

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION 395 Aerovista Place, Suite 101 San Luis Obispo, California 93401

# GENERAL WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2024-0036 FOR CLOSED LANDFILL FACILITIES IN THE CENTRAL COAST REGION

**AUGUST XX, 2024** 



# WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2024-0036 FOR CLOSED LANDFILL FACILITIES IN THE CENTRAL COAST REGION

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# WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2024-0036 FOR CLOSED LANDFILL FACILITIES IN THE CENTRAL COAST REGION

#### **FINDINGS**

The California Regional Water Quality Control Board, Central Coast Region (hereafter "Central Coast Water Board"), finds that:

- 1. Waste Discharge Requirements General Order No. R3-2024-0036 (General Order or Order) applies to owners and operators, referred to as Discharger(s), of closed landfill facilities (Closed Landfills) that are subject to the prescriptive requirements of <a href="California Code of Regulations">Code of Regulations</a> (CCR), title 27, §20005 et seq., and are within the post-closure maintenance period, as defined in Finding 3.
- 2. For the purposes of this General Order, a Closed Landfill is defined as a Waste Management Unit<sup>1</sup> (WMU or Unit) that meets the following criteria:
  - a. The Discharger operated a WMU(s) for the discharge and disposal of nonhazardous solid waste and/or municipal solid waste pursuant <u>CCR</u>, <u>title</u> <u>27</u>, <u>\$20005 et seq.</u> and the <u>Code of Federal Regulations (CFR)</u>, <u>title 40</u>, <u>part</u> <u>258 et seq.</u>;
  - b. The WMU operated as a former surface impoundment or waste pile and was "closed as a landfill" as defined by CCR title 27, §21400(b)(2)(A);
  - c. The Closed Landfill is sited within the jurisdictional boundaries of the Central Coast Water Board's region (Central Coast Region);
  - d. The Closed Landfill is not enrolled under General Waste Discharge Requirements Order No. R3-2004-0006 for Post-Closure Maintenance of Closed, Abandoned or Inactive Nonhazardous Waste Landfills Within the Central Coast Region;
  - e. The WMU no longer accepts waste of any kind for disposal;
  - f. The WMU(s) have a fully constructed final cover that complies with <u>CCR</u>, <u>title</u> <u>27</u>, <u>§21090</u>; and
  - g. The WMU(s) have undergone all operations necessary for post-closure maintenance in accordance with an Executive Officer approved Closure and Post-Closure Maintenance Plan (CPCMP).
- 3. The post-closure maintenance period for each WMU is a minimum of 30 years pursuant to <u>CFR</u>, <u>title 40</u>, <u>§258.61(a)</u>, and must extend as long as the waste poses a threat to water quality pursuant to <u>CCR</u>, <u>title 27</u>, <u>§20950(a)(1)</u>, and <u>CFR</u>,

<sup>&</sup>lt;sup>1</sup> An area of land, or a portion of a waste management facility, at which waste is discharged. The term includes containment features and ancillary features for precipitation and drainage control and for monitoring.

title 40, §258.61(b)(2). Once the Landfill no longer presents a threat to water quality, the Discharger may submit a technical report supporting that finding and request Executive Officer approval of that determination. If the technical report and other site data and reports, including monitoring reports, are found to support that waste no longer is a threat to water quality, there will be a public comment period no less than 45 days, followed by a Notice of Termination (NOT).

- 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 pursuant <u>CCR</u>, <u>title 27</u>, <u>\$20164</u>. Closure includes construction of a final cover, which serves as the principal containment feature. The goal of closure is to minimize the infiltration of water into waste, thereby minimizing production of leachate<sup>2</sup> and landfill gas.
- 5. A final cover generally consists of the following layers (in ascending order), a foundation layer, a low-hydraulic conductivity layer, and an uppermost erosion-resistant layer as described by <u>CCR</u>, <u>title 27</u>, <u>§ 21090</u>, <u>subd.(a)</u>. The Final Cover design may deviate from the prescriptive standard described above, as an engineered alternative under <u>CCR</u>, <u>title 27</u>, <u>§20080(b)</u>. Engineered alternatives previously approved by the Executive Officer constitute a compliant final cover for the purposes of Finding 2.g above.
- 6. There are currently 10 Closed Landfills in the Central Coast Region that meet the criteria specified in Finding 2 of this General Order. Enrollment in this General Order will be phased starting with Closed Landfills that meet the criteria specified in Finding 2 but are currently enrolled under individual waste discharge requirements (WDRs) for an active facility, followed by the oldest individual WDRs for Closed Landfills, followed by those Closed Landfills with more recently adopted WDRs. General Order Attachment B includes a list of the landfill facilities that require coverage under this General Order and includes the dates for phased enrollment. Additionally, active landfills currently enrolled in the Active Landfill General Order may enroll in this General Order once they meet the criteria for a Closed Landfill as described in Finding 2 of this General Order. Upon approval of a report of waste discharge (ROWD), as described in Additional Finding B.4 of Attachment C, a facility specific Monitoring and Reporting Program (MRP) will be issued, and the Discharger notified of enrollment in the General Order.
- 7. The Central Coast Water Board's additional findings that provide rationale for these requirements are set forth in Attachment C of this Order and are incorporated by reference herein.
- 8. On May 24, 2024, the Central Coast Water Board notified the Dischargers, and interested agencies and persons of its intent to issue WDRs for Closed Landfills within the Central Coast Region and provided the Dischargers and interested

<sup>2</sup> Leachate is any liquid formed by the drainage of liquids from waste, or by the percolation or flow of liquid through waste.

- parties the opportunity to review a draft copy of the proposed Order and submit written comments.
- On August XX, 2024, the Central Coast Water Board held a public hearing and considered all comments and evidence pertaining to this General Order. Notice of this hearing was given to all known interested persons in accordance with California Water Code (Water Code), §13167.5, subd.(a).

#### REQUIREMENTS

IT IS HEREBY ORDERED, that upon adoption of this General Order, pursuant to <u>Water Code §13263</u> and <u>§13267</u>, the Discharger, its agents, successors, and assignees, must meet the provisions contained in <u>Water Code, division 7</u> and regulation adopted hereunder, and must comply with the requirements in this General Order. It is further ordered that where a Closed Landfill is currently regulated by an individual order, that order is terminated upon the enrollment of the Closed Landfill into this General Order.

# A. COMPLIANCE WITH OTHER REGULATIONS

- Discharge of waste, closure, post-closure maintenance, and long-term monitoring must comply with all applicable requirements contained in <u>CCR</u>, <u>title 27</u>, <u>§20005</u> <u>et seq.</u> and <u>CFR</u>, <u>title 40</u>, <u>part 258</u>. If any applicable regulatory requirements overlap or conflict in any manner, the most water quality protective requirement or requirements must govern in all cases, unless specifically stated otherwise in this Order.
- 2. If applicable, the Discharger must comply with all required stormwater permits and regulations. Please see the State Water Resources Control Board's <a href="Stormwater Program webpage">Storm Water Program webpage</a> for more information.

