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COLORADO RIVER BASIN REGION

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**WASTE DISCHARGE REQUIREMENTS GENERAL  
ORDER R7-2022-0033  
FOR CLOSED LANDFILL FACILITIES**

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**ORDER INFORMATION**

<b>Order Type:</b>	Waste Discharge Requirements (WDRs)
<b>Status:</b>	Adopted
<b>Program:</b>	Title 27 Land Disposal Unit
<b>Discharger(s):</b>	Enrolled Dischargers
<b>Facility:</b>	Closed Landfill Facilities
<b>County:</b>	Multiple Counties

**CERTIFICATION**

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 14, 2022.

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PAULA RASMUSSEN,  
Executive Officer

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## GLOSSARY

### Units

°F .....	Degrees Fahrenheit
ft bgs .....	Below Ground Surface
ft <sup>3</sup> .....	Cubic Feet
ft <sup>3</sup> / min .....	Cubic Feet per Minute
Inches Hg .....	Inches Mercury
µg/L.....	Micrograms per Liter
µg / cm.....	Micrograms per Centimeter
µmhos / cm .....	Microsiemens per Centimeter
mg / L.....	Milligrams per Liter
NTU.....	Nephelometric Turbidity Units
% Vol. ....	Percentage
SU .....	Standard pH Units

### Other Terms

<b>Antidegradation Policy</b> .....	Statement of Policy with Respect to Maintaining High Quality Waters in California, State Water Board Resolution 68-16
<b>Basin Plan</b> .....	Water Quality Control Plan for the Colorado River Basin Region
<b>CalRecycle</b> .....	California Department of Resources Recycling and Recovery (CalRecycle)
<b>CAP</b> .....	Corrective Action Program
<b>CAMP</b> .....	Corrective Action Monitoring Program
<b>CEQA</b> .....	California Environmental Quality Act

<b>CEQA Guidelines</b> .....	California Code of Regulations, Title 14, section 15000 et seq.
<b>C.F.R.</b> .....	Code of Federal Regulations
<b>COCs</b> .....	Constituents of Concern
<b>CPCMP</b> .....	Closure and Post-Closure Maintenance Plan
<b>CQA</b> .....	Construction Quality Assurance
<b>Designated Waste</b> .....	(a) Hazardous Waste subject to variance from management requirements per Health and Safety Code section 25143; and (b) Nonhazardous Waste containing pollutants that, under ambient conditions, could be released in concentrations exceeding applicable WQOs, or that could reasonably be expected to affect beneficial uses of water. (Wat. Code, § 13173.)
<b>DMP</b> .....	Detection Monitoring Program
<b>DTSC</b> .....	California Department of Toxic Substances Control
<b>DWR</b> .....	California Department of Water Resources
<b>EC</b> .....	Electrical Conductivity
<b>EIR</b> .....	Environmental Impact Report
<b>EMP</b> .....	Evaluation Monitoring Plan
<b>EW</b> .....	Extraction Well
<b>FEMA</b> .....	Federal Emergency Management Agency
<b>GCL</b> .....	Geocomposite Liner
<b>Hazardous Waste</b> .....	Wastes which, pursuant to Title 22, section 66261.3 et seq., are required to be managed in accordance with Division 4.5 of Title 22. (Title 27, § 20164; Title 23, § 2521(a).)
<b>HDPE</b> .....	High-Density Polyethylene



<b>JTD</b> .....	Joint Technical Document
<b>LCRS</b> .....	Leachate Collection and Removal System
<b>LEA</b> .....	Local Enforcement Agency
<b>Leachate</b> .....	Liquid formed by the drainage of liquids from waste or by the percolation or flow of liquid through waste. Leachate includes any constituents extracted from the waste and dissolved or suspended in the fluid. (Title 27, § 20164.)
<b>LFG</b> .....	Landfill Gas
<b>MCE</b> .....	Maximum Credible Earthquake
<b>MDL</b> .....	Method Detection Limit
<b>MPE</b> .....	Maximum Probable Earthquake
<b>MRP</b> .....	Monitoring and Reporting Program
<b>MSW</b> .....	Municipal Solid Waste regulated under 40 C.F.R. part 258
<b>MSWLF</b> .....	Municipal Solid Waste Landfill
<b>MW</b> .....	Monitoring Well
<b>NOA</b> .....	Notice of Applicability
<b>PQL</b> .....	Practical Quantitation Limit
<b>RCRA</b> .....	Resource Conservation and Recovery Act
<b>Subtitle D</b> .....	USEPA-promulgated MSW regulations under RCRA (see 40 C.F.R. part 258)
<b>ROWD</b> .....	Report of Waste Discharge
<b>TDS</b> .....	Total Dissolved Solids
<b>Title 22</b> .....	California Code of Regulations, Title 22
<b>Title 23</b> .....	California Code of Regulations, Title 23

<b>Title 27</b> .....	California Code of Regulations, Title 27
<b>Trace Results</b> .....	Results between Method Detection Limit (MDL) and Practical Quantitation Limit (PQL)
<b>USEPA</b> .....	United States Environmental Protection Agency
<b>VOCs</b> .....	Volatile Organic Compounds
<b>WDRs</b> .....	Waste Discharge Requirements
<b>WMU</b> .....	Waste Management Unit
<b>WQOs</b> .....	Water Quality Objectives
<b>WQPS</b> .....	Water Quality Protection Standard

## FINDINGS

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

### Introduction

1. This Order prescribes Waste Discharge Requirements (WDRs) for facilities with “Closed Landfills” that are subject to the prescriptive requirements of California Code of Regulations, title 27 (Title 27), section 20005 et seq., and are within the Post-Closure Maintenance Period, as defined below.
2. For the purposes of this Order, a **Closed Landfill** is a Waste Management Unit<sup>1</sup> (WMU or Unit) that meets all of the following criteria:
  - a. The WMU no longer accepts waste of any kind for disposal;
  - b. The WMU is not subject to the requirements for “Class I” WMUs under California Code of Regulations, title 23 (Title 23), section 2510 et seq.;
  - c. The WMU either operated as a landfill during its active life, or in the case of a former surface impoundment or waste pile, the WMU has been “closed as a landfill” in lieu of clean-closure (Title 27, §§ 21400(b)(2)(A), 21410(a)(2)(a));
  - d. The WMU’s entire lateral footprint is enclosed by a fully-constructed Final Cover that complies with Title 27, section 21090; and
  - e. The WMU has undergone all operations necessary for post-closure maintenance in accordance with an approved Closure and Post-Closure Maintenance Plan or equivalent document.
3. The **Post-Closure Maintenance Period** for each WMU commences upon completion of closure of the entire unit, and ends when the Executive Officer determines in writing that the waste in the WMU no longer poses a threat to

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<sup>1</sup> A Waste Management Unit (WMU) is a discrete area of land to which waste is discharged, and encompasses any containment features that have been constructed or installed for monitoring, or for precipitation and drainage control. (Title 27, § 20164.)

water quality.<sup>2</sup> (Title 27, § 20950, subd. (a)(1).) For purposes of compliance with California Department of Resources Recycling and Recovery (CalRecycle) promulgated regulations, the period is no less than 30 years. (Title 27, § 21180, subd. (a).) State Water Resources Control Board (State Water Board) promulgated regulations do not prescribe a minimum length of time for the Post-Closure Maintenance Period. In most cases, the Post-Closure Maintenance Period under this Order will be coextensive with the period under CalRecycle regulation. However, this Order allows the Executive Officer to make a determination ending the Post-Closure Maintenance Period within 30 years of closure. (See Finding 15.)

4. **Closure** is the process during which a WMU undergoes all operations necessary to prepare for post-closure maintenance in accordance with an approved CPCMP or equivalent document. (Title 27, § 20164.) For landfills and other WMUs “closed as landfills,” closure includes construction of a Final Cover, which serves as the principal containment feature. (Title 27, § 20950, subd. (a)(2)(A)1.) The goal of closure is to minimize the infiltration of water into waste, thereby minimizing production of leachate<sup>3</sup> and landfill gas (LFG). (Title 27, § 20950, subd. (a)(2)(A)1.)
5. A **Final Cover** generally consists of the following layers (in ascending order): (1) a foundation layer; (2) a low-hydraulic conductivity layer; and (3) an uppermost erosion-resistant layer. (Title 27, § 21090, subd. (a).) The Final Cover design may deviate from the prescriptive standard described above, as an engineered alternative under Title 27. Engineered alternatives previously approved by the Colorado River Basin Water Board constitute a compliant Final Cover for the purposes of Finding 2.d above, and WMUs incorporating an approved engineered alternative are eligible for enrollment under this Order.
6. The majority of Closed Landfills regulated under this Order are also subject to federal Municipal Solid Waste (MSW) regulations promulgated pursuant to the Resource Consideration Recovery Act (RCRA). (42 U.S.C. § 6901 et seq.) Typically referred to as “Subtitle D,” these MSW regulations are now codified as 40 Code of Federal Regulations (C.F.R.) part 258, and implemented in part through Title 27, and in accordance with State Water Resources Control Board (State Water Board) Resolution 9362. Landfills subject to these federal

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<sup>2</sup> For Closed Landfills concurrently regulated by the other state agencies (e.g., CalRecycle), the Executive Officer’s determination only releases the Discharger from compliance with these WDRs and the State Water Board-promulgated provisions of Title 27. (Title 27, § 20950, subd. (a)(1).)

<sup>3</sup> Leachate is any liquid formed by the drainage of liquids from waste, or by the percolation or flow of liquid through waste.

regulations are referred to as Municipal Solid Waste Landfills (MSWLFs). Unless specifically noted however, the provisions of this Order are applicable to all Closed Landfills.

7. In addition to those WMUs concurrently regulated as “solid waste landfills” by CalRecycle and the designated Local Enforcement Agency<sup>4</sup> (LEA), this Order is also intended to also regulate certain Closed Landfills that are not subject to CalRecycle or LEA oversight (e.g., surface impoundments and waste piles “closed as landfills”).

### Scope of Order

8. This Order only applies (permits) to **Enrolled Facilities**—i.e., eligible facilities for which the Executive Officer has issued a Notice of Applicability in accordance with the enrollment procedures below. An eligible facility is not permitted under this Order until a Notice of Applicability issued specifically for that facility and its owners/operators. Until such time, the eligible facility shall remain under its prior WDRs order(s).
9. For the purposes of this Order, **Discharger[s]** refers to the Enrolled Facility owners and/or operators, as specified in the Notice of Applicability, who are responsible for compliance with the WDRs of this Order. The Dischargers identified in the Notice of Applicability are the only parties permitted under this Order; to transfer coverage under this Order, the new parties must obtain a new Notice of Applicability from the Executive Officer per **Section H.8**.
10. To be eligible for permit coverage under this Order, a facility must contain at least one Closed Landfill (Finding 2) in the Post-Closure Maintenance Period (Finding 3). **Attachment A** contains an initial list of facilities are eligible for coverage as of this Order’s adoption date. Additional facilities will become eligible over time.
11. The Executive Officer may decline to issue a Notice of Applicability if the subject facility is not eligible for coverage, or where it would be inappropriate to regulate a Closed Landfill under this Order.

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<sup>4</sup> Local Enforcement Agencies (LEAs) are designated by city or county’s governing body of a county or city and, upon certification by CalRecycle, are empowered to implement delegated CalRecycle programs and locally designated activities. LEAs are assigned the primary responsibility for ensuring correct operation and closure of solid waste facilities; they also have responsibilities for guaranteeing proper storage and transportation of solid wastes.

12. If an eligible facility also contains other WMUs (e.g., surface impoundments or active landfills), the Executive Officer may extend coverage under this Order to the Closed Landfill only. In such instances, the WDRs of this Order shall extend to the Enrolled Facility (to the extent they are applicable); the Executive Officer may specify requirements in this Order that are inapplicable to other aspects of the Enrolled Facility.
13. Immediately upon the issuance of the Notice of Applicability, the provisions of this Order shall supersede all prior WDRs orders particularly with respect to the Closed Landfill(s) permitted hereunder, and with respect to applicable aspects of the Enrolled Facility as a whole (as specified by the Executive Officer).
14. Following enrollment under this Order, all prior WDRs orders will be formally rescinded at a subsequent Colorado River Basin Water Board public meeting.

#### **Termination Procedure**

15. The Dischargers may apply to the Executive Officer for a determination that waste in a Closed Landfill no longer presents a threat to water quality. The application shall be supported by a technical demonstration incorporating historical monitoring data. The Executive Officer's determination, in the form of a Notice of Termination, shall be preceded by a public comment period of no less than 45 days. (See Wat. Code, § 13167.5; Title 27, § 21730.)
16. The Dischargers may alternatively submit a Report of Waste Discharge (ROWD)/Joint Technical Document (JTD) requesting permit coverage under individual WDRs in lieu of this General Order.
17. Until the Executive Officer issues a Notice of Termination, or individual WDRs are adopted specifically for the Closed Landfill, the WMU at the Enrolled Facility shall remain subject to this Order.

#### **Facility-Specific Monitoring and Reporting Programs**

18. Notices of Applicability will be accompanied by an Enrolled Facility-specific Monitoring and Reporting Program (Facility-Specific MRP) issued by the Executive Officer. The Facility-Specific MRP will follow the basic structure and substantive provisions of the example included in **Attachment B**.
19. In accordance with Title 27, the Facility-Specific MRPs will establish the Water Quality Protection Standard (WQPS), which is the analytical framework for monitoring groundwater, unsaturated zone and surface water monitoring to

detect a release from Closed Landfills at the earliest possible time.<sup>5</sup> (Title 27, § 20420, subd. (b).)

20. The WQPS elements are as follows: for the duration of the Compliance Period, the Monitoring Points at the Point of Compliance (POC) are sampled and analyzed for Monitoring Parameters indicative of a release; and if concentrations of Constituents of Concern (COCs), including Five-Year COCs, exceed Concentration Limits, the results are confirmed through Retesting Procedures, and then Corrective Action will be required.
- a. **Compliance Period.** The “compliance period” is the minimum time for which a water quality monitoring will be required—i.e., equal to the sum of active years and the closure period. (§ 20410.) The period restarts each time an Evaluation Monitoring Program (EMP) is initiated for a given WMU. (§§ 20410(a), 20415, 20425.) If a WMU is in corrective action, the period continues until it is demonstrated that the WMU has been in continuous compliance with its WQPS for at least three years. (§ 20410, subd. (c).)
  - b. **Monitoring Points.** For WQPS purposes, a “monitoring point” is any well, device, or location where monitoring is conducted, as specified in the WDRs (incorporating Facility-Specific MRP). (Title 27, § 20164.)
  - c. **Point of Compliance (POC).** The POC is a vertical plane at the WMU’s hydraulically downgradient limit, extending through the uppermost underlying aquifer. (Title 27, §§ 10164, 20405(a).) The Facility’s POC monitoring wells are listed below in Table 1.
  - d. **Monitoring Parameters.** Monitoring Parameters are a predetermined set of Constituents of Concern (see below) and measurable physical characteristics (e.g., temperature, electrical conductivity, pH), which serve as reliable indicators of a release, and for which samples will therefore be routinely analyzed. (Title 27, §§ 20164, 20395(a), 20420(e) (f).)
  - e. **Constituents of Concern (COCs).** COCs are Monitoring Parameters that consist of waste constituents, reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in a WMU. (Title 27, §§ 20164, 20395.)
  - f. **Five-Year COCs.** Five-Year COCs are a subset of Monitoring Parameter COCs for which analyses is only required every five years. They are

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<sup>5</sup> For most Enrolled Facilities, surface water monitoring will not be required because there are no waterbodies immediately adjacent to Closed Landfills.

essentially a broader range of COCs that do not require more frequent monitoring.

