 20415(e)(15).)

h. **Background Concentration Limits Update.** The background concentration limits update shall Reevaluate background concentration limits (required every five years per Part III.A.2.c) and propose any appropriate changes.

i. **Site Conditions Summary.** The site conditions summary shall Include a comprehensive discussion regarding the condition of the Facility, including, but not limited to, interim cover areas, the current operational area, maintenance roads, the erosion and drainage control measures implemented to control run-on and run-off during the rainy season, the annual maintenance and work conducted to clear any run-on and run-off features (such as dikes, drainage culverts, drain pipes, etc.) of accumulated sediment, the condition of monitoring wells, piezometers, and any other monitoring device located at the Facility. The discussion should also highlight any areas of noncompliance observed and repaired during the previous year and should be documented with photographs and inspection reports.

j. **Compliance Summary.** Include a comprehensive discussion of the compliance issues during the reporting period (the past year), and of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the Order or this MRP.

B. Report Schedule

Annual monitoring reports shall be submitted to the Regional Water Board by April 30 of the year following the reporting period.

C. Standard Reporting Procedures

1. A transmittal letter explaining the essential points shall accompany each report. At a minimum, the transmittal letter shall identify any violations found since the last report was submitted, and if the violations were corrected. If no violations have occurred since the last submittal, this shall be stated in the transmittal letter. The transmittal letter shall also state that a discussion of any violations found since the last report was submitted, and a description of the actions taken or planned for correcting those violations, including any references to previously submitted time schedules, is contained in the accompanying report.

2. In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the Facility is operating in compliance with the WDRs. Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).

3. The results of any analysis taken more frequently than required at the locations specified in this MRP shall be reported to the Regional Water Board.

4. As specified in Standard Provisions H.13, all monitoring reports shall be certified under penalty of perjury to be true and correct. Each report shall contain the following completed declaration:

   "I certify under the penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

   Executed on the _____day of _____ at _____

   _____(Signature)

   _____(Title)"

5. The monitoring reports and any other information requested by the Regional Water Board shall be signed by a principal executive officer or ranking elected official. A duly authorized representative of the Discharger may sign the documents if:

   a. The authorization is made in writing by the person described above,

   b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system, and

   c. The written authorization is submitted to the Regional Water Board's Executive Officer.

6. As specified in Standard Provisions H.12, technical reports shall be prepared by or under the direction of appropriately qualified professional(s). Each technical report submitted shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.

7. As specified in Standard Provisions H.11, the Discharger shall comply with Electronic Submittal of Information (ESI) requirements by submitting all correspondence and reports required under this MRP and future revisions thereto, including groundwater monitoring data and discharge location data (latitude and longitude), correspondence, and monitoring reports to the State Water Board's Geotracker database. Documents that are too large to be uploaded into Geotracker should be broken down into smaller electronic files and labelled properly prior to uploading into Geotracker.