  (https://www.waterboards.ca.gov/water\_issues/programs/stormwater/).
- 3. The adoption of this General Order is exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to <a href="CCR">CCR</a>, title 14, §15301, because all Closed Landfills subject to this General Order are existing facilities with no planned expansion of these existing facilities.

#### **B. PROHIBITIONS**

- No further wastes of any kind shall be accepted by, or discharged to, any of the Closed Landfills permitted under this General Order. This prohibitions does not preclude the operation of a transfer or processing station as defined in <u>Public</u> Resource Code, Division 30, Part 1, §40200.
- 2. The discharge of solid or liquid waste or leachate to surface waters, surface water drainage courses, the unsaturated zone, and/or groundwater is prohibited.
- 3. Wastes within the Closed Landfill, and post-closure operations at the Closed Landfill, shall not result in the degradation of groundwater or surface water quality or otherwise threaten to result in the conditions of pollution or nuisance, as defined in <a href="Water Code">Water Code</a>, §13050, subds. (I) and (m), respectively.

# C. POST-CLOSURE MAINTENANCE REQUIREMENTS FOR CLOSED LANDFILLS

- Post-closure maintenance shall assure the landfill continues to comply with <u>CCR</u>, <u>title 27</u>, <u>chapter 3</u>, <u>§20950 et seq.</u> and <u>CFR</u>, <u>title 40</u>, <u>§258.61 et seq.</u> closure requirements until the waste in the Closed Landfill no longer poses a threat to water quality.
- 2. For the duration of each closed landfill's post-closure maintenance period, the Discharger shall:
  - a. Protect and 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. Protect, maintain, and operate any leachate collection and removal systems (LCRS) for as long as leachate is being generated and detected, or as approved by the Executive Officer;
  - c. Protect, maintain, and operate any landfill gas extraction systems for as long as landfill gas is generated, or as approved by the Executive Officer;
  - d. Protect and maintain all monitoring systems and comply with the site-specific Monitoring and Reporting Program Order No. R3-2024-0036 (MRP) (Attachment A) and CCR, title 27, §20380 et seq.;
  - e. Prevent erosion and related damage of the final cover due to drainage, wind, or from other sources; and
  - f. Protect and maintain surveyed monuments installed in accordance with <u>CCR</u>, title 27, §20950(d).
- 3. The Discharger shall maintain the site-specific final cover containment system as approved by the Executive Officer in the final cover design workplans and subsequent construction quality assurance certification.
- 4. A closed landfill's post-closure maintenance period starts after the Executive Officer approves the certification of closure, which occurs after the submittal and/or completion of the following:
  - a. The final closure construction completion date; and
  - b. The date the Executive Officer approves all relevant documents, pursuant to <a href="CCR">CCR</a>, title 27, § 20005 et seq. [i.e., §20323 Construction Quality Assurance Plan, §20324(a) –Construction Quality Assurance Performance Standards, §20324(d)(1)(C) –Final Documentation Report and §21760(a)(1) As Built Plans].
- 5. 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.
- 6. Following closure, the Discharger shall record a notation on the deed to the Closed Landfill property, or some other instrument that is normally examined

during a title search. The deed notation shall include a detailed description of the Closed Landfill, including a map, and shall specify that use of the land is restricted to the planned use described in the CPCMP per <a href="CCR title 27">CCR title 27</a>, <a href="S20515(a)(4)">§20515(a)(4)</a> and <a href="S21170">§21170</a> an in <a href="CFR">CFR</a>, title 40, <a href="S258.60(i)">§258.60(i)</a>. The description shall include at a minimum:

- a. The date closure was completed for the Closed Landfill;
- b. The boundaries including height and depths of the filled area;
- c. The location where the CPCMP can be obtained; and
- d. A statement that the future site use is restricted in accordance with the postclosure maintenance plan.
- 7. Repairs necessary to protect the integrity of any Executive Officer approved engineered alternative final cover, as defined in <a href="CCR title 27">CCR title 27</a>, <a href="\$\sum\_{20080(b)}\$, shall be constructed in accordance with an approved construction quality assurance plan (CQA Plan) and the CPCMP per CCR title 27</a>, <a href="\$\sum\_{21090(b)(1)(E)}\$.
- 8. Dischargers shall conduct a periodic leak search to monitor the integrity of the final cover in accordance with the schedule approved in the CPCMP or equivalent document per <a href="CCR title 27">CCR title 27</a>, §21090(a)(4)(A).
- Dischargers shall periodically inspect and identify problems with the final cover including areas that require replanting, areas with erosion, areas lacking positive drainage, areas damaged by equipment operations, and localized areas identified in the five-year iso-settlement survey per <u>CCR title 27</u>, §21090(a)(4)(B).
- 10. The Discharger shall maintain grading and positive drainage of all Closed Landfill surfaces to minimize precipitation/surface water from infiltrating into waste, to prevent ponding of water, and to resist erosion. For vegetative covers, the Discharger shall repair erosion rills greater than six inches in depth, or when rills leave insufficient cover to prevent infiltration of precipitation/surface water. For final covers that do not include a vegetative cover, the Discharger shall maintain, and repair when needed, any component of the final cover that may interfere with positive drainage.
- 11. The Discharger shall maintain the Closed Landfill to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, overtopping, and damage to all WMUs and disposal areas, containment structures, and drainage facilities resulting from natural disasters (e.g., floods with a prediction frequency of once in 100 years, the maximum probable earthquake, and severe wind storms).
- 12. The Discharger shall use best management practices to maintain the capacity of any stormwater retention facilities and thereby reduce or prevent pollutants in stormwater from discharging into receiving waters to the best available technology standard. In accordance with <a href="CCR">CCR</a>, title 27, §20365(a)(c)(6), the Discharger shall periodically remove accumulated sediment from the stormwater retention facilities and manage the facilities to maintain their capacity.

- 13. The management of landfill leachate or landfill gas condensate shall comply with all the following:
  - a. The Discharger may only return liquids to a landfill waste management unit equipped with a leachate collection and removal system (LCRS) containment system that meets or exceeds the performance standards of <u>CCR</u>, title <u>27</u>, §20340;
  - b. Have a secondary containment system sized to hold 100 percent of containment system holding capacity; and
  - c. Have an approved alternate method of leachate and landfill gas condensate disposal (e.g., wastewater treatment plant, recirculation within lined WMUs, burned off in a flare) that is described in the Executive Officer approved CPCMP.
- 14. The Discharger shall remove waste discharged in violation of this General Order.
- 15. The Discharger shall prevent formation of a habitat for carriers of pathogenic microorganisms.