- g. **Concentration Limits.** The Concentration Limit is the “background concentration” for each Monitoring Parameter, as determined by the statistical methods outlined in subdivision (e)(8) of Title 27, section 20415. (Title 27, § 20400, subds. (a), (b).)
  - h. **Retesting Procedures.** If monitoring results indicate “measurably significant” evidence of a release, the Facility-Specific MRP will require the Dischargers to follow one of two retesting procedures, depending on whether the COC is naturally occurring (i.e., detected in at least 10 percent of background samples).
- 21. To the extent permissible under Title 27, each Facility-Specific MRP may vary from the example provided in **Attachment B**, particularly with respect to: Monitoring Parameters; sampling or inspection frequencies; reporting frequencies; applicability of Leachate Collection and Removal System (LCRS) monitoring; applicability of unsaturated zone monitoring; applicability of Leachate Collection and Removal System (LCRS) monitoring; frequency of required updates to Concentration Limits; and applicability of Corrective Action-related monitoring.
  - 22. The Facility-Specific MRP may also be used to consolidate monitoring provisions from other orders into a single MRP.
  - 23. The Facility-Specific MRP may also require changes to the Enrolled Facility’s monitoring network (e.g., where such changes are necessary to comply with Title 27 objectives).

### **Corrective Action**

- 24. In the event a release is confirmed from a Closed Landfill via the applicable Retesting Procedure, the Facility-Specific MRP will require that the Dischargers to submit a *Corrective Action Feasibility Study* evaluating potential remedial options to address the release.
- 25. In lieu of individual WDRs with facility-specific corrective action requirements, all further corrective actions to address the release shall be implemented pursuant to a Cleanup and Abatement Order (CAO) issued by the Executive Officer under Water Code section 13304. (See Title 27, § 20090, subd. (d).)
- 26. This General Order requires the Dischargers to comply with any CAOs issued for their Enrolled Facility. For the purposes of Title 27, section 20430, this Order incorporates the provisions of any CAO issued by the Executive Officer for an Enrolled Facility to address releases from a Closed Landfill.



### **Financial Assurances**

27. Title 27 requires the Dischargers demonstrate their ability to pay for the estimated costs of post-closure maintenance (§§ 20950, 22210, 22212), and known or reasonably foreseeable corrective action in response to a release from Closed Landfills (§§ 20380, 22220, 22222).
28. For Closed Landfill that are concurrently regulated as “solid waste landfills” by CalRecycle, post-closure maintenance cost estimates are included in the Dischargers’ Closure and Post-Closure Maintenance Plan; corrective action cost estimates are submitted separately. CalRecycle is ultimately responsible for the review, approval and management of financial assurance mechanisms for these WMUs, though the Colorado River Basin Water Board will assist CalRecycle in evaluating the adequacy of the Dischargers’ cost estimates for post-closure maintenance and corrective action. (Title 27, § 20950, subd. (f).)
29. For Closed Landfills that are not regulated by CalRecycle, the Dischargers are responsible for submitting their financial assurance cost estimates and mechanisms directly to the Colorado Basin Water Board. The Notice of Applicability and/or the Facility-Specific MRP may specify any requirements for calculating cost estimates, and other financial assurances reporting and mechanism submission requirements (e.g., incorporating applicable CalRecycle regulations).

### **Other Regulatory Considerations**

30. This Order is issued in part pursuant to Water Code section 13263, subdivision (a), which provides as follows:  
  
The regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge..., with relation to the conditions existing in the disposal area ... into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of [Water Code] Section 13241.
31. By incorporating Title 27 standards for the post-closure maintenance and monitoring, this Order implements the Board’s Water Quality Control Plan for the Colorado River Basin Region (Basin Plan), which designates beneficial uses for surface water and groundwater and establishes water quality objectives (WQOs) necessary to preserve such beneficial uses. Specifically, this Order contains WDRs intended to prevent any degradation of surface water and groundwater, thereby protecting established beneficial uses.

32. This Order prescribes general WDRs for Enrolled Facilities in accordance with Water Code section 13263, subdivision (i), which provides in relevant part as follows:

[A] regional board may prescribe general waste discharge requirements for a category of discharges if ... all of the following criteria apply to the discharges in that category:

- (1) The discharges are produced by the same or similar operations.
- (2) The discharges involve the same or similar types of waste.
- (3) The discharges require the same or similar treatment standards.
- (4) The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

33. Enrolled Facilities subject to regulatory coverage under this Order are appropriately regulated under general WDRs based on the following considerations:

- a. Wastes are not discharged to Closed Landfills. During the Post-Closure Maintenance Period, Dischargers' principal obligations are to maintain the Closed Landfills' existing waste containment systems (particularly the final cover), to conduct monitoring to detect any releases, and in the event of a verified release, to perform any necessary corrective action to address the release. These obligations are dictated by Title 27 prescriptive standards.
- b. Closed Landfills contain previously-discharged wastes that have been classified based on their potential to impair water quality. (Wat. Code, § 13172, subd. (a).) Specifically, Closed Landfills contain nonhazardous solid waste (Class III) designated waste (Class II) and/or municipal solid waste (Class II). During the Post-Closure Maintenance Period, Dischargers' obligations under Title 27 do not depend on whether wastes are classified as Class II or Class III.<sup>6</sup>
- c. Closed Landfills do not contain wastes that require any treatment.

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<sup>6</sup> The definition of "Closed Landfill" explicitly excludes "Class I" WMUs.

- d. Closed Landfills at Enrolled Facilities are more appropriately regulated under this General Order than under individual WDRs. Due to the prescriptive nature of Title 27, the same requirements are applicable to each Enrolled Facility. This is especially true during the Post-Closure Maintenance Period, as there are no lateral expansions, design approvals, new constructions, new engineered alternatives or new waste discharges. Additionally, most of the facilities potentially eligible for enrollment are both owned and operated by three county governments: Imperial County; Riverside County; and San Bernardino County. This General Order is adopted in part to standardize the provisions applicable to their numerous facilities.
34. The State Water Board's *Statement of Policy with Respect to Maintaining High Quality Waters in California*, Resolution 68-16 (*Antidegradation Policy*) prohibits the Colorado River Basin Water Board from authorizing degradation of "high quality waters" unless it is shown that such degradation: (1) will be consistent with the maximum benefit to the people of California; (2) will not unreasonably affect beneficial uses, or otherwise result in water quality less than as prescribed in applicable policies; and (3) is minimized through the discharger's best practicable treatment or control.
35. Consistent with Title 27, this Order requires the Dischargers to maintain their Enrolled Facilities to contain waste within the Closed Landfills, thereby preventing degradation of water quality. To the extent that there are releases from Closed Landfills, will be required to address such releases through Corrective Action. (§§ 20385, 20415, 20430.) Because this Order authorizes no water quality degradation, it complies with the *Antidegradation Policy*.
36. For the purposes of California Code of Regulations, title 23 (Title 23), section 2200, Enrolled Facilities have a default Threat-Complexity Rating of 2-B, where:
- a. Threat Category "2" reflects discharges that can impair receiving water beneficial uses, cause short-term WQO violations, cause secondary drinking water standard violations, and cause nuisances; and
  - b. Complexity Category "B" reflects dischargers with Class II or Class III WMUs.<sup>7</sup>

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<sup>7</sup> The Executive Office may assign a higher or lower Threat-Complexity Rating in the Notice of Applicability.

37. This Order is also issued in part pursuant to Water Code section 13267, subdivision (b)(1), which provides that:

[T]he regional board may require that any person who has discharged, discharges..., or who proposes to discharge waste within its region ... shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

38. The technical reports required under this Order, as well as those required under the separately issued Facility-Specific MRPs, are necessary to ensure compliance with prescribed WDRs, Title 27, Subtitle D (40 C.F.R. part 258) and State Water Board Resolution 93-62. Additionally, the burdens associated with such reports are reasonable relative to the need for their submission.
39. Failure to comply with the reporting requirements under this Order and the Facility-Specific MRP may result in enforcement action pursuant to Water Code section 13268.
40. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered "confidential" under any circumstances. All submittals from the Discharger shall be subject to inspection under the Public Records Act.
41. The Enrolled Facilities permitted under this Order are comprised exclusively of existing facilities, with no expansions of existing uses. Accordingly, the adoption of this Order (and enrollments hereunder) categorically is exempt from the procedural requirements of the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., pursuant to California Code of Regulations, title 14, section 15301 (CEQA Guidelines).

## REQUIREMENTS

**IT IS HEREBY ORDERED**, pursuant to Water Code sections 13263 and 13267, that the owners and operators of Enrolled Facilities, as identified in the Notice of Applicability (collectively, Dischargers), shall comply with the following requirements.

### **A. Discharge Prohibitions for Closed Landfills**

1. No further wastes of any kind shall be discharged to any of the Closed Landfills permitted under this Order.
2. Wastes in the Closed Landfills shall not result in the degradation of groundwater or surface water quality, or otherwise threaten to result in conditions of pollution or nuisance, as the terms are defined per Water Code section 13050.
3. Waste constituents shall not be discharged from Closed Landfills, or otherwise released, to surface waters, the unsaturated zone or to groundwater.

### **B. Post-Closure Maintenance Requirements for Closed Landfills**

1. For the duration of each Closed Landfill's Post-Closure Maintenance Period (see Finding 3), Dischargers shall:
  - a. Maintain the structural integrity and effectiveness of all containment structures, and maintain the final cover as necessary to correct the effects of settlement or other adverse factors;
  - b. Continue to operate the any leachate collection and removal systems (LCRS) as long as leachate is generated and detected;
  - c. Monitor groundwater and the unsaturated zone in accordance with the Enrolled Facility's Monitoring and Reporting Program and Title 27, section 20380 et seq.;
  - d. Prevent erosion and related damage of the Closed Landfill's final cover due to drainage; and
  - e. Protect and maintain surveyed monuments installed per Section B.2 below. (Title 27, § 21090, subd. (c).)
2. Closed Landfills shall have at least two permanent surveying monuments, installed by a licensed land surveyor or by a registered civil engineer, from which the location and elevation of all wastes, containment structures, and

monitoring facilities can be determined throughout the post-closure maintenance period. (Title 27, § 20950, subd. (d).)

3. **[MSWLFs Only]** Following closure, Dischargers shall notify the Executive Officer that the deed to the entire property, or some other instrument that is normally examined during a title search, has been recorded and a copy placed in the operating record. The notation on the deed shall in perpetuity notify any potential purchaser of the property that the land has been used as a landfill facility and that use of the land is restricted to the planned use described in the Closure and Post-Closure Maintenance Plan (CPCMP). (Title 27, §§ 20515(a)(4), 21170; 40 C.F.R. § 258.60(i).)
4. When repairs are needed for a monolithic final cover, the final cover's low-hydraulic conductivity layer, or other Board-approved final cover, such repairs shall be conducted in accordance with an approved Construction Quality Assurance Plan (CQA Plan) and the operative CPCMP or equivalent document. (Title 27, § 21090, subd. (b)(1)(E).)
5. For Closed Landfills with a prescriptive final cover (i.e., incorporating a low-hydraulic conductivity layer), Dischargers shall conduct a periodic leak search to monitor the integrity of the final cover in accordance with the schedule in the approved CPCMP or equivalent document. (Title 27, § 21090, subd. (a)(4)(A).)
6. Dischargers shall periodically inspect and identify problems with the final cover including areas that require replanting, erosion, areas lacking free drainage, areas damaged by equipment operations, and localized areas identified in the required five-year iso-settlement survey. (Title 27, § 21090, subd. (a)(4)(B).)
7. After final cover installation, Dischargers may perform minor modifications to problematic areas, provided that: (a) the barrier layer of the final cover (e.g., geomembrane, GCL and/or compacted clay layer) remains intact; and (b) the Board approves of such modifications. For final covers incorporating an engineered alternative, Dischargers may perform remedial actions on the final cover in accordance with an approved workplan detailing how the final cover shall be restored so as to provide the full protection of its original design.
8. If the final cover incorporates a geomembrane barrier, all edges of the final cover shall remain sealed to the liner.
9. Dischargers shall ensure that methane and other landfill gases (LFG) are adequately vented, removed from Closed Landfills, or otherwise controlled to prevent the danger of adverse health effects, nuisance conditions,

degradation, or the impairment of the beneficial uses of water to migration through the unsaturated zone.

**C. Financial Assurance Requirements for Enrolled Facilities**

**1. Requirements for CalRecycle-Regulated Facilities**

- a. Dischargers shall maintain with CalRecycle assurances of financial responsibility for post-closure maintenance. A report regarding financial assurances, or a copy of the financial assurances report submitted to CalRecycle, shall be submitted to the Board annually, no later than **June 1**.
- b. If CalRecycle determines that the submitted financial assurances are inadequate, Dischargers shall, within 90 days of such determination:
  - i. Obtain a new financial assurance mechanism for the amount specified by CalRecycle; and
  - ii. Submit a report documenting such financial assurances to CalRecycle and the Board.
- c. Whenever changed conditions increase the estimated costs of post-closure maintenance, Dischargers shall promptly submit an updated CPCMP to the Board, CalRecycle and LEA.

**2. Requirements for Other Closed Landfills**

- a. Dischargers shall develop and periodically update cost estimates for post-closure maintenance and corrective action in accordance with applicable CalRecycle-promulgated regulations.<sup>8</sup>
- b. Dischargers shall demonstrate their ability to pay for the operative post-closure maintenance and corrective action cost estimates in accordance with the provisions and available mechanisms set forth in subchapter 3, articles 1-2 of Title 27, division 2, subdivision 1, chapter 6, (§§ 22225-22254).

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<sup>8</sup> The Executive Officer may specify applicable regulations in the Notice of Applicability.

- c. Dischargers shall comply with all additional requirements in the Facility-Specific MRP regarding periodic updates to cost estimates, demonstration of financial assurances to the Board.