### D. WATER QUALITY PROTECTION STANDARDS

- 1. The discharge of waste must be contained within the WMU to prevent degradation of waters of the state pursuant to <u>CCR</u>, <u>title 27</u>, <u>§20310(c)</u>. The discharger must continue evaluation monitoring pursuant to <u>CCR</u>, <u>title 27</u>, <u>§20385(a)(2)&(3)</u> and <u>Water Code §13267</u>, whenever there is a measurably significant or significant physical evidence of release from the WMU to waters of the state, in accordance with the MRP, **Attachment A**.
- 2. In accordance with <a href="CCR">CCR</a>, title 27, §20390</a>, water quality protection standards apply at the point of compliance and monitoring points for each WMU. Pursuant to <a href="CCR">CCR</a>, title 27, §20405</a>, the point of compliance is a vertical surface located at the hydraulically downgradient limit of a WMU that extends through the uppermost aquifer underlying the WMU. Water quality protection standards continue to apply during the post-closure maintenance period and any other compliance period.
- 3. MRP, **Attachment A**, as modified for each Discharger, specifies monitoring points, constituents of concern, and monitoring parameters for groundwater, surface water, leachate, and landfill gas.
- 4. Discharge of waste must not cause a statistically significant difference in water quality over background concentrations at the point of compliance. Establishment of concentration limits are described in the MRP, **Attachment A**. The Discharger must update concentration limits throughout the post-closure maintenance period in accordance with the MRP.
- Discharge of waste must not cause concentrations of organic chemicals, synthetic organic chemicals, inorganic constituents, and/or radionuclides in groundwater to exceed the Federal Maximum Contaminant Levels (MCLs) or the State Water Resources Control Board Division of Drinking Water's latest

- recommended Drinking Water Action Levels or MCLs of CCR, title 22, §64431 and §64444, or exceed median groundwater objectives set forth in Basin Plan Table 3-6.
- 6. Discharge of waste must not cause a violation of any applicable water quality standard for receiving waters adopted by the Central Coast Water Board or the State Water Board.
- 7. Discharge of waste must neither cause nor contribute to any surface water degradation including, but not limited to:
  - a. Floating, suspended, or macroscopic particulate matter, or foam.
  - b. Increases in bottom deposits or aquatic growth.
  - c. An adverse change in temperature, turbidity, or apparent color beyond natural background levels.
  - d. The creation or contribution of visible, floating, suspended oil, or other products of petroleum origin.
  - e. The introduction or increase in concentration of toxic or other pollutants/contaminants resulting in unreasonable impairment of the beneficial uses of State waters.
- 8. In the event of a verified release at a Closed Landfill enrolled under this General Order, the Discharger shall comply with the corrective action program requirements specified in <a href="CCR">CCR</a>, <a href="title-27">title 27</a>, <a href="title-20430">§20430</a>.
- 9. The active life of a WMU is the period during which wastes are being discharged to the WMU until final closure of the WMU has been initiated pursuant to <a href="CCR">CCR</a>, <a href="title 27">title 27</a>, <a href="\$\ \\$20950</a>.
- 10. The post-closure maintenance period is the period after closure of a WMU during which the waste could have an adverse effect on the quality of waters of the state. The post-closure maintenance period is a minimum of 30 years pursuant to <a href="CFR">CFR</a>, title 40, part 258.61(a), and must extend as long as the waste poses a threat to water quality and human health pursuant to <a href="CCR">CCR</a>, title 27, §20950(a)(1), and CFR, title 40, §258.61(b)(2).
- 11. The compliance period is the minimum period during which the Discharger must conduct a water quality monitoring program subsequent to a release from a WMU and is equal to the active life of the WMU plus the closure period, pursuant to CCR, title 27 §20410, and begins anew each time the Discharger initiates an evaluation monitoring program pursuant to CCR, title 27, §20425. If the Discharger is engaged in a corrective action program at the scheduled end of the compliance period, the compliance period will be extended until the Discharger can demonstrate that the WMU has been in continuous compliance with water quality protection standards for a period of three consecutive years pursuant to CCR, title 27, §20410(c).

#### **E. PROVISIONS**

- 1. Existing individual waste discharge requirements for compliance with title 27 will be terminated upon enrollment and coverage under this General Order.
- 2. The Discharger is responsible for waste containment, monitoring, and correcting any problems resulting from the discharge of waste for as long as the waste poses a threat to water quality.
- 3. If not already submitted during final closure activities, the Discharger must submit a copy of records specifying the volume and type of all waste discharged and manner and location of discharge to the Central Coast Water Board.
- 4. The Discharger must comply with the MRP, **Attachment A**, as modified for each Closed Landfill, and any revisions thereto, as specified by the Executive Officer. All applicable monitoring must begin immediately upon receipt of an Executive Officer issued notice of applicability (NOA) and landfill specific MRP.
- 5. **By October 1 of each year**, the Discharger must complete all necessary runoff diversion and erosion prevention measures (except for planting vegetation in accordance with Provision E.6) including, but not limited to, construction, maintenance, or repairs of precipitation and drainage control facilities to prevent erosion or WMU flooding to prevent surface drainage from contacting or percolating through waste. The Discharger must repair erosion rills greater than six-inches deep, damage to covers or drainages that threatens waste containment or creates ponding, and damage to drainage control facilities that reduces capacity below 100-year, 24-hour storm design, as soon as practicable after storm events that caused the erosion or damage, if it is safe to do so.
- 6. Throughout the rainy season of each year, the Discharger must seed and maintain vegetation over all WMU slopes to prevent erosion. The Discharger must select vegetation that requires minimum irrigation and maintenance and a rooting depth not to exceed the cover soil thickness. After receiving approval from the Executive Officer, the Discharger may utilize non-hazardous biosolids, compost, or other organic materials as a soil amendment to promote vegetation. Soil amendments and fertilizers (including wastewater biosolids, compost, or other organic materials) used to establish vegetation must not exceed the vegetation's agronomic rates (i.e., annual nutrient needs).
- 7. Should additional data become available through monitoring or investigation that indicates compliance with this General Order is not adequately protective of water quality, the Central Coast Water Board will review and revise this General Order as appropriate.
- 8. If the Discharger or the Executive Officer determines, pursuant to <a href="CCR">CCR</a>, title 27</a>, \$20420, that there is evidence of a release from a WMU, the Discharger must immediately implement the procedures outlined in <a href="CCR">CCR</a>, title 27, \$20380, \$20385, \$20425, \$20430, and MRP, **Attachment A**. If evidence of a release is confirmed, pursuant to <a href="CCR">CCR</a>, title 27, \$20425, the Discharger must implement corrective actions to remove waste constituents or treat them in place pursuant to <a href="CCR">CCR</a>, title 27, \$20430. Prior to implementing corrective actions, the Discharger must submit and receive Executive Officer approval for a corrective action