**D. Stormwater Requirements**

1. Dischargers without a valid Notice of Non-Applicability (NONA) or an approved Notice of Termination (NOT) shall comply with the operative Statewide General Permit for Stormwater Discharges Associated with Industrial Activities, NPDES Permit No. CAS000001 (Industrial General Permit), and maintain a Storm Water Pollution Prevention Plan (SWPPP) and Monitoring Program and Reporting Requirements; or otherwise retain all stormwater onsite at the Enrolled Facility.
2. Closed Landfills shall be maintained to prevent inundation or washout due to floods with a 100-year return period. (Title 27, § 20260, subd. (c).)
3. Stormwater conveyance systems shall be designed for a 100-year, 24-hour storm event. (Title 27, § 21750, subd. (e)(3).)
4. Precipitation onto Closed Landfills, which is not diverted by covers or drainage control systems, shall be collected and managed through the LCRS, which shall be designed and constructed to accommodate the precipitation conditions for each class unit. (Title 27, § 20365, subd. (b).)
5. Diversion and drainage features at the Enrolled Facility shall be designed, constructed, and maintained to:
  - a. Accommodate the anticipated volume of precipitation and peak flows from surface runoff and under the precipitation conditions for each affected WMU;
  - b. Effectively divert sheet flow runoff laterally, via the shortest distance, into the drainage and collection features;
  - c. Prevent surface 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. Consider the expected final contours of the closed unit, including its planned drainage pattern;
  - f. Consider the possible effects of the WMU's drainage pattern on and by the regional watershed;



- g. Consider 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; and
        - h. Preserve the diversion and drainage system's function.
- 6. Dischargers shall periodically remove accumulated sediment from the sedimentation or detention basins as needed to preserve the design capacity of the system. (Title 27, § 20365, subd. (c).)
- 7. Collection and holding features associated with precipitation and drainage control systems shall be emptied immediately following each storm or otherwise managed to maintain the design capacity of the system. (Title 27, § 20365, subd. (d).)
- 8. Surface and subsurface drainage from outside of the Closed Landfill shall be diverted from the unit. (Title 27, § 20365, subd. (e).)
- 9. Cover materials shall be graded to divert precipitation from the Closed Landfill, to prevent ponding of surface water over wastes, and to resist erosion as a result of precipitation. (Title 27, § 20365, subd. (f).)
- 10. Any drainage layer in the final cover shall be designed and constructed to intersect with the final drainage system for the Closed Landfill in a manner promoting free drainage from all portions of the drainage layer. (Title 27, § 20365, subd. (f).)

**E. Corrective Action Requirements**

In the event of a verified release from a Closed Landfill at their Enrolled Facility, Dischargers shall comply with any Cleanup and Abatement Orders (i.e., for Corrective Action), which shall be incorporated herein upon issuance by the Executive Officer.

**F. Monitoring Requirements**

Dischargers shall comply with their Facility-Specific MRP, which shall be incorporated herein upon issuance by the Executive Officer.

## G. Reporting Requirements

1. **Electronic Submittal via GeoTracker.** Reports shall be submitted electronically via the State Water Board's [GeoTracker Database](https://geotracker.waterboards.ca.gov) (<https://geotracker.waterboards.ca.gov>). After uploading, Dischargers shall notify Colorado River Basin Water Board staff via email to [RB7\\_WDRs\\_paperless@waterboards.ca.gov](mailto:RB7_WDRs_paperless@waterboards.ca.gov), or another address specified by staff. The following information shall be included in the body of the email:

<b>Attention:</b>	Land Disposal Unit
<b>Report Title:</b>	[Report Title]
<b>Upload ID:</b>	[Number]
<b>Facility:</b>	[Facility]
<b>County:</b>	[County]
<b>GeoTracker ID:</b>	[Number]

2. **Preparation of Technical Reports by Qualified Professionals.** All technical reports submitted under this Order shall be prepared by, or under the direct supervision of, a licensed civil engineer or engineering geologist (Qualified Professional). A "technical report" is a report incorporating the application of scientific or engineering principles.
3. **Certifications for Submittals.** All submittals under this Order shall be accompanied by a transmittal containing the following certification that is signed by either the **Required Signatory** (see WDRs Table 1) or their **Authorized Representative** (see § G.4):

<p>I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.</p>
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4. **Authorized Representatives.** To act as an Authorized Representative for a Required Signatory (see WDRs Table 1), an individual must be identified<sup>9</sup> and duly authorized in writing by the Required Signatory; this written authorization shall be provided to the Board beforehand, or concurrently with the first submittal signed by the Authorized Representative.

**WDRs Table 1. Required Signatories for Submittals.**

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

**H. Other Provisions**

1. **General Maintenance.** Dischargers shall maintain in good working order any feature, control system, or monitoring device installed to achieve compliance with this General Order or the Facility-Specific MRP.
2. **Fluid in Sumps.** Dischargers shall maintain the depth of the fluid in the sump of each Closed Landfill at the minimum needed for efficient pump operation (the depth at which the pump turns on given the pump intake height and maximum pump cycle frequency).

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<sup>9</sup> This identification may be in reference to the Authorized Representative’s title or position, provided it is one that customarily has the responsibility of supervising the Enrolled Facility’s overall operation (e.g., facility manager, superintendent).

3. **Groundwater Separation.** To the extent practicable, WMUs shall be kept at least five feet above the highest anticipated elevation of underlying groundwater, including the capillary fringe. (Title 27, § 20240, subd. (c).)
4. **Copies of Orders at Enrolled Facility.** Dischargers shall maintain at the Enrolled Facility copies of this Order, and the operative Facility-Specific MRP. These materials shall be made available to all operating personnel, who shall be familiar with the contents of such materials.
5. **Enrolled Facility Inspections.** Dischargers and their agents shall permit Board staff to inspect the Enrolled Facility during business to verify compliance with WDRs. Failure to consent to a reasonable request for inspection constitutes a violation of this Order.
6. **Prior Notification for Other Changes at Facility.** In addition to the requirements of Water Code sections 13260 and 13264, Dischargers shall notify the Board in writing prior to any changes at the Enrolled Facility with regard to: site operations and features; and proposed closure procedures (including changes to cost estimates). This notification shall be provided a reasonable time before the changes are made or become effective, in addition to any other prerequisites specifically provided for under the Water Code, Subtitle D, Title 27 and this Order. Additionally, no changes shall be made without Board approval following authorization for closure pursuant to Notification of Closure. (Title 27, § 21710, subd. (a)(4).)
7. **Required Mitigation.** Dischargers shall take all reasonable steps to minimize any adverse impact to the waters of the State resulting from noncompliance with this Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature, extent, and impact of the noncompliance.
8. **Changes in Enrolled Facility Ownership or Responsibility for Operations.**
  - a. Prior to any changes in Enrolled Facility ownership, or any changes in operators (including parties responsible for performing activities to comply with this Order), Dischargers shall notify (in writing) the prospective owners or operators of the existence of this General Order and the Facility-Specific MRP. Copies of this written notification shall be provided to the Board.
  - b. For any changes in ownership of Enrolled Facilities with Closed Landfills subject to CalRecycle jurisdiction, Dischargers shall comply with the provisions of Title 27, section 21200. Copies of materials submitted to CalRecycle and the LEA per

section 21200, subdivisions (a)-(b) of section 21200, shall also be contemporaneously sent to the Board.

- c. In addition to compliance with Title 27, section 21200 (if applicable), prior to the transfer of ownership or operations, Dischargers shall notify the Board of the effective date, and submit a signed statement by the new parties, affirming that post-closure maintenance and monitoring will be conducted in accordance with this Order and the Facility-Specific MRP. (Title 27, § 21710, subd. (c)(1).)
- d. To assume ownership or operation under regulatory coverage of this Order, the new owner or operator must apply in writing to the Board requesting transfer of coverage **within 14 days** of assuming ownership or responsibility for operation. The request shall contain the applicant's full legal name; place of incorporation (if a corporation); names, addresses and telephone numbers of designated contact persons, and a statement signed by the applicant's **Required Signatory** (see WDRs Table 1) affirming that the new owner or operator assumes full responsibility for compliance with this General Order and Facility-Specific MRP. Failure to submit the request shall be considered a discharge without requirements, a violation of the Water Code.
- e. Transfers of coverage under this General Order and the Facility-Specific MRP are subject to approval by the Executive Officer, and not effective until a new Notice of Applicability is issued.

### LIST OF ATTACHMENTS

**Attachment A**—Initial List of Eligible Facilities under Order

**Attachment B**—Example of Facility-Specific Monitoring and Reporting Program

### ENFORCEMENT

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

### **ADMINISTRATIVE REVIEW**

Any person aggrieved by this Colorado River Basin Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. To be timely, the petition must be received by the State Water Board by 5:00 pm on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday or state holiday, the petition must be received by the State Water Board by 5:00 pm on the next business day. The law and regulations applicable to filing petitions are available on the [State Water Board website](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) ([http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)). Copies will also be provided upon request.

**ATTACHMENT A—INITIAL LIST OF ELIGIBLE FACILITIES UNDER ORDER**

**WDRs Table A-1. Initial List of Eligible Facilities under Order.**

<b>Facility</b>	<b>GeoTracker ID</b>	<b>Dischargers</b>	<b>Final Closure Dates</b>	<b>Previous Order</b>
<b>Brawley Class III Municipal Solid Waste Management Facility</b> N. Western Ave. at New River, Brawley, Imperial County	<a href="#">L10006582911</a>	County of Imperial, Department of Public Works	August 2013	Order 97-007
<b>Holtville Class III Waste Management Facility</b> Whitlock Rd. North of Norrish Rd., Holtville, Imperial County	<a href="#">L10005968736</a>	County of Imperial, Department of Public Works	July 2009	Order R7-2015-0009
<b>Ocotillo Class III Municipal Solid Waste Management Facility</b> Shell Canyon Rd., Ocotillo, Imperial County	<a href="#">L10003033435</a>	County of Imperial, Department of Public Works	June 2009	Order R7-2007-0044
<b>Palo Verde Class III Municipal Solid Waste Management Facility</b> Palo Verde Dump Rd., Palo Verde, Imperial County	<a href="#">L10006866257</a>	County of Imperial, Department of Public Works	April 2010	Order R7-2007-0046

WASTE DISCHARGE REQUIREMENTS GENERAL ORDER R7-2022-0033  
 CLOSED LANDFILL FACILITIES  
**ATTACHMENT A—INITIAL FACILITIES UNDER ORDER**

Facility	GeoTracker ID	Dischargers	Final Closure Dates	Previous Order
<b>United States Gypsum Inert Waste Pile</b> 3810 W. Evan Hewes Hwy., Plaster City, Imperial County	<a href="#">L10002337522</a>	United States Gypsum Co.	December 2018	Order R7-2007-0046
<b>Big Bear Sanitary Landfill</b> 38550 Holcomb Valley Rd., Big Bear City (1.5 mi. north of Baldwin Lake), San Bernardino County	<a href="#">L10007155213</a>	County of San Bernardino, Department of Public Works, Solid Waste Management Division	April 2011	Order R7-2013-0060
<b>Lucerne Valley Waste Management Facility, Class III Sanitary Landfill</b> Camp Rock Rd., 8 Mi. NE of Lucerne Valley, San Bernardino County	<a href="#">L10006289548</a>	County of San Bernardino, Department of Public Works, Solid Waste Management Division	1995	Order R7-2005-0097
<b>Morongo Valley Sanitary Landfill</b> 10870 Malibu Trail, Morongo Valley, San Bernardino County	<a href="#">L10002541113</a>	County of San Bernardino, Department of Public Works, Solid Waste Management Division	November 1998	Order R7-2013-0046



WASTE DISCHARGE REQUIREMENTS GENERAL ORDER R7-2022-0033  
 CLOSED LANDFILL FACILITIES  
**ATTACHMENT A—INITIAL FACILITIES UNDER ORDER**

Facility	GeoTracker ID	Dischargers	Final Closure Dates	Previous Order
<b>Needles Sanitary Landfill</b> South U.S. Hwy. 95, Needles, San Bernardino County	<a href="#">L10003086281</a>	County of San Bernardino, Department of Public Works, Solid Waste Management Division	Fall 2005	Order R7-2003-0046
<b>Parker Dam Disposal Site</b> CA Hwy. 62, South of Parker Dam, San Bernardino County	<a href="#">L10007525096</a>	County of San Bernardino, Department of Public Works, Solid Waste Management Division	Nov 1991	Order R7-2003-0019
<b>Twentynine Palms Disposal Site</b> 7501 Pinto Mountain Rd., Twentynine Palms, San Bernardino County	<a href="#">L10006535144</a>	County of San Bernardino, Department of Public Works, Solid Waste Management Division	Fall 2006	Order R7-2015-0019
<b>Coachella Sanitary Landfill</b> 87-011 44th Avenue (Landfill Road), Coachella, Riverside County	<a href="#">L10003659217</a>	County of Riverside, Department of Waste Resources	August 1999	Order R7-2017-0012
<b>Edom Hill Landfill</b> 70100 Edom Hill Rd., Cathedral City, Riverside County	<a href="#">L10009373801</a>	County of Riverside, Department of Waste Resources	February 2008	Order R7-2014-0010

## **ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

The contents of Attachment B are provided as an example of the form of Monitoring and Reporting Program (MRP) that will be issued by the Executive Officer concurrently with the Notice of Applicability for regulatory coverage under the General Order.

To the extent permissible under the Water Code section 13000 et seq., California Code of Regulations, title 27, and 40 Code of Federal Regulations part 258, the actual substantive requirements of each MRP may differ from the example below.

Tables listing monitoring points are included as examples only. The Facility-Specific MRP will be modified to reflect the actual network of monitoring points.

Where appropriate to do so, the Executive Officer will tailor each MRP in consideration of existing monitoring and reporting requirements, while maintaining a standardized approach to the monitoring of closed landfill requirements.

### **PREFACE**

Issued by the Executive Officer of the California Regional Water Quality Control Board, Colorado River Basin Region (Colorado River Basin Water Board or Board) pursuant to Water Code section 13267, subdivision (b)(1), this Order establishes a Monitoring and Reporting Program (MRP) for [DISCHARGER], which owns and/or operates [ENROLLED FACILITY] (Facility) in [COUNTY].

Effective [DATE], the Facility has been enrolled for coverage under Waste Discharge Requirements General Order R7-2022-XXXX (WDRs General Order), which prescribes general waste discharge requirements (WDRs) for the owners/operators of facilities with “closed” landfill-type waste management units (WMUs).

Except as otherwise noted, all code sections cited herein are those of California Code of Regulations, title 27 (Title 27), section 20005 et seq.

## REQUIRED ACTIONS

IT IS HEREBY ORDERED, pursuant to Water Code section 13267, subdivision (b)(1), that [PRIOR MRP] is rescinded (except for enforcement purposes), and that [DISCHARGER] shall comply with the following provisions.