- program that includes a proposed scope of action, schedule, and performance monitoring to demonstrate the effectiveness of corrective actions pursuant CCR, title 27, §20430.
- The Dischargers shall comply with any CAO issued by the Executive Officer for the Closed Landfill.
- 10. Post-closure land use shall be limited to open space as described in <u>CCR</u>, <u>title</u> <u>27</u>, <u>§21190</u>, unless otherwise approved in the CPCMP.
- 11. This General Order does not authorize commission of any act causing injury to the property of another, does not convey any property rights of any sort, does not remove liability under federal, state, or local laws, and does not guarantee a capacity right.
- 12. The Central Coast Water Board and its representatives shall be allowed to:
  - a. Physically access the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the provisions of this General Order.
  - Have access to and copy any records that must be kept under the provisions of this General Order.
  - c. Have access to and copy any records that must be kept under the provisions of this General Order.
  - d. Collect photographs and samples as needed to evaluate compliance with this General Order, or as otherwise authorized by the Water Code.
- 13. The Discharger must take all reasonable steps to minimize or correct adverse impacts on the environment and public health resulting from noncompliance with this General Order in accordance with Reporting F.11 and F.13.
- 14. After notice and opportunity for a hearing, enrollment in the General Order may be terminated for cause, including, but not limited to:
  - a. Violation of any term or condition contained in this General Order.
  - b. Obtaining this General Order by misrepresentation, or by failure to disclose fully all relevant facts.
  - c. A change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge.
- 15. The Discharger must obtain and maintain financial assurance instruments (Instruments), which comply with <a href="CCR">CCR</a>, title 27, §22212 (Post Closure Fund) and §22220, et seq. (Corrective Action Fund), and <a href="CFR">CFR</a>, title 40, part 258, subpart G. Pursuant to <a href="CCR">CCR</a>, title 27, §22221, the amount of required coverage for the Corrective Action Fund will be the greater of water release corrective action estimate or non-water release corrective action estimate. Pursuant to <a href="CCR">CCR</a>, title <a href="27">27</a>, §20380(b) and §22222, the Discharger must obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all

known or reasonably foreseeable releases and name the Central Coast Water Board as beneficiary if CalRecycle does not require financial assurance for corrective action. As WMU conditions change, and upon the Central Coast Water Board's request, the Discharger must submit a report proposing the amount of financial assurance necessary for corrective action for the Executive Officer's review and approval. The Discharger must demonstrate to the Central Coast Water Board compliance with all financial instruments at a minimum of every five years.

#### F. REPORTING

- 1. All reports required by this General Order or MRP, **Attachment A** must be signed by the Discharger as follows:
  - a. For a public agency by either a principal executive officer or ranking elected official.
  - b. For a partnership or proprietorship by a general partner or the proprietor, respectively.
  - c. For a corporation by a principal executive officer of at least the level of a vice-president.
  - d. A "duly authorized representative"<sup>3</sup>.
  - e. A California Registered Civil Engineer or Certified Engineering Geologist must sign engineering reports.
- 2. Any person signing a report as prescribed in Reporting F.1 of this General Order must include the following statement:
  - "I certify under penalty of perjury I have personally examined and am familiar with the information submitted in this document and all attachments and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of a fine and imprisonment."
- Except for data determined to be confidential under <u>Water Code</u>, <u>§13267 subd</u>. (b)(2), all technical reports prepared in accordance with this General Order are non-exempt public records and must be uploaded to the California State Water Resources Control Board GeoTracker system (<a href="https://geotracker.waterboards.ca.gov/">https://geotracker.waterboards.ca.gov/</a>) by the Discharger.

<sup>3</sup> A "duly authorized representative" means a person who has written authorization from the Discharger to sign required reports on behalf of the Discharger.

- 4. The Discharger must submit reports in advance of any planned changes of the permitted WMU, or any activity, which could potentially or actually result in noncompliance.
- 5. By October 1 of each year, the Discharger must submit a wet weather preparedness report (WWPR) that describes compliance with Provisions E.5 and E.6 above. The report must also detail preparedness actions taken to ensure discharges of waste constituents to surface or groundwater do not occur during the impending rainy season and ensure compliance with all other relevant <a href="CCR">CCR</a>, and <a href="CFR">CFR</a>, title 40, part 258, criteria. The report must include photographs of all wet weather preparedness measures implemented.
- 6. The Discharger must notify the Central Coast Water Board of any proposed change in ownership or responsibility for operation of WMUs in accordance with <a href="CCR">CCR</a>, <a href="title 27">(\$21710(c)(1)</a>. The notice and must be given at least **90 days** prior to the effective date of change in ownership or responsibility and must:
  - a. Be accompanied by an amended ROWD and any other technical documents needed to demonstrate continued compliance with this General Order.
  - b. Contain the requesting entity's full legal name, the state of incorporation if a corporation, the name, address, and telephone number of the persons responsible for contact with the Central Coast Water Board.
  - c. Contain a statement indicating that the new owner or operator assumes full responsibility for compliance with this General Order.
- 7. In the event of any change in ownership or operation responsibility of WMUs, the Discharger must notify the succeeding owner or operator, in writing, of the existence of this General Order and their requirement to be in compliance with the General Order. The Discharger must send a copy of that notification to the Executive Officer.
- 8. The Discharger must furnish, within a timeframe specified by the Executive Officer, any information the Executive Officer may require to determine compliance with this General Order or to determine whether cause exists for modifying or terminating coverage under this General Order.
- 9. The Discharger or persons employed by the Discharger must comply with all notice and reporting requirements of the California Department of Water Resources, and other applicable permitting agencies with concurrence of the Executive Officer regarding the permitting, construction, alteration, inactivation, destruction, or abandonment of all monitoring wells used for compliance with this General Order or with MRP, **Attachment A**, as required by <u>Water Code</u>, §13750.5 through §13755, and §13267.
- 10. Should the Discharger discover that it failed to submit any relevant facts or that it submitted incorrect information, it must promptly submit the missing or corrected information.
- 11. The Discharger must notify the Executive Officer, within **24 hours** by telephone and email and submit a report of noncompliance within **14 days**, of:

- a. Any noncompliance that potentially or actually endangers human health and/or the environment. Reports of noncompliance must include a description of:
  - i. The reason for noncompliance.
  - ii. A description of the noncompliance, including photo documentation.
  - iii. Schedule of tasks necessary to achieve compliance.
  - iv. An estimated date for achieving full compliance.
- Any flooding, equipment failure, slope failure, or other change in WMU conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures.
- c. Leachate seep(s) occurring on or in proximity to a WMU.
- d. Violation of a discharge prohibition.
- e. Violation of any treatment system's discharge limitation.

If the primary Central Coast Water Board case worker is unavailable by telephone or email, the Discharger must call the Central Coast Water Boards main office at (805) 549-3147.

- 12. The Discharger must submit a compliance or noncompliance report within 14 days of compliance dates or Executive Officer approved compliance schedules pursuant to Reporting F.11. Compliance reports must document both the original noncompliance and corrective actions implemented to achieve compliance. Noncompliance reports must summarize progress towards compliance dates or compliance schedules. For Executive Officer approved compliance schedules, additional time may be granted by the Executive Officer in complex situations where data collection and/or detailed evaluation is necessary. If reporting a noncompliance update, include the following:
  - a. The reason for noncompliance.
  - b. A description of the noncompliance.
  - c. Schedule of tasks necessary to achieve compliance.
  - d. An estimated date for achieving full compliance.
- 13. The Discharger must promptly correct any noncompliance issue(s) that threatens WMU containment integrity. Correction schedules submitted in accordance with Reporting F.11, are subject to the approval of the Executive Officer, except when delays will threaten human health and/or the environment and/or WMU integrity (i.e., emergency corrective measures). For emergency corrective measures, the Discharger must report details of the corrections in writing within **seven (7) days** of initiating correction.
- 14. The Discharger must submit for the Executive Officer's review and approval a report demonstrating financial responsibility for initiating and completing reasonably foreseeable corrective action (water and non-water based), along with adjustments to financial assurances (as necessary), pursuant to <a href="CCR">CCR</a>, title

- 27, §22220 through §22222. The Discharger must submit an updated report every five years, or earlier as needed.
- 15. The Discharger must submit for the Executive Officer's review and approval postclosure maintenance plan that includes a cost analysis of all actions and associated costs necessary to carry out post-closure maintenance, pursuant to <u>CCR, title 27, §21815</u>, §21825, and §21840. The Discharger must submit an updated plan including updated financial assurance every five years, or earlier as needed.
- 16. The Discharger must submit an amended or updated CPCMP at least 120 days before making any changes that affect compliance with this General Order. Any changes that may affect compliance with this General Order must be approved in writing by the Executive Officer prior to the Discharger implementing such changes.

# G. LEGAL REQUIREMENTS

- The requirement that the Discharger submit a ROWD is made pursuant to <u>Water Code</u>, <u>§13260</u>. Violation of a request made pursuant to this section may subject the Discharger to administrative civil liability of up to \$1,000 per day under <u>Water Code</u>, <u>§13261(b)</u>.
- 2. The Discharger must submit all technical and monitoring reports pursuant to this General Order in accordance with <u>Water Code</u>, §13267. The reports are reasonably necessary to ensure compliance with this General Order and the requirements of <u>CCR</u>, title 27, division 2 and <u>CFR</u>, title 40, part 258. Failure to submit reports in accordance with schedules established by this General Order, attachments to this General Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer may subject the Discharger to enforcement action pursuant to <u>Water Code</u>, §13268.
- 3. Any person failing or refusing to furnish technical or monitoring program reports as required by <u>Water Code</u>, §13267(b), or falsifying any information provided therein, is guilty of a misdemeanor.
- 4. The Discharger and/or any person who violates this General Order through unauthorized discharges of waste to surface waters or groundwater may be liable for civil and/or criminal penalties, as appropriate, pursuant to <a href="Water Code">Water Code</a>, §13350, §13385, and §13387.
- 5. The provisions of this General Order are severable. If any provision of this General Order is found invalid, the remainder of this General Order must not be affected.
- 6. The Discharger must comply with all conditions of this General Order and any additional conditions prescribed by the Central Coast Water Board in amendments thereto. Any noncompliance with this General Order constitutes a violation of the Water Code and is grounds for:

- a. Enforcement action pursuant to the <u>Water Code</u> and in accordance with the <u>State Water Board's Water Quality Enforcement Policy</u>.
- b. Termination of rescission of this General Order.
- 7. No provision or requirement of this General Order or MRP, **Attachment A** is a limit on the Discharger's responsibility to comply with other federal, state, and local laws, regulations, or ordinances.
- 8. The Discharger must comply with the following submittal and implementation schedule for all tasks and/or reports required by this General Order.

Table 1: Task Summary Table

Task	Implementation Date
Provision E.4: Compliance with MRP	Upon the issuance of a Notice of Applicability
<b>Provision E.5</b> : Runoff diversion and erosion prevention	October 1 of each year
Provision E.6: Implement stormwater BMPs	Throughout the rainy season
<b>Provision E.8</b> : Evaluation monitoring, corrective actions	Evidence of release
Provision E.11: Correction of noncompliance	Immediately, subject to Executive Officer approval, except during emergencies
Provision E.13: Financial assurance	Continuous

Table 2: Report Summary Table

Report	Due Date
Reporting F.4: Planned changes and noncompliance	Prior to implementing changes
Reporting F.5: Wet Weather Preparedness Report	October 1 of each year
Reporting F.6: Notice of change in ownership or responsibility	At least 90 days prior to the effective date of change
Reporting F.8: Requests regarding compliance determination	Reasonable timeframe

Report	Due Date
Reporting F.10: Missing and/or	Immediately upon discovery
corrected information	
Reporting F.11: Notice of	Within 24 hours verbally and within 14 days
noncompliance	in writing
Reporting F.12:	Within 14 days of failing to meet compliance
Noncompliance report	dates or Executive Officer Approved
	Compliance Schedule
Reporting F.13: Emergency	Within 7 days of initiating corrections
corrective measures	
Reporting F.14: Demonstration	Every 5 years thereafter, or earlier as
of financial assurance	needed
Reporting F.16: Amended	At least 120 days prior to request to
CPCMP	implement changes

# **ORDERED BY:**

I, Ryan E. Lodge, Executive Officer of the California Regional Water Quality Control Board, Central Coast Region, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Coast Region on August XX, 2024.

Ryan E. Lodge, Executive Officer

#### ATTACHMENT A

# GENERAL MONITORING AND REPORTING PROGRAM ORDER NO. R3-2024-0036 FOR

CLOSED LANDFILL FACILITIES IN THE CENTRAL COAST REGIONS (MODIFIED FOR "LANDFILL NAME" ON "DATE")
WDID No. 3 XXXXXX

#### INTRODUCTION

[This General Monitoring and Reporting Program (MRP) is an example of an MRP, which will be issued to closed landfills in the Central Coast Region upon enrollment in General Waste Discharge Requirements Order No. R3-2024-0036 (General Order). Upon Central Coast Regional Water Quality Control Board (Central Coast Water Board) Executive Officer issuance of a notice of applicability (NOA), the Executive Officer will issue a modified site-specific MRP No. R3-2024-0036 pursuant to California Water Code (Water Code),§13267.

The [Owner/Operator Name(s)] (hereafter "Discharger") owns and operates the closed [Landfill Name] (Closed Landfill). The Monitoring and Reporting Program (MRP) is required to determine compliance with the <u>Water Code</u>, applicable state and federal regulations, and the associated Waste Discharge Requirements Order No. R3-2024-0036 (General Order). The Central Coast Water Board requirement that the Discharger submit the reports as specified in the MRP are made pursuant to <u>Water Code</u>, §13267. The reports are reasonably necessary to ensure compliance with this General Order and the requirements of <u>California Code of Regulations (CCR)</u>, title 27 and <u>Code of Federal Regulations (CFR)</u>, title 40, part 258. Pursuant to <u>Water Code</u>, §13268, a violation of <u>Water Code</u>, §13267, may subject the Discharger to civil liability of up to \$1,000 per day, for each day in which the violation occurs.

#### **ELECTRONIC SUBMITTAL**

Unless otherwise specified by the Executive Officer, Dischargers must transmit correspondence and other information electronically in Portable Data Format (PDF), reducing the amount of paper used, and increasing the speed at which information is distributed. Electronic documents can be submitted to <a href="mailto:centralcoast@waterboards.ca.gov">centralcoast@waterboards.ca.gov</a> and will be distributed to the appropriate staff person. Informal written correspondence (i.e., email) can be sent directly to the appropriate staff person.