### A. Detection Monitoring Program (DMP)

To detect a release at the earliest possible time (see Title 27, § 20420, subd. (b)), the Discharger shall implement a Detection Monitoring Program (DMP) for groundwater, surface water and the unsaturated zone in accordance with the provisions of Title 27, particularly sections 20415 and 20420.

#### 1. Groundwater Detection Monitoring

- a. **Current Network.** The Facility's groundwater monitoring well network consists of the wells listed in **MRP Table 1**.<sup>10</sup> As of the date of this Order, the network meets the requirements of Title 27. (§ 20415, subd. (b).)
- b. **Monitoring Parameters.** Each monitoring well in **MRP Table 1** (and any other subsequently-installed monitoring well) shall be sampled and analyzed for the Monitoring Parameters in **MRP Table 3**, in accordance with the specified schedule therein, as well as any other time a monitoring well is sampled (e.g., for other purposes). (§ 20420, subds. (e)-(f).) MRP Table 3 includes monitoring for Five-Year Constituents of Concern (Five-Year COCs), which was last conducted in [YEAR], and shall be conducted again in [YEAR]. (§ 20420, subd. (g).) Results shall be reported semiannually per **MRP Section E.1**.
- c. **Groundwater Conditions Monitoring.** Each quarter, the Discharger shall monitor Groundwater Conditions in **MRP Table 2**, with results reported semiannually per **MRP Section E.1**. To the extent feasible, this information shall be determined separately for: (1) the uppermost aquifer; (2) any zones of perched water; and (3) any additional zone of saturation monitored based upon water level

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<sup>10</sup> Non-background monitoring wells at the Point of Compliance constitute "Monitoring Points" for purposes of the Water Quality Protection Standard (WQPS).

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

elevations taken prior to the collection of the water quality data submitted in the report. (§ 20415, subd. (e)(15).) Results shall be reported semiannually per MRP Section E.1.

**MRP Table 1. Groundwater Monitoring Network.**

Well	Program	Monitored Unit	POC (WQPS)	Zone	Status
MW-1	Detection	LF-1	Yes	Deep	Operational
MW-2	Background	LF-1	No	Deep	Operational
MW-3	Corrective Action	LF-1	No	Deep	Planned
MW-4	Detection	LF-1	Yes	Deep	Operational
MW-5	Detection	LF-1	Yes	Deep	Operational
MW-6	Detection	LF-1	Yes	Deep	Operational

**MRP Table 2. Groundwater Conditions Monitoring.**

Conditions	Units	GeoTracker Code	Monitoring Freq.	Reporting Freq.
Elevation (Well-Specific)	ft bgs	ELEV	Quarterly	Semiannually
Gradient / Direction	-	(none)	Quarterly	Semiannually
Flow Rate		(none)	Quarterly	Semiannually

**MRP Table 3. Groundwater Detection Monitoring Parameters.**

Monitoring Parameter	Units	GeoTracker Code	Monitoring Freq.	Reporting Freq.
Temperature	°F	TEMP	Semiannually	Semiannually
Electrical Conductivity	µmhos/cm	SC	Semiannually	Semiannually

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

Monitoring Parameter	Units	GeoTracker Code	Monitoring Freq.	Reporting Freq.
pH	SU	PH	Semiannually	Semiannually
Turbidity	NTU	TURB	Semiannually	Semiannually
TDS	mg/L	TDS	Semiannually	Semiannually
Chloride	mg/L	CL	Semiannually	Semiannually
Carbonate	mg/L	CACO3	Semiannually	Semiannually
Bicarbonate	mg/L	BICACO3	Semiannually	Semiannually
Sulfate	mg/L	SO4	Semiannually	Semiannually
Calcium	mg/L	CA	Semiannually	Semiannually
Magnesium	mg/L	MG	Semiannually	Semiannually
Potassium	mg/L	K	Semiannually	Semiannually
Sodium	mg/L	NA	Semiannually	Semiannually
Short List VOCs (Attachment A)	µg/L	(various)	Semiannually	Semiannually
1,2,3-Trichloropropane per Method SRL-524M-TCP	µg/L	TCPR123	Semiannually	Semiannually
Total Organic Carbon	mg/L	TOC	Every 5 Yrs.	Every 5 Yrs.
Dissolved Inorganics (Attachment B)	µg/L	(various)	Every 5 Yrs.	Every 5 Yrs.
Extended List VOCs (Attachment C)	µg/L	(various)	Every 5 Yrs.	Every 5 Yrs.
Semi-Volatile Organic Compounds (Attachment D)	µg/L	(various)	Every 5 Yrs.	Every 5 Yrs.
Chlorophenoxy Herbicides (Attachment E)	µg/L	(various)	Every 5 Yrs.	Every 5 Yrs.

2. **Unsaturated Zone Detection Monitoring**

- a. **Required Network.** The Facility's unsaturated zone monitoring network consists of the landfill gas (LFG) monitoring points specified in **MRP Table 4**. As of the date of this Order, the network meets the requirements of Title 27. (Title 27, § 20415, subd. (d).)
- b. **Soil Pore Gas Monitoring.** Soil Pore Gas (SPG) shall be monitored for Methane and Method TO-15 VOCs<sup>11</sup> in accordance with **MRP Table 5**, provided that samples may be prescreened to determine if such analyses will be required.<sup>12</sup> (Title 27, § 20420, subds. (e)-(f).) Results shall be reported semiannually per **MRP Section E.1**.
- c. **Monthly Lysimeter Inspections (Monitoring Parameters).** Each month, the Discharger shall inspect each of the pan lysimeters in **MRP Table 4**, and any other subsequently-installed lysimeter; and sample and analyze liquids in accordance with **MRP Table 6**. (Title 27, § 20420, subds. (e)-(f).) Lysimeter liquids were last analyzed for Five-Year COCs in **YEAR**, and shall be conducted again in **YEAR**. (Title 27, § 20420, subd. (g).) Results shall be reported semiannually per **MRP Section E.1**.
- d. **Initial Detection of Liquid.** The Discharger shall notify Board staff *within seven days* of detecting liquid in a previously dry lysimeter.

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<sup>11</sup> Volatile Organic Compounds associated with USEPA Method TO-15.

<sup>12</sup> A gas analyzer for methane concentrations or a Photo Ionization Detector (PID) for total VOCs concentrations may be used. If methane concentrations exceed 1 percent by volume OR organic vapors (total VOCs) exceed 1 ppm, a gas sample shall be obtained and analyzed for VOCs using Method TO-15. Both the screening results and lab analysis results shall be reported. Otherwise, the methane or total VOC screening results shall be reported, and no further lab analysis will be required.

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM****MRP Table 4. Unsaturated Zone Monitoring Network.**

Monitoring Point	Program	Monitored Unit	Status
LFG-1	Detection	LF-1	Operational
LFG-2	Detection	LF-1	Operational
LFG-3	Detection	LF-1	Operational
LFG-4	Detection	LF-1	Operational

**MRP Table 5. Unsaturated Zone Detection Monitoring Parameters, Soil Pore Gas.**

Monitoring Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Method TO-15 VOCs	(various)	$\mu\text{g}/\text{cm}^3$	Semiannual	Semiannual
Methane	CH4	%	Semiannual	Semiannual

**MRP Table 6. Unsaturated Zone Detection Monitoring Parameters, Lysimeter Liquids in Monthly Inspection.**

Monitoring Parameter	Units	GeoTracker Code	Monitoring Freq.	Reporting Freq.
Temperature	°F	TEMP	Semiannually	Semiannually
Electrical Conductivity	$\mu\text{mhos}/\text{cm}$	SC	Semiannually	Semiannually
pH	SU	PH	Semiannually	Semiannually
Turbidity	NTU	TURB	Semiannually	Semiannually
TDS	mg/L	TDS	Semiannually	Semiannually
Chloride	mg/L	CL	Semiannually	Semiannually
Carbonate	mg/L	CACO3	Semiannually	Semiannually

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Monitoring Parameter	Units	GeoTracker Code	Monitoring Freq.	Reporting Freq.
Bicarbonate	mg/L	BICACO3	Semiannually	Semiannually
Sulfate	mg/L	SO4	Semiannually	Semiannually
Calcium	mg/L	CA	Semiannually	Semiannually
Magnesium	mg/L	MG	Semiannually	Semiannually
Potassium	mg/L	K	Semiannually	Semiannually
Sodium	mg/L	NA	Semiannually	Semiannually
Short List VOCs (Attachment A)	µg/L	(various)	Semiannually	Semiannually
1,2,3-Trichloropropane per Method SRL-524M-TCP	µg/L	TCPR123	Semiannually	Semiannually
Total Organic Carbon	mg/L	TOC	Every 5 Yrs.	Every 5 Yrs.
Dissolved Inorganics (Attachment B)	µg/L	(various)	Every 5 Yrs.	Every 5 Yrs.
Extended List VOCs (Attachment C)	µg/L	(various)	Every 5 Yrs.	Every 5 Yrs.
Semi-Volatile Organic Compounds (Attachment D)	µg/L	(various)	Every 5 Yrs.	Every 5 Yrs.
Chlorophenoxy Herbicides (Attachment E)	µg/L	(various)	Every 5 Yrs.	Every 5 Yrs.



## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM****3. Surface Water Detection Monitoring**

- a. **Affected Waterbodies.** Runoff is collected in one or more sedimentation basins, which periodically flow to **WATERBODY**, which may be affected by a release. (§ 20415, subd. (c)(1).)
- b. **Required Network.** The surface water monitoring network consists of the monitoring points listed in **MRP Table 7**. As of the date of this Order, the network meets the requirements of Title 27. (See § 20415, subd. (c).)
- c. **Monitoring Parameters.** When surface water is present at the monitoring points in **MRP Table 7** at any point during the monitoring period, samples shall be collected from each monitoring point and analyzed for the Monitoring Parameters in **MRP Table 8**, in accordance with the specified schedule. (§ 20420, subds. (e)-(f).) Samples were last analyzed for Five-Year COCs in **YEAR**, and shall be conducted again in **YEAR**. (§ 20420, subd. (g).) Results shall be reported semiannually per **MRP Section E.1**.

**MRP Table 7. Surface Water Detection Monitoring Network.**

Monitoring Point	Program or Function	Monitored Unit	Location / Notes
SW-1	Background	LF-1	(none)
SW-2	Detection	LF-1	(none)
SW-3	Detection	LF-1	(none)

**MRP Table 8. Surface Water Detection Monitoring Parameters.**

Monitoring Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Electrical Conductivity	SC	µmhos/cm	Semiannual	Semiannual
pH	PH	SU	Semiannual	Semiannual
Turbidity	TURB	NTU	Semiannual	Semiannual

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Monitoring Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Hardness	HARD	mg / L	Semiannual	Semiannual
Presence of Oil & Grease	(none)	Yes / No	Semiannual	Semiannual
Flow to Surface Waters at Time of Sampling	(none)	Yes/No	Semiannual	Semiannual
TSS	TSS	mg/L	Semiannual	Semiannual
Chloride	CL	mg/L	Semiannual	Semiannual
Carbonate	CACO3	mg/L	Semiannual	Semiannual
Bicarbonate	BICACO3	mg/L	Semiannual	Semiannual
Nitrate as Nitrogen	NO3N	mg/L	Semiannual	Semiannual
Sulfate	SO4	mg/L	Semiannual	Semiannual
Calcium	CA	mg/L	Semiannual	Semiannual
Magnesium	MG	mg/L	Semiannual	Semiannual
Potassium	K	mg/L	Semiannual	Semiannual
Sodium	NA	mg/L	Semiannual	Semiannual
Short List VOCs (Attachment A)	(various)	µg/L	Semiannual	Semiannual
1,2,3-Trichloropropane per Method SRL-524M-TCP	TCPR123	µg/L	Semiannual	Semiannual

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Monitoring Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Total Organic Carbon	TOC	mg/L	Every 5 Yrs.	Every 5 Yrs.
Dissolved Inorganics (Attachment B)	(various)	µg/L	Every 5 Yrs.	Every 5 Yrs.
Extended List VOCs (Attachment C)	(various)	µg/L	Every 5 Yrs.	Every 5 Yrs.
Semi-Volatile Organic Compounds (Attachment D)	(various)	µg/L	Every 5 Yrs.	Every 5 Yrs.
Chlorophenoxy Herbicides (Attachment E)	(various)	µg/L	Every 5 Yrs.	Every 5 Yrs.
Organophosphorus Compounds (Attachment F)	(various)	µg/L	Every 5 Yrs.	Every 5 Yrs.

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM****4. Concentration Limits for Constituents of Concern (COCs)**

- a. The Concentration Limit for each Constituent of Concern (COC) is the “background concentration,” as determined by the statistical methods outlined in subdivision (e)(8) of section 20415. (§ 20400, subds. (a), (b).) Concentration Limits are initially proposed by the Discharger, then reviewed and approved by the Board (subject to any necessary revisions). The limits specified herein are approved and incorporated as part of the WDRs. Methods for calculating Concentration Limits were proposed in the most recent WQPS Report, and approved by the Executive Officer.
- b. Concentration Limits shall be proposed and/or updated by the Discharger on an annual basis, in the Annual Monitoring Report submitted per **MRP Section E.2**. Unless expressly rejected by the Executive Officer in writing, these Concentration Limits shall be incorporated as part of this Order.
- c. If the Discharger fails to submit periodically updated concentration limits, as provided in this MRP, the existing concentration limits shall remain operative, provided that, where appropriate, the Executive Officer may revert to lower concentrations where warranted based on existing monitoring data.
- d. The Concentration Limit for organic compounds that are neither naturally occurring, nor detected in background groundwater samples, shall be taken as the detection limit of the analytical method used (e.g., USEPA Methods 8260, 8270).

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

Whenever a COC is detected at a detection monitoring point at a concentration exceeding the applicable WQPS Concentration Limit the Discharger shall conduct verification sampling to confirm if the exceedance is due to a release, or if it is a false-positive (unless previous monitoring has already confirmed a release for that constituent at that monitoring point). An exceedance of the Concentration Limit shall be considered “measurably significant evidence of a release” that shall be either confirmed or denied through the applicable verification procedure specified in **MRP sections A.5.a or A.5.b** below.

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

**Step 1: Initial Determination.** The Discharger shall identify each analyte in the current detection monitoring point sample that exceeds either its respective MDL or PQL, and for which a release has not been previously confirmed. The Discharger shall conclude that the exceedance provides a preliminary indication of a release or a change in the nature or extent of the release, at that monitoring point, if either: (i) The data contains two or more analytes that equal or exceed their respective MDLs; or (ii) the data contains one or more analyte that equals or exceeds its PQL.

**Step 2: Notification to Board Staff.** Upon determining that there is a preliminary indication of a release, the Discharger shall immediately notify Board staff by phone or email (not required if Board staff made the determination in writing and notified Discharger).

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

**Step 4: Confirmation of Release.** As soon as the retest data are available, the Discharger shall conclude that measurably significant evidence of a release is confirmed if (not including the original sample) two or more analytes equal or exceed their respective MDLs or if one or more analyte equals or exceeds its PQL. The Discharger shall then immediately verbally notify the Board whether or not the retest confirmed measurably significant evidence of a release for the analyte at the monitoring point, and follow up with written notification submitted by certified mail within seven days of the verbal notification.

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

**Step 1: Initial Determination.** The Discharger shall compare the value reported by the laboratory for each analyte to the statistically-derived Concentration Limit from the most recent report (e.g., Annual Report or WQPS Report) that uses the approved statistical procedure. If the value exceeds the Concentration Limit for that analyte, the Discharger shall conclude that there is “measurably significant evidence of a release.” (Title 27, § 20420, subd. (i).)

**Step 2: Notification to Board Staff.** Upon determining that there is a preliminary indication of a release, the Discharger shall *immediately notify Board staff* by phone or email (not required if Board staff made the determination in writing and notified Discharger).

**Step 3: Retest Method.** Within 30 days of either the Discharger or the Board determining that there is a preliminary indication of a release, the Discharger shall implement a verification procedure/retest option in accordance with Title 27, section 20415, subdivision (e)(8)(E) and section 20420, subdivision (j)(2). (Title 27, §§ 20415(e)(8)(E), 20420(j).) The verification procedure shall include either a single “composite” retest (i.e., a statistical analysis that augments and reanalyzes the data from the monitoring point that indicated a release), or shall consist of at least two “discrete” retests (i.e., statistical analyses each of which analyzes only newly-acquired data from the monitoring point that indicated a release). (Title 27, § 20415, subd. (e)(8)(E).) The Discharger may use an alternate method previously approved in writing by the Board. The verification procedure shall comply with the requirements of Title 27, section 20415, subdivision (e)(8)(E), in addition to the performance standards of section 20415, subdivision (e)(9).

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

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The Discharger shall then *immediately verbally notify the Board* whether or not the retest confirmed measurably significant evidence of a release for the analyte at the monitoring point, and follow up with written notification submitted by certified mail within seven days of the verbal notification.

c. **Next Steps After Confirmation**

If a release has been confirmed under either of the procedures above, the Discharger shall comply with the Response to Release Requirements in the WDRs General Order. If the analyte at issue is a Five-Year COC, that analyte shall be added to list of Constituent Parameters that are monitored on a more frequent basis.

6. **Physical Evidence of a Release.**

If the Discharger determines that there is a significant physical evidence of a release, the Discharger shall immediately verbally notify Colorado River Basin Water Board staff and provide written notification by certified mail within 7 days of such determination, and within 90 days shall submit an amended report of waste discharge (ROWD) to establish an Evaluation Monitoring Program (EMP). (Title 27, §§ 20385(a)(3), 20420(l)(1)-(2).)

7. **Response to Release Requirements**

- a. In the event that the Discharger confirms that there is “measurably significant evidence of a release” per **MRP Sections A.5.a and A.5.b**, the Discharger shall comply with the time schedule of required actions in **MRP Table 9** below.
- b. If the Discharger confirms that there is measurably significant evidence of a release from the WMU at any monitoring point, the Discharger may attempt to demonstrate that a source other than the WMU caused the evidence of a release or that the evidence is an artifact caused by an error in sampling, analysis, or statistical evaluation or by natural variation in groundwater, surface water, or the unsaturated zone.
  - i. The Discharger may make a demonstration pursuant to section 20420, subdivision (k)(7) in addition to or in lieu of submitting both an amended ROWD or an engineering

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feasibility study; however, the Discharger is not relieved of the requirements and due dates of Title 27, sections 20420, subdivision (k)(6)-(7), unless Colorado River Basin Water Board staff agree that the demonstration successfully shows that a source other than the WMU caused the evidence of a release or that the evidence resulted from error in sampling, analysis, or statistical evaluation or from natural variation in groundwater, surface water, or the unsaturated zone.

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

**MRP Table 9. Time Schedule of Required Actions After Confirming Measurably Significant Evidence of Release.**

Deadline	Required Action
Immediately after Confirmation	<p><i>Additional Sampling</i></p> <p>The Discharger shall sample all monitoring points in the affected medium at that WMU and determine the concentration of all monitoring parameters and constituents of concern for comparison with established concentration limits (CLs). Because this constituent of concern (COC) scan does not involve statistical testing, the Discharger will need to collect and analyze only a single water sample from each monitoring point in the affected medium (Title 27, § 20420, subd. (k)(1))</p>
Within 14 Days of Confirmation	<p><i>Notification to Affected Persons (MSWLFs Only)</i></p> <p>For releases from MSWLFs, the Discharger shall notify all persons who own the land or reside on or in the land that directly overlies any portion of the plume of contamination if contaminants have migrated offsite if indicated by sampling of detection monitoring wells. (40 C.F.R. § 258.55(g)(1)(iii))</p>



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Deadline	Required Action
<p>Within 90 Days of Confirmation</p>	<p><i>Submit Evaluation Monitoring Program</i></p> <p>The Discharger shall submit an amended ROWD with a proposed Evaluation Monitoring Program (EMP) in accordance with Title 27, section 20420, subdivision (k)(5)(A)-(D), and incorporating the results of the immediate post-confirmation sampling activities required above. Specifically, the EMP shall be designed for the collection and analysis of all data necessary to assess the nature and extent of the release and to determine the spatial distribution and concentration of each constituent throughout the zone affected by the release. (Title 27, §§ 20420(k)(5), 20425(b).) For releases from MSWLFs, the EMP shall also include any additional proposals necessary to comply with 40 C.F.R. section 258.55, particularly the additional monitoring well required subsection (g)(1)(ii).</p> <p>The EMP is subject to Executive Officer approval, including with specified revisions. The EMP shall be considered established upon its approval.</p>
<p>Within 180 Days of Confirmation</p>	<p><i>Submit Corrective Action Feasibility Study</i></p> <p>The Discharger shall submit, for Executive Officer approval, an initial engineering feasibility study for a Corrective Action Program necessary to meet the requirements of Title 27, section 20430. At a minimum, the feasibility study shall contain a detailed description of the corrective action measures that could be taken to achieve background concentrations for all constituents of concern. (Title 27, § 20420, subd. (k)(6).)</p>

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Deadline	Required Action
Within 90 Days of EMP Approval	<p>The Discharger shall complete and submit the following:</p> <ol style="list-style-type: none"> <li data-bbox="516 449 1333 520">(1) Technical Report with EMP results and assessment. (Title 27, § 20425, subd. (b).)</li> <li data-bbox="516 537 1414 716">(2) Updated Engineering Feasibility Study for corrective action based on data collected to delineate the release and data from the ongoing monitoring program per Title 27, section 20425, subdivision (e). (Title 27, § 20425, subd. (c).)</li> <li data-bbox="516 735 1414 877">(3) Amended ROWD with a proposed Corrective Action Program in accordance Title 27, section 20430, based on data collected to delineate the release the updated engineering feasibility study. (Title 27, § 20425, subd. (d).)</li> </ol> <p>For releases from MSWLFs, prior to the final selection of a remedy the Discharger shall hold a public meeting with interested persons and affected parties, to discuss the results of the updated engineering feasibility study. (40 C.F.R. § 258.56(d).)</p>

**B. Corrective Action Monitoring Program (CAMP)**

To demonstrate the effectiveness of ongoing Correction Action at the Facility, the Discharger shall perform additional monitoring in accordance with the tables below. (Title 27, § 20430, subd. (d).) All Corrective Action monitoring results shall be reported semiannually per **MRP Section E.1**.

**1. Groundwater Corrective Action (Extraction Wells)**

The Facility's groundwater extraction network consists of the extraction wells listed in MRP Table 10. In addition to the Monitoring Parameters listed in MRP Table 3, the Discharger shall monitor extracted groundwater for the additional parameters listed in MRP Table 11.

**MRP Table 10. Groundwater Corrective Action, Extraction Well Network**

Well	Zone	Monitored Units
EW-1	Shallow	LF-1
EW-2	Shallow	LF-1
EW-3	Shallow	LF-1

**MRP Table 11. Groundwater Corrective Action, Additional Monitoring Parameters.**

Specific Well	Zone	Additional Constituents	Sampling Freq.	Reporting Freq.
EW-1, EW-2 EW-3	Shallow	TDS	Quarterly	Semiannually

**2. Landfill Gas (LFG) Corrective Action**

The landfill gas extraction network consists of the extraction wells listed in MRP Table 12. In addition to the Monitoring Parameters listed in MRP Table 3, MRP Table 5 and MRP Table 6, the Discharger shall monitor extracted groundwater for the parameters listed in MRP Table 13.

**MRP Table 12. LFG Corrective Action, Extraction Well Network.**

LFG Extraction Well	Associated WMU
SVP-1	LF-1

**MRP Table 13. LFG Corrective Action, Extraction Well Monitoring Parameters.**

Monitoring Parameter	Units	Sampling Freq.	Reporting Freq.
Atmospheric Temperature	°F	Quarterly	Semiannually

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Monitoring Parameter	Units	Sampling Freq.	Reporting Freq.
Atmospheric Pressure	Inches Hg	Quarterly	Semiannually
Methane	% by Vol.	Quarterly	Semiannually
Carbon Dioxide	% by Vol.	Quarterly	Semiannually
Oxygen	% by Vol.	Quarterly	Semiannually
Remainder Gas	% by Vol.	Quarterly	Semiannually
Gas Temperature at Each Well	°F	Quarterly	Semiannually
Initial Static Pressure in Wellhead	Inches Hg	Quarterly	Semiannually
Adjusted Static Pressure in Wellhead	Inches Hg	Quarterly	Semiannually

**MRP Table 14. LFG Corrective Action, Control System Performance.**

Parameter	Units	Sampling Freq.	Reporting Freq.
System Shutdowns	N/A	N/A	Semiannually
Monthly Runtime	Hours	N/A	Semiannually
Monthly Downtime	%	N/A	Semiannually
Temperature into Plant	°F	Quarterly	Semiannually
Flare Combustion Temperature	°F	Quarterly	Semiannually
System Vacuum	mm Hg vacuum	Quarterly	Semiannually
Totalized Flow into Plant	ft <sup>3</sup>	Quarterly	Semiannually
Totalized Flow Rate into Plant	ft <sup>3</sup> / min	Quarterly	Semiannually

## CLOSED LANDFILL FACILITIES

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Parameter	Units	Sampling Freq.	Reporting Freq.
VOCs per USEPA Method TO-15 in Influent	µg / cm	Quarterly	Semiannually
Methane in Influent	%	Quarterly	Semiannually

**C. Additional Facility Monitoring****1. Leachate Collection & Removal Systems (LCRS) Monitoring**

The Discharger shall operate and maintain leachate collection and removal system (LCRS) sumps, and conduct monitoring of any detected leachate seeps in accordance with Title 27 and the following provisions.

- a. **Annual Testing.** Each LCRS shall be tested annually to demonstrate proper operation, with the results of each test being compared to the results of prior testing. (See Title 27, § 20340, subd. (d).) Results shall be reported annually per **MRP Section E.2.i.**
- b. **Monthly LCRS Sump Inspections.** LCRS sumps shall be inspected monthly for the presence of leachate. As provided in **MRP Table 15**, the total flow and flow rate for leachate in each sump shall be recorded after each inspection and reported semiannually per **MRP Section E.1.**
- c. **Monitoring Parameters for Leachate in LCRS Sump.** Upon detecting leachate in a previously dry sump, the Discharger shall notify Board staff within seven days, and immediately sample and analyze leachate for the parameters in **MRP Table 16**.<sup>13</sup> Thereafter, whenever leachate is present in the same sump, it shall be sampled and analyzed for the same parameters, in accordance with the specified schedule. MRP Table 16 includes

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<sup>13</sup> The sampling and reporting schedules in **MRP Table 16** are applicable for subsequent monitoring only. When notifying Colorado River Basin Water Board staff of the first detection of leachate, the Discharger shall indicate when laboratory results are expected to be available.

## CLOSED LANDFILL FACILITIES

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Five-Year COCs, which were last analyzed in **YEAR**, and shall be analyzed again in **YEAR**. Results shall be reported semiannually per **MRP Section E.1**.

**MRP Table 15. LCRS Sump Monitoring, Monthly Inspection Parameters.**

Physical Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Total Flow	(none)	Gallons	Monthly	Semiannually
Flow Rate	FLOW	Gallons/Day	Monthly	Semiannually

**MRP Table 16. LCRS Sump Monitoring, Parameters for Subsequent Monitoring.**

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Electrical Conductivity	SC	µmhos/cm	Quarterly	Semiannually
pH	PH	SU	Quarterly	Semiannually
TDS	TDS	mg/L	Quarterly	Semiannually
Chloride	CL	mg/L	Quarterly	Semiannually
Carbonate	CACO3	mg/L	Quarterly	Semiannually
Bicarbonate	BICACO3	mg/L	Quarterly	Semiannually
Nitrate (as Nitrogen)	NO3N	mg/L	Quarterly	Semiannually
Sulfate	SO4	mg/L	Quarterly	Semiannually
Calcium	CA	mg/L	Quarterly	Semiannually
Magnesium	MG	mg/L	Quarterly	Semiannually
Potassium	K	mg/L	Quarterly	Semiannually
Sodium	NA	mg/L	Quarterly	Semiannually

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Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Short List VOCs (Attachment A)	(various)	µg/L	Quarterly	Semiannually
1,2,3-Trichloropropane per Method SRL-524M-TCP	TCPR123	µg/L	Quarterly	Semiannually
Total Organic Carbon	TOC	mg/L	Every 5 Yrs.	Every 5 Yrs.
Dissolved Inorganics (Attachment B)	(various)	µg/L	Every 5 Yrs.	Every 5 Yrs.
Extended List VOCs (Attachment C)	(various)	µg/L	Every 5 Yrs.	Every 5 Yrs.
Semi-Volatile Organic Compounds (Attachment D)	(various)	µg/L	Every 5 Yrs.	Every 5 Yrs.
Chlorophenoxy Herbicides (Attachment E)	(various)	µg/L	Every 5 Yrs.	Every 5 Yrs.
Organophosphorus Compounds (Attachment F)	(various)	µg/L	Every 5 Yrs.	Every 5 Yrs.
Total Organic Carbon	TOC	mg/L	Every 5 Yrs.	Every 5 Yrs.

**2. Leachate Seepage**

Immediately upon detecting leachate seepage to the surface, the Discharger shall sample the leachate and analyze it for the Monitoring Parameters in **MRP Table 17**. Results shall be reported semiannually per **MRP Section E.1**.