All technical reports including the monitoring site information, data, and reports required below, must be submitted electronically to the State Water Resources Control Board's internet-accessible database system (GeoTracker), pursuant to the General Order and in accordance with the reporting requirements of this MRP. Additional instructions for the Discharger on formatting, uploading data, and other technical information to GeoTracker can be found under the "Information and Resources" section at <a href="UST Electronic Submittal of Information (ESI)">UST Electronic Submittal of Information (ESI)</a> | California State Water Resources Control

### **Board**

(https://www.waterboards.ca.gov/water\_issues/programs/ust/electronic\_submittal/).

The GeoTracker page associated with [Landfill Name] can be found at:

[Internet Link to Facility GeoTracker Public Access Page]

#### MONITORING REQUIREMENTS

### PART I. MONITORING AND OBSERVATION SCHEDULE

Unless otherwise indicated, the Discharger must report all monitoring data and observations as outlined in **Part IV**.

#### A. SITE INSPECTIONS

The Discharger must inspect the Closed Landfill, in accordance with the following schedule, and record (including photographs, when appropriate), at a minimum, the observations listed below.

- 1. Inspection Schedule
  - a. During the wet season (October 1 through April 30), at least monthly and during or following each storm event that produces stormwater runoff and/or a storm event that produces a minimum of 1-inch of rain within a 24-hour period.<sup>1</sup>
  - b. During the dry season (**May 1 through September 30**), a minimum of one inspection each three-month period.

#### 2. Standard Observations

 At the waste management units (WMU) and along the perimeter of the WMUs:

- i. Evidence of ponded water over the final cover this includes providing a map and photos of the affected area, documenting whether ponded water contacted waste, and corrective action.
- ii. Evidence of erosion and/or exposed refuse within WMU disposal areas.
- iii. Evidence of waste in the drainage system (e.g., drainage channels, stormwater sediment retention basins).

<sup>1</sup> The intent of this requirement is for Landfill staff to use professional judgment to determine how quickly (**during or within 24 hours**) and the level of detail a facility inspection is warranted after a storm event to ensure that the storm event has not resulted in erosion or other stormwater related issues that can potentially impact water quality or the integrity of the various covers and stormwater conveyance systems (i.e., drainage control systems).

- iv. Integrity of all drainage and containment systems.
- b. Along the Closed Landfill perimeter:
  - i. Evidence of liquid offsite discharge or onsite run-on, from/to WMUs and, if applicable, any waste processing/diversion/recycling areas of the Landfill, estimated size of affected area and flow rate. Show any affected area on a map.
  - ii. Whether stormwater sedimentation/retention basins and drainage ditches contain liquids and if basins are discharging.
  - iii. Evidence of non-stormwater discharges at stormwater discharge locations.
  - iv. Evidence of odors characterization, source, and distance odor detected from the source.
  - v. Evidence of trespass/illegal access and damage to the cover system, structures, monitoring points, or any other onsite equipment.
- c. For receiving waters<sup>2</sup>:
  - Oily sheen of waste origin presence or absence, source, and size of affected area.
  - ii. Suspended material of waste origin presence or absence, source, and size of affected area.
  - iii. Discoloration and turbidity description of color, source, and size of affected area.
  - iv. Evidence of odors presence or absence, characterization, source, and distance of odor detected from source.
  - v. Evidence of beneficial use presence of water associated wildlife.
  - vi. Estimated flow rate to the receiving water.
  - vii. Weather conditions wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

#### **B. DRAINAGE SYSTEM INSPECTIONS**

- General conditions (e.g., evidence of excessive sediment or vegetation requiring cleanout, poor drainage, erosion, or ponding due to settlement, structural integrity requiring maintenance/repair).
- 2. Whether stormwater sediment retention basins (if applicable) and drainage ditches contain liquids and if basins are discharging.

<sup>&</sup>lt;sup>2</sup> Any surface water which potentially or actually receives surface or groundwater containing landfill facility wastes, including stormwater runoff and leachate.

- 3. Whether best management practices to prevent impacts to stormwater (e.g., erosion control, sediment control, waste containment, stormwater diversion) are implemented and performing as specified in the Landfill's annual wet weather preparedness plan required by the General Order, and as required by an applicable stormwater permit if enrolled.
- 4. Steps taken to correct any problems found during inspections and date(s) when corrective action was taken (include photographic documentation).

#### C. RAINFALL DATA

The Discharger must record the following information:

- 1. Total daily precipitation, in inches, during each three-month period (October through December, January through March, April through June, and July through September).
- 2. Precipitation, in inches, and return period (25-year, 100-year, etc.) of the most intense 24-hour rainfall event occurring within each three-month period (October through December, January through March, April through June, and July through September).
- 3. Number and date of storms (greater than or equal to one inch precipitation in 24 hours) received during each three-month period (October through December, January through March, April through June, and July through September).

# D. POLLUTION CONTROL SYSTEM

The Discharger must inspect the leachate collection and removal systems (LCRS), any leak detection system (LDS), and groundwater subdrains and record the following information:

- 1. LCRS, LDS, and Groundwater Subdrain (if applicable)
  - a. **Weekly** During the wet season (October 1 and April 30) inspect system integrity and general operational status, volume of leachate collected (gallons with monthly, semiannual, and annual volume sub-totals), and disposal method, if more than one disposal method is used, record volume specific for each method. Documentation of scheduled and unscheduled maintenance. Include weekly inspection check-off sheets with monitoring reports.
  - b. Monthly During the dry season (May 1 through September 30) inspect system integrity and general operational status, volume of leachate collected (gallons with monthly, semiannual, and annual volume sub-totals), and disposal method, if more than one disposal method is used, record volume specific for each method. Documentation of scheduled and unscheduled maintenance. Include weekly inspection check-off sheets with monitoring reports.
  - c. **Annually** Analytical results of leachate monitoring from lined area as specified in **Part I.E.2**. The Discharger must take leachate or groundwater

- samples, as applicable, directly from any LCRS, LDS, groundwater subdrain, or associated holding tank (if fresh) that is representative of liquids from the control system sampled.
- d. Annually LCRS testing and demonstration, per <u>CCR</u>, title <u>27</u>, §20340(d), or Executive Officer approved engineered alternative pursuant to <u>CCR</u>, title <u>27</u>, §20380(e). Report results as part of the annual summary report required by this MRP, Part IV.C. The Discharger must develop results of annual testing in a manner that makes one year's test comparable to previous and subsequent tests. The Discharger must specifically address the absence or presence of biofouling in the annual summary report. For LCRS and LDS, the Discharger must check and report water level transducer calibrations per manufacturer's specifications.
- 2. Landfill Gas Collection and Removal System (if applicable)
  - a. Monthly System integrity and general operational status, and volume of landfill gas extracted with semiannual and annual volume sub-totals. Document how volume measurement is made. Documentation of scheduled and unscheduled maintenance.
  - b. **Annually** Analytical results of landfill gas monitoring (if applicable) as specified in **Part I.E.7**. The Discharger must take samples directly from any landfill gas collection header that is representative of landfill gas from the waste mass.
- 3. Groundwater Extraction and Treatment System (site-specific if applicable)
  - a. Site-Specific Frequency System integrity and general operational status, volume of extracted groundwater from each well, and treatment and disposal method. Document how volume measurement is made. Documentation of scheduled and unscheduled maintenance.
  - b. **Site-Specific Frequency** Analyze treated groundwater influent and effluent as specified in **Part I.E.2.a.**
  - c. Annually Submit an annual operational summary for the groundwater extraction and treatment system. The summary shall outline downtime causes and durations, major system changes, the computation of contaminant mass removed using most recent concentration data and extracted groundwater volume.