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**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM****MRP Table 17. Leachate Seep Monitoring Parameters.**

Physical Parameter	GeoTracker Code	Units	Sampling Freq.
Total Flow	(none)	Gallons	Upon Detection
Flow Rate	FLOW	Gallons/Day	(same)
Electrical Conductivity	SC	µmhos/cm	(same)
pH	PH	SU	(same)
TDS	TDS	mg/L	(same)
Chloride	CL	mg/L	(same)
Carbonate	CACO3	mg/L	(same)
Bicarbonate	BICACO3	mg/L	(same)
Nitrate as N	NO3N	mg/L	(same)
Sulfate	SO4	mg/L	(same)
Calcium	CA	mg/L	(same)
Magnesium	MG	mg/L	(same)
Potassium	K	mg/L	(same)
Sodium	NA	mg/L	(same)
Short List VOCs (Attachment A)	(various)	µg/L	(same)
1,2,3-Trichloropropane per Method SRL-524M-TCP	TCPR123	µg/L	(same)



## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM****3. Regular Visual Inspection**

The Discharger shall perform the regular visual inspections in **MRP Table 18** on a monthly basis during the “wet season” (October 1 to April 30) and quarterly during the “dry season” (May 1 to September 30). Results of these regular visual inspections shall be included in Semiannual Monitoring Reports per **MRP Section E.1**.

**MRP Table 18. Criteria for Regular Visual Inspections.**

Category	Criteria
Within Unit	<ul style="list-style-type: none"> <li>• Evidence of ponded water at any point on unit outside of any contact storm water/leachate diversions structures on the active face of unit (record affected areas on map).</li> <li>• Evidence of erosion and/or of day-lighted refuse.</li> </ul>
Unit Perimeter	<ul style="list-style-type: none"> <li>• Evidence of leachate seep.</li> <li>• Estimated size of affected area (record on map) and flow rate.</li> <li>• Evidence of erosion and/or of day-lighted refuse.</li> </ul>
Receiving Surface Waters	<ul style="list-style-type: none"> <li>• Floating and suspended materials of waste origin—presence or absence, source and size of affected areas.</li> <li>• Discoloration and turbidity (description of color, source and size of affected areas).</li> </ul>

**4. Annual Facility Inspections**

Prior to **September 30th**, the Discharger shall inspect the Facility to assess repair and maintenance needs for drainage control systems, cover systems and groundwater monitoring wells; and preparedness for winter conditions (e.g., erosion and sedimentation control). If repairs are made as result of the annual inspection, problem areas shall be photographed before and after repairs. Any necessary construction, maintenance or repairs shall be completed by **October 31st**. See **MRP Section E.5** for Reporting Requirements.

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM****5. Major Storm Events**

Within seven days of any storm event capable of causing damage or significant erosion (Major Storm Event), the Discharger shall inspect the Facility for damage to any precipitation, diversion and drainage facilities, and all landfill side slopes. Necessary repairs shall be completed within 30 days of the inspection. The Discharger shall take photos of any problem areas before and after repairs. See **MRP Section E.4** for reporting requirements.

**6. Five-Year Iso-Settlement Surveys**

Upon completion of closure activities, the Discharger shall complete a Final Cover Survey for the Closed Landfill; these surveys shall include an initial survey and map. (Title 27, § 21090, subd. (e)(1).) Every five years thereafter, the Discharger shall conduct an iso-settlement survey of each closed landfill and produce an iso-settlement map accurately depicting the estimated total change in elevation of each portion of the final cover's low-hydraulic-conductivity layer. For each portion of the landfill, this map shall show the total lowering of the surface elevation of the final cover, relative to the baseline topographic map. (Title 27, § 21090, subd. (e)(1)-(2).) See **MRP Section E.2.I** for reporting requirements.

**7. Other Required Notifications**

The Discharger shall **immediately notify** Board staff of the following occurrences:

- a. Any slope failure occurring at a WMU. Any failure which threatens the integrity of containment features or the WMU shall be promptly corrected in accordance with an approved method. (Title 27, § 21710, subd. (c)(2).)
- b. Any flooding, unpermitted discharge of waste off-site or outside of WMUs, equipment failure, or other change in site conditions which could impair the integrity of waste or leachate containment facilities or precipitation and drainage control structures.

**D. General Monitoring Provisions**

**1. Monitoring Networks at Facility**

- a. The groundwater detection monitoring network shall include a sufficient number of monitoring points, installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that represent the quality of groundwater passing the Point of Compliance (POC) to allow the detection of a release from the WMU at the earliest possible opportunity. (§ 20415, subd. (b)(1)(B)1.) Additional points shall be added as necessary to provide the best assurance of the earliest possible detection. (§ 20415, subd. (b)(1)(B)2.) The network shall also include a sufficient number of monitoring points installed at appropriate depths and locations to yield groundwater samples from other aquifers or perched zones not already monitored. (§§ 20415(b)(1)(B)3-4, 20420(b).)
- b. All monitoring systems shall be designed and certified by a licensed civil engineer or certified engineering geologist (Qualified Professional). (Title 27, § 20415, subd. (e)(1).)
- c. Monitoring wells shall be cased and constructed in a manner that maintains bore hole integrity and prevents the bore hole from acting as a conduit for contaminant transport. (Title 27, § 20415, subd. (b)(4)(A).)
- d. The Discharger shall lock all groundwater monitoring wells with a lock on the well cap or monitoring well box. All monitoring devices shall be clearly labeled with their designation including all monitoring wells, LCRS risers, and lysimeter risers and shall be easily accessible for required monitoring by authorized personnel. Each monitoring device shall be clearly visible and be protected from damage by equipment or vehicles.
- e. Monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to design specifications throughout the life of the monitoring program. (40 C.F.R. § 258.51(c)(2).) Monitoring devices that cannot be operated and maintained to perform to design specifications shall be replaced after review and approval of a report (i.e., work plan) for the proposed replacement devices.

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

- f. All borings are to be logged during drilling under the direct supervision of a registered geologist or registered civil engineer with expertise in stratigraphic well logging. (Title 27, § 20415(e)(2).)
- g. Soils are to be described according to the Unified Soil Classification System. (Title 27, § 20415, subd. (e)(2)(A).) Rock is to be described in a manner appropriate for the purpose of the investigation. (Title 27, § 20415, subd. (e)(2)(B).)
- h. The Discharger shall submit a work plan for review and approval at least **60 days** prior to installation or abandonment of groundwater monitoring wells.
- i. The Discharger shall provide Board staff a minimum of **one-week** notification prior to commencing any field activities related to the installation or abandonment of monitoring devices.
- j. Driller's logs for all monitoring wells shall be submitted to the Board and Department of Water Resources (DWR). (Wat. Code, § 13751; Title 27, § 20415, subd. (b)(3).)
- k. The groundwater monitoring system shall include a sufficient number of monitoring points, installed at appropriate locations, to yield groundwater samples from the uppermost aquifer that represent the quality of groundwater that has not been affected by a release from the WMU (Title 27, § 20415, subd. (b)(1)(A).)
- l. The sampling interval of each monitoring well shall be appropriately screened and fitted with an appropriate filter pack to enable collection of representative groundwater samples. (Title 27, § 20415, subd. (b)(4)(B).) Groundwater samples shall not be field-filtered prior to laboratory analysis. (40 C.F.R. § 258.53(b).) Groundwater samples needing filtering (e.g., samples to be analyzed for dissolved metals) shall be filtered by the laboratory prior to analysis.
- m. Groundwater elevations shall be measured in each well immediately prior to purging, each time groundwater is sampled. The owner or operator shall determine the rate and direction of groundwater flow each time groundwater is sampled. Groundwater elevations in wells which monitor the same waste management area shall be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude

accurate determination of groundwater flow rate and direction.  
(40 C.F.R. § 258.53(d).)

**2. Sample Collection and Analysis**

- a. The Discharger shall submit, for Executive Officer approval, a Sample Collection and Analysis Plan (SCAP), which includes the following elements:
  - i. Sample collection procedures, describing purging techniques, sampling equipment, and decontamination of sampling equipment;
  - ii. Sample preservation information and shipment procedures;
  - iii. Sample analytical methods and procedures;
  - iv. Sample Quality Assurance/Quality Control (QA/QC) procedures;
  - v. Chain of Custody Control; and
  - vi. 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.
- b. The Executive Officer may require that the Discharger submit a Revised SCAP with specified revisions. Upon approval, the SCAP shall be implemented for all applicable monitoring activities at the Facility.
- c. All samples shall be collected, preserved and transported in accordance with the approved SCAP, and the QA/QC standards specified therein. The Discharger may use alternative methods (including new USEPA-approved methods), provided that the methods have MDLs equal to or lower than the analytical methods specified herein and are identified in the approved SCAP.
- d. Background for water samples or soil-pore gas samples shall be represented by the data from all samples taken from applicable background monitoring points during that reporting period (at least one sample from each background monitoring point).

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

- e. Sample analyses shall be performed by a lab certified by the State Water Resources Control Board's Environmental Laboratory Accreditation Program (ELAP). (Wat. Code, § 13176, subd. (a).)
- f. Where lab analysis is required, samples analyzed using the most recent version of the USEPA Methods specified herein. If no method is specified, the Discharger shall propose an analytical method for written concurrence by Board staff prior to use in satisfying the requirements of this MRP.
- g. For any given monitored medium, the samples taken from all monitoring points and background monitoring points to satisfy the data analysis requirements for a given reporting period shall all be taken within a span not to exceed 30 days, unless a longer time period is approved in writing, and shall be taken in a manner that ensures sample independence to the greatest extent feasible.
- h. Analytical methods and the detection limits shall be appropriate for anticipated concentrations. For Monitoring Parameters producing non-numerical determinations (i.e., "trace" or "non-detect") in 90 percent of background monitoring results for a given medium, the Discharger shall use the method with the lowest MDL (among those methods that would provide valid results in light of any matrix effects or interferences).
- i. Where lab analysis is required, the reporting limit (RL) for all reported monitoring data shall be less than or equal to the practical quantitation limit (PQL).
- j. All "trace" results (between MDL and PQL) shall be reported as such, and shall be accompanied both by estimated MDL and PQL values for that analytical run.
- k. Lab data shall not be altered or revised by the Discharger. If the Discharger observes potential lab errors, it shall identify the issue in the monitoring report and shall describe steps that will be taken to prevent similar errors in the future.
- l. MDLs and PQLs shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. These MDLs and PQLs shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the lab, rather than simply being quoted from USEPA analytical method manuals. In relatively

## CLOSED LANDFILL FACILITIES

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interference-free water, laboratory-derived MDLs and PQLs are expected to closely agree with published USEPA MDLs and PQLs. MDLs and PQLs shall be reported.

- m. If the laboratory suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged in the laboratory report accordingly, along with estimates of the detection limit and quantitation limit actually achieved. The MDL shall always be calculated such that it represents the lowest achievable concentration associated with a 99 percent reliability of a nonzero result. The PQL shall always be calculated such that it represents the lowest constituent concentration at which a numerical value can be assigned with reasonable certainty that it represents the constituent's actual concentration in the sample. Normally, PQLs should be set equal to the concentration of the lowest standard used to calibrate the analytical procedure.
- n. All QA/QC data shall be reported, along with the sample results to which they apply, including the method, equipment, analytical detection and quantitation limits, the percent recovery, an explanation for any recovery that falls outside the QC limits, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name and signature of a responsible person from the laboratory. Sample results shall be reported unadjusted for blank results or spike recoveries. 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.
- o. Unknown chromatographic peaks shall be reported, flagged, and tracked for potential comparison to subsequent unknown peaks that may be observed in future sampling events. Identification of unknown chromatographic peaks that recur in subsequent sampling events may be required.

**3. Statistical Analyses**

- a. For each WMU, the Discharger shall collect all data necessary for selecting appropriate data analysis methods for establishing background values for each Monitoring Parameter. (§ 20420, subd. (c).) The Discharger shall propose a data analysis method that includes a detailed description of criteria used for determining “measurably significant” (as defined per § 20164) evidence of a release from the WMU and determining compliance with the Concentration Limits. (§ 20415, subd. (e)(6)-(7).)
- b. For statistical analysis of data, the Discharger shall use one of the methods described in section 20415, subdivision (e)(8)(A)-(E). A non-statistical data analysis method may be used if the method can achieve the goal of the particular monitoring program at least as well as the most appropriate statistical method. (§ 20415, subd. (e)(8).) The Discharger shall use a statistical or nonstatistical data analysis method compliant with subdivision (e)(7)-(10) to compare the concentration of each COC or monitoring parameter with its respective background concentration to determine whether there has been a “measurably significant” evidence of a release from the WMU. For any given monitoring point at which a given constituent has already exhibited a “measurably significant” indication of a release at that monitoring point, the Discharger may propose to monitor the constituent, at that well, using a concentration-versus-time plot.
- c. The Discharger may propose, for review and approval, an alternate statistical method in lieu of methods listed in section 20415, subdivision (e)(8)(A)-(D). (§ 20415, subd. (e)(8)(E).)
- d. The statistical method shall account for data below the practical quantitation limit (PQL) with one or more statistical procedures that are protective of human health and the environment.
- e. Any PQL validated per section 20415, subdivision (e)(7) that is used in the statistical method shall be the lowest concentration (or value) that can be reliably achieved within limits of precision and accuracy specified in an approved SCAP for routine laboratory operating conditions that are available to the facility. The Discharger’s technical report (SCAP and/or WQPS Report) per subdivision (e)(7) shall consider the PQLs listed in of California Code of Regulations, title 22 (Title 22), Division 4.5, Chapter 14,



## CLOSED LANDFILL FACILITIES

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Appendix IX, for guidance when specifying limits of precision and accuracy. (Title 27, § 20415, subd. (e)(7).)

- f. For any given constituent monitored at a background or downgradient monitoring point, “trace” indications (between MDL and PQL) shall be identified and used in appropriate statistical or non-statistical tests.
- g. For a statistical method that is compatible with the proportion of censored data (“trace” and “non-detect”) in the dataset, the Discharger may use the lab’s concentration estimates in the “trace” range (if available) for statistical analysis, in order to increase the statistical power by decreasing the number of “ties.”
- h. Alternate statistical procedures may be used for determining the significance of analytical results for common laboratory contaminants (i.e., methylene chloride, acetone, diethylhexyl phthalate, and di-n-octyl phthalate) if part of an approved WQPS. Nevertheless, analytical results involving detection of these analytes in any background or downgradient sample shall be reported and flagged for easy reference by Board staff.

**E. Reporting Requirements**

**MRP Table 19. Summary of Required Reports.**

Section	Report	Deadline
§ E.1	Semiannual Monitoring Reports (SMRs)	August 1st (1 January to 30 June)  February 1st (1 July to 31 December)
§ E.2	Annual Monitoring Reports (AMRs)	February 1st
§ E.3	Leachate Seep Reporting	Immediately upon Discovery ( <i>staff notification</i> )  Within 7 Days ( <i>written report</i> )
§ E.4	Annual Facility Inspection Reports	November 15th
§ C.5, § E.4	Major Storm Reporting	Immediately after Damage Discovery ( <i>staff notification</i> )  Within 14 Days of Completing Repairs ( <i>written report, photos</i> )
§ C.6	Survey and Iso-Settlement Mapping	Every Five Years (Next Due in YEAR)
§ E.6	Financial Assurances Reports	June 1st
§ E.7	Water Quality Protection Standard Reports	Proposed Revisions (excluding Concentration Limits)

1. **Semiannual Monitoring Reports**

The Discharger shall submit Semiannual Monitoring Reports on **August 1st** (Jan.1 to June 30) and **February 1st** (July 1 to Dec. 31). These reports shall contain the following materials and information:

- a. Affirmation that all sampling activities referenced in the report were conducted in accordance with the approved SCAP.
- b. Maps/aerial photographs depicting locations of all observation stations, monitoring points referenced in the report.
- c. In tabulated format, all monitoring data required to be reported on a semiannual basis (see § E.8.b).
- d. For each groundwater monitoring point referenced:
  - i. The times each water level measurement was taken;
  - ii. The type of pump or other device used to purge and elevate pump intake level relative to screening interval;
  - iii. The purging methods used to stabilize water in the well bore before sampling (including pumping rate);
  - iv. The equipment and methods used for the monitoring of pH, temperature and EC during purging activity, and the results of such monitoring;
  - v. Methods for disposing of purged water; and
  - vi. The type of device used for sampling, if different than the one used for purging.
- e. Concentrations (or other results) for all Monitoring Parameters (including Five-Year COCs, when analyzed); a comparison to operative WQPS Concentration Limits; and results of any Retest Procedures (see MRP, § A.5).
- f. In the event of a verified exceedance of WQPS Concentration Limit(s), any actions taken in accordance with Section A.7 for wells and/or constituents not already specifically addressed in Corrective Action Monitoring per this MRP.

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

- g. Evaluation as to effectiveness of existing leachate monitoring and control facilities, and runoff/run-on control facilities.
- h. For lined landfill units, a summary of any instances where leachate on the landfill liner system exceeded a depth of 30 cm (excluding the leachate sump), and information about the required notification and corrective action.
- i. Summaries of all Regular Visual Inspections conducted per **Section 0** during the reporting period.
- j. Summaries of inspections, leak searches and final cover repairs conducted in accordance with an approved CPCMP.
- k. Laboratory statements of results of all analyses evaluating compliance with the WDRs.
- l. For any Corrective Action systems at the Facility, tabulated summaries of:
  - i. Operating hours;
  - ii. Monthly runtimes and downtimes; and
  - iii. Shutdowns, including start/stop dates and causes.

2. **Annual Monitoring Reports**<sup>14</sup>

On **February 1st** of each year, the Discharger shall submit an Annual Monitoring Report containing following materials and information:

- a. In tabulated format, monitoring data for which annual reporting is required.
- b. Graphs of all analytical data from each POC monitoring point, from each non-POC downgradient monitoring point, and from each background monitoring point. (§ 20415, subd. (e)(14).)
- c. Graphs of historical trends for all Monitoring Parameters, including Five-Year COCs, with respect to each monitoring point over the past five calendar years.<sup>15</sup>
- d. Evaluation of Monitoring Parameters with regard to the cation/anion balance, and graphical presentation of same in a Stiff diagram, Piper graph or Schoeller plot.
- e. In tabulated format, historical monitoring data for which there are detectable results, including data for the previous year.
- f. For each groundwater well, quarterly hydrographs showing the elevation of groundwater with respect to the top and bottom of the screened interval, and the elevation of the pump intake.
- g. Comprehensive discussion of the Facility's compliance record, and the result of any corrective actions taken or planned which may be needed to attain full compliance with the General WDRs Order.
- h. Summary of monitoring results, indicating changes made or observed since the previous Annual Monitoring Report.

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<sup>14</sup> The Annual Monitoring Report may be combined with the Semiannual Monitoring Report for July 1st through December 31st of the same year, provided that the combination is clearly indicated in the title.

<sup>15</sup> Each graph shall contain individual data points (not mean values) and be appropriately scaled to accurately depict statistically significant trends or variations in water quality.

- i. Discussion of Annual LCRS Testing results (§ C.1.a).
- j. Annual updates to Concentration Limits for all Monitoring Parameters and WQPS Monitoring Points.
- k. To assess the progress of ongoing Corrective Action at the Facility, the following: [e.g., removal data].
- l. Results of any five-year iso-settlement surveys conducted within the subject year (§ C.6).

**3. Leachate Seep Reporting**

Upon discovery of seepage from any disposal area within the Facility, the Discharger shall immediately notify the Colorado River Basin Water Board via telephone or email; and within seven days, submit a written report with the following information:

- a. Map(s) depicting the location(s) of seepage;
- b. Estimated flow rate(s);
- c. A description of the nature of the discharge (e.g., all pertinent observations and analyses);
- d. Verification that samples have been submitted for analyses of the Monitoring Parameters in MRP Table 17, and an estimated date that the results will be submitted to the Colorado River Basin Water Board; and
- e. Corrective measures underway or proposed, and corresponding time schedule.

**4. Major Storm Reporting**

The Discharger shall notify Board staff, via phone or email, immediately upon discovering damage to the Facility resulting from a Major Storm Event (see C.5 for definition). Within 14 days of completing any necessary repairs per MRP Section C.5, the Discharger shall submit a report discussing the repairs; before and after photos shall be included.

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM****5. Annual Facility Inspection Report**

By **15 November**, the Discharger shall submit a report with results of the Annual Facility Inspection per **Section C.4**. The report shall discuss any repair measures implemented, any preparations for winter, and include photographs of any problem areas and repairs. Immediately following each post-storm inspection described in **Section C.5**, the Discharger shall notify Colorado River Basin Water Board staff of any damage or significant erosion (upon discovery). Subsequent repairs shall be reported to the Colorado River Basin Water Board (together with before and after photos of the repaired areas) within 14 days of completion. The Discharger shall submit all iso settlement maps prepared in accordance with **Section C.6**. (Title 27, § 21090, subd. (e).) The next maps are due in **YEAR**.

**6. Financial Assurances Report**

By **June 1st** of each year, the Discharger shall submit a copy of the annual financial assurances report due to the California Department of Resources Recycling and Recovery (CalRecycle) that updates the financial assurances cost estimates for post-closure maintenance and corrective action.

**7. Water Quality Protection Standard Report**

Any proposed changes<sup>16</sup> to the WQPS components, other than periodic update of the Concentration Limits, shall be submitted in a WQPS Report for review and approval. The report shall be certified by a “Qualified Professional” (§ B), and contain the following:

- a. An identification of all distinct bodies of surface water and groundwater potentially affected by a WMU release (including, but not limited to, the uppermost aquifer and any permanent or ephemeral zones of perched groundwater underlying the Facility);

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<sup>16</sup> If subsequent sampling of the background monitoring point(s) indicates significant water quality changes due to either seasonal fluctuations or other reasons unrelated to onsite activities, the Discharger may request modification of the WQPS.

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

- b. A map of all groundwater, surface water<sup>17</sup> and unsaturated zone monitoring points (including all background/upgradient and POCs);
- c. An evaluation of perennial direction(s) of groundwater movement within the uppermost zone(s);
- d. A proposed statistical method for calculating Concentration Limits for Monitoring Parameters (including Five-Year COCs) detected in at least 10 percent of the background data using a statistical procedure from subdivisions (e)(8)(A)-(D) or (e)(8)(E) of section 20415; and
- e. A retesting procedure to confirm or deny measurably significant evidence of a release (§§ 20415(e)(8)(E), 20420(j)(1)-(3)).

**8. General Reporting Provisions**

- a. **Transmittal Letters.** Each report submitted under this MRP shall be accompanied by a Transmittal Letter providing a brief overview of the enclosed report, as well as the following:
  - i. Any violations found since the last report was submitted, a description of all actions undertaken to correct the violation (referencing any previously submitted time schedules for compliance), and whether the violations were corrected; and
  - ii. A statement from the submitting party, or its authorized agent, signed under penalty of perjury, certifying that, to the best of the signer's knowledge, the contents of the enclosed report are true, accurate and complete.
- b. **Electronic Submittal via GeoTracker.** Reports shall be submitted electronically via the State Water Board's [GeoTracker Database](https://geotracker.waterboards.ca.gov) (<https://geotracker.waterboards.ca.gov>). After uploading, the Discharger shall notify Colorado River Basin Water Board staff via email to [RB7\\_WDRs\\_paperless@waterboards.ca.gov](mailto:RB7_WDRs_paperless@waterboards.ca.gov), or another

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<sup>17</sup> To the extent surface water monitoring is included in Detection Monitoring.



## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

address specified by staff. The following information shall be included in the body of the email:

<b>Attention:</b>	Land Disposal Unit
<b>Report Title:</b>	[Report Title]
<b>Upload ID:</b>	[Number]
<b>Facility:</b>	[Facility]
<b>County:</b>	[County]
<b>GeoTracker ID:</b>	[Number]

- c. **Preparation of Technical Reports by Qualified Professionals.** All technical reports submitted under this Order shall be prepared by, or under the direct supervision of, a licensed civil engineer or engineering geologist (Qualified Professional). For the purposes of this section, a “technical report” is a report incorporating the application of scientific or engineering principles.
- d. **Certifications for Submittals.** All submittals under this Order shall be accompanied by a transmittal containing the following certification that is signed by either the Required Signatory (specified in the table below) or their Authorized Representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.
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**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

To act as an **Authorized Representative** for a Required Signatory, an individual must be identified<sup>18</sup> and duly authorized in writing by the Required Signatory; this written authorization shall be provided to the Board beforehand, or concurrently with the first submittal signed by the Authorized Representative.

**MRP Table 20. Required Signatories for Submittals.**

Category	Required Signatory
Corporation	Senior Vice President or Equivalent Principal Executive
Limited Liability Companies (LLCs)	Manager
General Partnerships and Limited Partnerships (LPs)	General Partner
Sole Proprietorship	Sole Proprietor
Municipalities and Other Public Agencies	Principal Executive or Ranking Elected/Appointed Official

- e. **Data Presentation and Formatting.** In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. Additionally, data shall be summarized in a manner that clearly illustrates compliance/noncompliance with WDRs.
- f. **Non-Detections / Reporting Limits.** Unless the reporting limits (RL) are specified in the same table, non-detections and sub-RL concentrations shall be reported as “< [limit]” (e.g., “< 5 µg/L”).
- g. **Units.** Absent specific justification, all monitoring data shall be reported in the units specified herein.

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<sup>18</sup> This identification may be in reference to the Authorized Representative’s title or position, provided it is one that customarily has the responsibility of supervising a facility’s overall operation (e.g., facility manager, superintendent).

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

- h. **Additional Requirements.** Every monitoring report submitted under this MRP shall include a discussion of relevant field and laboratory tests, and the results of all monitoring conducted at the site shall be reported to the Board in accordance with the reporting schedule above for the calendar period in which samples were taken or observations made.

**F. Record Retention Requirements**

The Discharger shall maintain permanent records of all monitoring information, including without limitation: calibration and maintenance records; original strip chart recordings of continuous monitoring instrumentation; copies of all reports required by this MRP; and records of all data used to complete applications for WDRs. Such records shall be legible, and show the following for each sample:

1. Sample identification and the monitoring point or background monitoring point from which it was taken, along with the identity of the individual who obtained the sample;
2. Date, time and manner of sampling;
3. Date and time that analyses were started and completed, and the name of the personnel and laboratory performing each analysis;
4. A complete list of procedures used (including method of preserving the sample, and the identity and volumes of reagents used);
5. A calculation of results; and
6. The results of all analyses, as well as the MDL and PQL for each analysis (all peaks shall be reported).

**LIST OF ATTACHMENTS**

**MRP Attachment A**—Volatile Organic Compounds, Short List

**MRP Attachment B**—Dissolved Inorganics (Five-Year COCs)

**MRP Attachment C**—Volatile Organic Compounds, Extended List (Five-Year COCs)

**MRP Attachment D**—Semi-Volatile Organic Compounds (Five-Year COCs)

**MRP Attachment E**—Chlorophenoxy Herbicides (Five-Year COCs)

**MRP Attachment F—Organophosphorous Compounds (Five Year COCs)**

**ENFORCEMENT**

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

**ADMINISTRATIVE REVIEW**

Any person aggrieved by this Colorado River Basin Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. To be timely, the petition must be received by the State Water Board by 5:00 pm on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday or state holiday, the petition must be received by the State Water Board by 5:00 pm on the next business day. The law and regulations applicable to filing petitions are available on the [State Water Board website](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) ([http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)). Copies will also be provided upon request.

**EXECUTIVE OFFICER SIGNATURE**

This Facility-Specific MRP is effective as of the date set forth below.