# E. ANALYTICAL MONITORING AND MONITORING LOCATIONS

The Discharger must monitor the Landfill in accordance with the following schedule(s). Monitoring locations are shown on **Figure A-1** [site map].

- 1. Monitoring Periods
  - a. **Quarterly** The 1st through 4th quarter monitoring periods are January 1 March 31, April 1 June 30, July 1 September 30, and October 1 December 31, respectively.

- b. **Semiannually** The 1st and 2nd semiannual monitoring periods are January 1 June 30, and July 1 December 31.
- c. **Annually** The annual monitoring period is from January 1 December 31.

# 2. Monitoring Points

The Discharger must sample the following monitoring points as shown and described in Table A-1 below.

a. Table A-1 Monitoring Points

Location ID	Monitoring Zone	Detection / Corrective	Parameters	Frequency	COCs	Frequency
Monitoring Well	Upgradient, downgradient, and/or geology		Table A-2 & Table A-4	Semiannually	Table A-3	5 Years
Piezometer ID	Upgradient, downgradient, and/or geology		NA	Semiannually	NA	5 Years
Extraction Well ID	downgradient		Table A-2 & Table A-4	Semiannually	Table A-3	5 Years
All LF Gas Probes	Vadose		Table A-5	Quarterly	NA	NA
LF Gas Header	Control System		Table A-5	Annually	NA	NA
Gas Condensate	Control System		VOCs	Annually	NA	NA
LCRS, LDRS, GW Subdrain,	Control System		Table A-2 & Table A-4	Annually	Table A-3	5 Years
Retention Basin	Stormwater		Table A-2 & Table A-4	Annually and Conditionally	NA	5 Years
Stormwater	Stormwater and/or Surface Water		Table A-2 & Table A-4	Conditionally	NA	NA
Leachate Seep/Spill	To Be Documented		Table A-2 & Table A-4	Conditionally	NA	5 Years

### b. Table A-1 Provisions

- i. For all new monitoring points, the Discharger must conduct **quarterly** monitoring for four consecutive quarters. After completing the initial quarterly samples, the frequency is as specified in **Part I.E.2.a**, Table A-1, except as provided under **Part III.D**.
- ii. The Discharger must sample and analyze monitoring parameters/constituents as specified in **Part I.E.3** of this MRP.

- iii. The Discharger must sample and analyze for constituents of concern (COC) as specified in **Part I.E.4** except as provided under **Part III.D**. Next sampling event [to be determined, Landfill specific].
- iv. The Discharger must sample and analyze monitoring parameters/constituents as specified in **Part I.E.5** of this MRP.
- v. The Discharger must measure groundwater elevations as specified in **Part I.E.8** of this MRP.
- vi. The Discharger must collect and analyze landfill gas samples (if applicable) as specified in **Part I.E.7** of this MRP.
- vii. The Discharger must collect and analyze stormwater samples as specified in **Part I.E.6** of this MRP.
- viii. In the event of a leachate seep or spill, the Discharger must monitor the seep or spill as specified in **Part IV.D.1** of this MRP.

# 3. Monitoring Parameters

The Discharger must analyze groundwater, stormwater, leachate for the monitoring parameters described in Table A-2 below:

Table A-2 Monitoring Parameters

Monitoring Parameters / Constituents	Method	Units
pH	Field	Std Units
Electrical Conductivity (@ 25° C)	Field	μmhos/cm
Dissolved Oxygen (DO)	Field	mg/L
Temperature	Field	°F/C
Turbidity	Field	NTU
Oxidation-Reduction Potential (ORP)	Field	mV
Total Dissolved Solids (TDS)	Laboratory	mg/L
Total Organic Carbon (TOC)	Laboratory	mg/L
Total Alkalinity (as CaCO₃)	Laboratory	mg/L
Carbonate (as CO <sub>3</sub> )	Laboratory	mg/L
Bicarbonate (as HCO <sub>3</sub> )	Laboratory	mg/L

Monitoring Parameters / Constituents	Method	Units
Chloride	Laboratory	mg/L
Nitrate (as Nitrogen)	Laboratory	mg/L
Ammonia (as Nitrogen)	Laboratory	mg/L
Sulfate	Laboratory	mg/L
Sulfide	Laboratory	mg/L
Iron	Laboratory	mg/L
Boron	Laboratory	mg/L
Calcium	Laboratory	mg/L
Magnesium	Laboratory	mg/L
Manganese	Laboratory	mg/L
Sodium	Laboratory	mg/L
Potassium	Laboratory	mg/L
TDS (Sum of lons) vs TDS (Measured)	Calculated	RPD
TDS/Electrical Conductivity	Calculated	RPD
Cation/Anion Balance	Calculated	RPD
Total Petroleum Hydrocarbons (TPH) (gasoline, diesel, crude oil)	Laboratory	mg/L
Volatile Organic Compounds (VOCs)	Laboratory	μg/L

# a. Table A-2 Provisions

i. Monitoring parameters/constituents listed are an example of what may be included in a site-specific monitoring and reporting program and may be expanded to include additional parameters/constituents or reduced as appropriate for site-specific conditions. Monitoring parameters/constituents must also be classified as either indicator or supplemental parameters/constituents. Statistical analysis will only be required for indicator parameters.

- ii. Laboratory analytical methods include any approved United States Environmental Protection Agency (US EPA) method that provides the lowest practicable detection limit or as specified in an Executive Officer approved sampling and analysis plan in accordance with **Part II.A** of this MRP.
- iii. Laboratory-derived parameters/constituents must be evaluated using statistical, non-statistical, and graphical assessment methods, as required by **Part III**.
- iv. For groundwater samples, all metals must be field filtered prior to laboratory analysis unless otherwise specified (e.g., chromium VI), or as approved in accordance with **Part II.A** of this MRP and analyzed for total metals.
- v. Units are defined as follows: µmhos/cm micromhos per centimeter; mg/L milligrams per liter; °F/C degrees Fahrenheit/Celsius; NTU nephelometric turbidity units; µg/L micrograms per liter; RPD relative percent difference; AMSL above mean sea level.
- vi. Volatile Organic Compounds (VOCs) include VOCs detectable using US EPA Method 8260B. Semi-volatile organic compounds (SVOCs) include SVOCs detectable using US EPA Method 8270C. Polycyclic Aromatic Hydrocarbons (PAH) chemicals include PAHs detectable using 8270 SIM. Lab results must include all unidentified peaks whenever practical, in accordance with **Part II.A.6** of this MRP.