ORDERED BY:

\_\_\_\_\_  
PAULA RASMUSSEN  
Executive Officer

\_\_\_\_\_  
DATE

**MRP Attachment A—Volatile Organic Compounds, Short List**

**USEPA Method 8260B Volatile Organic Compounds, Short List**

<b>Volatile Organic Compounds (VOCs)</b>	<b>Geotracker Code</b>
Acetone	ACE
Acrylonitrile	ACRAMD
Benzene	BZ
Bromochloromethane	BRCLME
Bromodichloromethane	BDCME
Bromoform (Tribromomethane)	TBME
Carbon disulfide	CDS
Carbon tetrachloride	CTCL
Chlorobenzene	CLBZ
Chloroethane (Ethyl chloride)	CLEA
Chloroform (Trichloromethane)	TCLME
Dibromochloromethane (Chlorodibromomethane)	DBCME
1,2 Dibromo 3 chloropropane (DBCP)	DBCP
1,2 Dibromoethane (Ethylene dibromide; EDB)	EDB
o Dichlorobenzene (1,2 Dichlorobenzene)	DCBZ12
m Dichlorobenzene (1,3 Dichlorobenzene)	DCBZ13
p Dichlorobenzene (1,4 Dichlorobenzene)	DCBZ14
trans 1,4 Dichloro 2 butene	DCBE14T
Dichlorodifluoromethane (CFC-12)	FC12

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

<b>Volatile Organic Compounds (VOCs)</b>	<b>Geotracker Code</b>
1,1 Dichloroethane (Ethylidene chloride)	DCA11
1,2 Dichloroethane (Ethylene dichloride)	DCA12
1,1 Dichloroethylene (1,1 Dichloroethene; Vinylidene chloride)	DCE11
cis 1,2 Dichloroethylene (cis 1,2 Dichloroethene)	DCE12C
trans 1,2 Dichloroethylene (trans 1,2 Dichloroethene)	DCE12T
1,2 Dichloropropane (Propylene dichloride)	DCPA12
cis 1,3 Dichloropropene	DCP13C
trans 1,3 Dichloropropene	DCP13T
Di-isopropylether (DIPE)	DIPE
Ethanol	ETHANOL
Ethyltertiary butyl ether	ETBE
Ethylbenzene	EBZ
2 Hexanone (Methyl butyl ketone)	HXO2
Hexachlorobutadiene	HCBU
Methyl bromide (Bromomethene)	BRME
Methyl chloride (Chloromethane)	CLME
Methylene bromide (Dibromomethane)	DBMA
Methylene chloride (Dichloromethane)	DCMA
Methyl ethyl ketone (MEK: 2 Butanone)	MEK
Methyl iodide (Iodomethane)	IME
Methyl t-butyl ether	MTBE

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

<b>Volatile Organic Compounds (VOCs)</b>	<b>Geotracker Code</b>
4-Methyl 2 pentanone (Methyl isobutylketone)	MIBK
Naphthalene	NAPH
Styrene	STY
Tertiary amyl methyl ether	TAME
Tertiary butyl alcohol	TBA
1,1,1,2 Tetrachloroethane	TC1112
1,1,2,2 Tetrachloroethane	PCA
Tetrachloroethylene (Tetrachloroethene; Perchloroethylene)	PCE
Toluene	BZME
1,2,4-Trichlorobenzene	TCB124
1,1,1 Trichloroethane (Methylchloroform)	TCA111
1,1,2 Trichloroethane	TCA112
Trichloroethylene (Trichloroethene)	TCE
Trichlorofluoromethane (CFC 11)	FC11
1,2,3 Trichloropropane	TCPR123
Vinyl acetate	VA
Vinyl chloride	VC
Xylenes	XYLENES

**MRP Attachment B—Dissolved Inorganics (Five-Year COCs)**

**Dissolved Inorganics (Five-Year COCs)**

Constituent	Analytical Method	Geotracker Code
Aluminum	USEPA Method 6010	AL
Antimony	USEPA Method 7041	SB
Arsenic	USEPA Method 7062	AS
Barium	USEPA Method 6010	BA
Beryllium	USEPA Method 6010	BE
Cadmium	USEPA Method 7131A	CD
Chromium	USEPA Method 6010	CR
Cobalt	USEPA Method 6010	CO
Copper	USEPA Method 6010	CU
Cyanide	USEPA Method 9010C	CN
Iron	USEPA Method 6010	FE
Lead	USEPA Method 7421	PB
Manganese	USEPA Method 6010	MN
Mercury	USEPA Method 7470A	HG
Nickel	USEPA Method 7521	NI
Selenium	USEPA Method 7742	SE
Silver	USEPA Method 6010	AG
Sulfide	USEPA Method 9030Bx	S
Thallium	USEPA Method 7841	TL



**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND  
REPORTING PROGRAM**

Constituent	Analytical Method	Geotracker Code
Tin	USEPA Method 6010	SN
Vanadium	USEPA Method 6010	V
Zinc	USEPA Method 6010	ZN

**MRP Attachment C—Volatile Organic Compounds, Extended List  
 (Five-Year COCs)**

**USEPA Method 8260 Volatile Organic Compounds (VOCs), Extended List  
 (Five-Year COCs)**

Volatile Organic Compounds (VOCs)	Geotracker Code
Acetone	ACE
Acetonitrile (Methyl cyanide)	ACCN
Acrolein	ACRL
Acrylonitrile	ACRAMD
Allyl chloride (3 Chloropropene)	CLPE3
Benzene	BZ
Bromochloromethane (Chlorobromomethane)	BRCLME
Bromodichloromethane (Dibromochloromethane)	DBCME
Bromoform (Tribromomethane)	TBME
Carbon disulfide	CDS
Carbon tetrachloride	CTCL
Chlorobenzene	CLBZ
Chloroethane (Ethyl chloride)	CLEA
Chloroform (Trichloromethane)	TCLME
Chloroprene	CHLOROPRENE
Dibromochloromethane (Chlorodibromomethane)	DBCME
1,2 Dibromo 3 chloropropane (DBCP)	DBCP

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

Volatile Organic Compounds (VOCs)	Geotracker Code
1,2 Dibromoethane (Ethylene dibromide; EDB)	EDB
o Dichlorobenzene (1,2 Dichlorobenzene)	DCBZ12
m Dichlorobenzene(1,3 Dichlorobenzene)	DCBZ13
p Dichlorobenzene (1,4 Dichlorobenzene)	DCBZ14
trans 1,4 Dichloro 2 butene	DCBE14T
Dichlorodifluoromethane (CFC 12)	FC12
1,1 Dichloroethane (Ethylidene chloride)	DCA11
1,2 Dichloroethane (Ethylene dichloride)	DCA12
1,1 Dichloroethylene (1, 1 Dichloroethene; Vinylidene chloride)	DCE11
cis 1,2 Dichloroethylene (cis 1,2 Dichloroethene)	DCE12C
trans 1,2 Dichloroethylene (trans 1,2 Dichloroethene)	DCE12T
1,2 Dichloropropane (Propylene dichloride)	DCPA12
1,3 Dichloropropane (Trimethylene dichloride)	DCPA13
2,2 Dichloropropane (Isopropylidene chloride)	DCPA22
1,1 Dichloropropene	DCP11
cis 1,3 Dichloropropene	DCP13C
trans 1,3 Dichloropropene	DCP13T
Di-isopropylether (DIPE)	DIPE
Ethanol	ETHANOL
Ethyltertiary butyl ether	ETBE
Ethylbenzene	EBZ

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

Volatile Organic Compounds (VOCs)	Geotracker Code
Ethyl methacrylate	EMETHACRY
Hexachlorobutadiene	HCBU
2 Hexanone (Methyl butyl ketone)	HXO2
Isobutyl alcohol	ISOBTOH
Methacrylonitrile	METHACRN
Methyl bromide (Bromomethane)	BRME
Methyl chloride (Chloromethane)	CLME
Methyl ethyl ketone (MEK; 2 Butanone)	MEK
Methyl iodide (Iodomethane)	IME
Methyl t-butyl ether	MTBE
Methyl methacrylate	MMTHACRY
4 Methyl 2 pentanone (Methyl isobutyl ketone)	MIBK
Methylene bromide (Dibromomethane)	DBMA
Methylene chloride (Dichloromethane)	DCMA
Naphthalene	NAPH
Propionitrile (Ethyl cyanide)	PACN
Styrene	STY
Tertiary amyl methyl ether	TAME
Tertiary butyl alcohol	TBA
1,1,1,2 Tetrachloroethane	TC1112
1,1,2,2 Tetrachloroethane	PCA

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

Volatile Organic Compounds (VOCs)	Geotracker Code
Tetrachloroethylene (Tetrachloroethene; Perchloroethylene; PCE)	PCE
Toluene	BZME
1,2,4 Trichlorobenzene	TCB124
1,1,1 Trichloroethane (Methylchloroform)	TCA111
1,1,2 Trichloroethane	TCA112
Trichloroethylene (Trichloroethene; TCE)	TCE
Trichlorofluoromethane (CFC 11)	FC11
1,2,3 Trichloropropane	TCPR123
Vinyl acetate	VA
Vinyl chloride (Chloroethene)	VC
Xylene (total)	XYLENES

**MRP Attachment D—Semi-Volatile Organic Compounds  
 (Five-Year COCs)**

**USEPA Methods 8270C or 8270D—Base, Neutral & Acids Extractables List**

Constituent	Geotracker Code
Acenaphthene	ACNP
Acenaphthylene	ACNPY
Acetophenone	ACPHN
2 Acetylaminofluorene (2 AAF)	ACAMFL2
Aldrin	ALDRIN
4 Aminobiphenyl	AMINOBP4
Anthracene	ANTH
Benzo[a]anthracene (Benzanthracene)	BZAA
Benzo[b]fluoranthene	BZBF
Benzo[k]fluoranthene	BZKF
Benzo[g,h,i]perylene	BZGHIP
Benzo[a]pyrene	BZAP
Benzyl alcohol	BZLAL
Bis(2 ethylhexyl) phthalate	BIS2EHP
alpha BHC	BHCALPHA
beta BHC	BHCBETA
delta BHC	BHCDELTA
gamma BHC (Lindane)	BHCGAMMA

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

Constituent	Geotracker Code
Bis(2 chloroethoxy) methane	BECEM
Bis(2 chloroethyl) ether (Dichloroethyl ether)	BIS2CEE
Bis(2 chloro 1 methylethyl) ether (Bis(2 chloroisopropyl) ether; DCIP)	BIS2CIE
4 Bromophenyl phenyl ether	BPPE4
Butyl benzyl phthalate (Benzyl butyl phthalate)	BBP
Chlordane	CHLORDANE
p Chloroaniline	CLANIL4
Chlorobenzilate	CLBZLATE
p Chloro m cresol (4 Chloro 3 methylphenol)	C4M3PH
2 Chloronaphthalene	CNPH2
2 Chlorophenol	CLPH2
4 Chlorophenyl phenyl ether	CPPE4
Chrysene	CHRYSENE
o Cresol (2 methylphenol)	MEPH2
m Cresol (3 methylphenol)	MEPH3
p Cresol (4 methylphenol)	MEPH4
4,4' DDD	DDD44
4,4' DDE	DDE44
4,4' DDT	DDT44
Diallate	DIALLATE
Dibenz[a,h]anthracene	DBAHA

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

Constituent	Geotracker Code
Dibenzofuran	DBF
Di n butyl phthalate	DNBP
3,3' Dichlorobenzidine	DBZD33
2,4 Dichlorophenol	DCP24
2,6 Dichlorophenol	DCP26
Dieldrin	DIELDRIN
Diethyl phthalate	DEPH
p (Dimethylamino) azobenzene	PDMAABZ
7,12 Dimethylbenz[a]anthracene	DMBZA712
3,3' Dimethylbenzidine	DMBZD33
2,4 Dimehtylphenol (m Xylenol)	DMP24
Dimethyl phthalate	DMPH
m Dinitrobenzene	DNB13
4,6 Dinitro o cresol (4,6 Dinitro 2 methylphenol)	DN46M
2,4 Dinitrophenol	DNP24
2,4 Dinitrotoluene	DNT24
2,6 Dinitrotoluene	DNT26
Di n octyl phthalate	DNOP
Diphenylamine	DPA
Endosulfan I	ENDOSULFANA
Endosulfan II	ENDOSULFANB



## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

Constituent	Geotracker Code
Endosulfan sulfate	ENDOSULFANS
Endrin	ENDRIN
Endrin aldehyde	ENDRINALD
Ethyl methanesulfonate	EMSULFN
Famphur	FAMPHUR
Fluoranthene	FLA
Fluorene	FL
Heptachlor	HEPTACHLOR
Heptachlor epoxide	HEPT-EPOX
Hexachlorobenzene	HCLBZ
Hexachlorocyclopentadiene	HCCP
Hexachloroethane	HCLEA
Hexachloropropene	HCPR
Indeno(1,2,3 c,d) pyrene	INP123
Isodrin	ISODRIN
Isophorone	ISOP
Isosafrole	ISOSAFR
Kepone	KEP
Methapyrilene	MTPYRLN
Methoxychlor	MTXYCL
3 Methylcholanthrene	MECHLAN3

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

Constituent	Geotracker Code
Methyl methanesulfonate	MMSULFN
2 Methylnaphthalene	MTNPH2
1,4 Naphthoquinone	NAPHQ14
1 Naphthylamine	AMINONAPH1
2 Naphthylamine	AMINONAPH2
o Nitroaniline (2 Nitroaniline)	NO2ANIL2
m Nitroaniline (3 Nitroaniline)	NO2ANIL3
p Nitroaniline (4 Nitroaniline)	NO2ANIL4
Nitrobenzene	NO2BZ
o Nitrophenol (2 Nitrophenol)	NTPH2
p Nitrophenol (4 Nitrophenol)	NTPH4
N Nitrosodi n butylamine (Di n butylNitrosamine)	NNSBU
N Nitrosodiethylamine (Diethylnitrosamine)	NNSE
N Nitrosodimethylamine (Dimethylnitrosamine)	NNSM
N Nitrosodiphenylamine (Diphenylnitrosamine)	NNSPH
N Nitrosodipropylamine (N Nitroso N dipropylamine; Di n propylNitrosamine)	NNSPR
N Nitrosomethylethylamine (Methylethylnitrosamine)	NNSME
N Nitrosopiperidine	NNSPPRD
N Nitrosopyrrolidine	NNSPYRL
5 Nitro o toluidine	TLDNONT5
Pentachlorobenzene	PECLBZ

## CLOSED LANDFILL FACILITIES

**ATTACHMENT B—EXAMPLE OF FACILITY-SPECIFIC MONITORING AND REPORTING PROGRAM**

Constituent	Geotracker Code
Pentachloronitrobenzene (PCNB)	PECLNO2BZ
Pentachlorophenol	PCP
Phenacetin	PHNACTN
Phenanthrene	PHAN
Phenol	PHENOL
p Phenylenediamine	ANLNAM4
Polychlorinated biphenyls (PCBs; Aroclors)	PCBS
Pronamide	PRONAMD
Pyrene	PYR
Safrole	SAFROLE
1,2,4,5 Tetrachlorobenzene	C4BZ1245
2,3,4,6 Tetrachlorophenol	TCP2346
o Toluidine	TLDNO
Toxaphene	TOXAP
2,4,5 Trichlorophenol	TCP245
0,0,0 Triethyl phosphorothioate	TEPTH
sym Trinitrobenzene	TNB135

**MRP Attachment E—Chlorophenoxy Herbicides (Five-Year COCs)**

**USPEA Method 8151A—Chlorophenoxy Herbicides (Five-Year COCs)**

Constituent	GeoTracker Code
2,4 D (2,4 Dichlorophenoxyacetic acid)	24D
Dinoseb (DNBP; 2 sec Butyl 4,6 dinitrophenol)	DINOSEB
Silvex (2,4,5 Trichlorophenoxypropionic acid; 2,4,5 TP)	SILVEX
2,4,5 T (2,4,5 Trichlorophenoxyacetic acid)	245T

**MRP Attachment F—Organophosphorus Compounds (Five Year COCs)**

**USEPA Method 8141B—Organophosphorus Compounds (Five-Year COCs)**

Constituent	GeoTracker Code
2,4 D (2,4 Dichlorophenoxyacetic acid)	24D
Dinoseb (DNBP; 2 sec Butyl 4,6 dinitrophenol)	DINOSEB
Silvex (2,4,5 Trichlorophenoxypropionic acid; 2,4,5 TP)	SILVEX
2,4,5 T (2,4,5 Trichlorophenoxyacetic acid)	245T

**[End of Example]**