# 4. Constituents of Concern Monitoring

Constituents of Concern<sup>3</sup> (COC) listed in **Part I.E.4.a**, Table A-3 below either directly include or include by reference all constituents listed in <u>Appendix II CFR</u>, <u>title 40</u>, <u>part 258</u>. Monitoring for COC must include only those constituents in **Part I.E.4.a**, Table A-3 that are not analyzed as part of the routine monitoring program. The Discharger must collect and analyze samples for COC once every five years at each of the Landfill's groundwater monitoring points (detection and corrective action), and pollution control systems (e.g. LCRS, LDRS, groundwater subdrain, gas condensate, if applicable). If there is an indication of release (Part IV D.4), then the Discharger is also required to monitor for COC at applicable monitoring points. Groundwater wells that have not previously been sampled for COC must be sampled and analyzed for all COC within six months of this MRP becoming effective. Additionally, approximately six months after installing a new

<sup>3</sup> Pursuant to CCR, title 27, Constituents of Concern means any waste constituent(s), reaction product(s), and hazardous constituent(s) that is reasonably expected to be in or derived from waste contained in a waste management unit. COCs include compounds that could reasonably be expected to have been disposed in a waste management unit but is not indicative that these compounds have been disposed or detected in groundwater.

groundwater monitoring point, the Discharger must collect and analyze samples for COC.

# a. Table A-3 Constituents of Concern

Constituents	Method	Units
Inorganics		
Antimony	Laboratory	mg/L
Arsenic	Laboratory	mg/L
Barium	Laboratory	mg/L
Beryllium	Laboratory	mg/L
Cadmium	Laboratory	mg/L
Chromium	Laboratory	mg/L
Cobalt	Laboratory	mg/L
Copper	Laboratory	mg/L
Cyanide	Laboratory	mg/L
Lead	Laboratory	mg/L
Mercury	Laboratory	mg/L
Molybdenum	Laboratory	mg/L
Nickel	Laboratory	mg/L
Perchlorate	Laboratory	mg/L
Selenium	Laboratory	mg/L
Silver	Laboratory	mg/L
Sulfide	Laboratory	mg/L
Thallium	Laboratory	mg/L
Tin	Laboratory	mg/L
Vanadium	Laboratory	mg/L
Zinc	Laboratory	mg/L
Organics		
All constituents listed in CFR, title 40, part 258, Appendix II	Laboratory	μg/L
Chlorinated Herbicides listed in US EPA method 8151A	Laboratory	μg/L
PCBs in US EPA method 8082	Laboratory	μg/L
Semi-Volatile Organic Compounds (SVOCs) listed in US EPA method 8270C	Laboratory	μg/L
Phthalate Esters (Included with SVOCs) listed in method 8060	Laboratory	μg/L
Nonhalogenated Volatiles in method 8015D	Laboratory	μg/L
Phenols (Included with SVOCs) listed in US EPA method 8040	Laboratory	μg/L
Pentachloroethane	Laboratory	μg/L

Constituents	Method	Units
Volatile Organic Compounds listed in US EPA Method 8260B	Laboratory	μg/L

### b. Table A-3 Provisions

- i. COC include all constituents listed in <u>Appendix II</u> to <u>CFR</u>, <u>title 40</u>, <u>part 258</u>.
- ii. Laboratory analytical methods include any approved US EPA method that provides the lowest practicable detection limit or as specified in an Executive Officer approved sampling and analysis plan in accordance with **Part II** of this MRP.
- iii. For groundwater samples, all metals must be field filtered prior to laboratory analysis, or as approved in accordance with **Part II.A** of this MRP and analyzed for total metals.
- iv. Units are defined as follows: mg/L milligrams per liter; µg/L micrograms per liter.
- v. Semi-volatile organic compounds (SVOCs) include SVOCs detectable using USEPA Method 8270C, and all unidentified peaks whenever practical, in accordance with **Part II.A.6** of this MRP. Semi-volatile organic compounds must include pentachloroethane, 2-picoline, and pyridine.
- vi. Volatile organic compounds (VOCs) include VOCs detectable using US EPA Method 8260B, fuel oxygenates, and all unidentified peaks whenever practical, in accordance with **Part II.A.6** of this MRP.
- 5. Per- and polyfluoroalkyl substances (PFAS) Monitoring Analytes The Discharger must analyze leachate and all detection monitoring and corrective action groundwater monitoring wells listed in Table A-1 for the PFAS analytes described in Table A-4 below:

Table A-4 PFAS Monitoring Constituents

PFAS Monitoring Constituents	Method	Units
Perfluoroalkyl carboxylic acids		
Perfluorobutanoic acid	Laboratory	ng/L
Perfluoropentanoic acid	Laboratory	ng/L
Perfluorohexanoic acid	Laboratory	ng/L
Perfluoroheptanoic acid	Laboratory	ng/L

PFAS Monitoring Constituents	Method	Units
Perfluorooctanoic acid	Laboratory	ng/L
Perfluorononanoic acid	Laboratory	ng/L
Perfluorodecanoic acid	Laboratory	ng/L
Perfluoroundecanoic acid	Laboratory	ng/L
Perfluorododecanoic acid	Laboratory	ng/L
Perfluorotridecanoic acid	Laboratory	ng/L
Perfluorotetradecanoic acid	Laboratory	ng/L
Perfluoroalkyl sulfonic acids		
Perfluorobutanesulfonic acid	Laboratory	ng/L
Perfluoropentanesulfonic acid	Laboratory	ng/L
Perfluorohexanesulfonic acid	Laboratory	ng/L
Perfluoroheptanesulfonic acid	Laboratory	ng/L
Perfluorooctanesulfonic acid	Laboratory	ng/L
Perfluorononanesulfonic acid	Laboratory	ng/L
Perfluorodecanesulfonic acid	Laboratory	ng/L
Perfluorododecanesulfonic acid	Laboratory	ng/L
Fluorotelomer sulfonic acids		
1 <i>H</i> ,1 <i>H</i> , 2 <i>H</i> , 2 <i>H</i> -Perfluorohexane sulfonic acid	Laboratory	ng/L
1 <i>H</i> ,1 <i>H</i> , 2 <i>H</i> , 2 <i>H</i> -Perfluorooctane sulfonic acid	Laboratory	ng/L
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	Laboratory	ng/L
Perfluorooctane sulfonamides		
Perfluorooctanesulfonamide	Laboratory	ng/L

PFAS Monitoring Constituents	Method	Units
N-methyl perfluorooctanesulfonamide	Laboratory	ng/L
N-ethyl perfluorooctanesulfonamide	Laboratory	ng/L
Perfluorooctane sulfonamidoacetic acids		
N-methyl perfluorooctanesulfonamidoacetic acid	Laboratory	ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid	Laboratory	ng/L
Perfluorooctane sulfonamide ethanols		
N-methyl perfluorooctanesulfonamidoethanol	Laboratory	ng/L
N-ethyl perfluorooctanesulfonamidoethanol	Laboratory	ng/L
Per- and Polyfluoroether carboxylic acids		
Hexafluoropropylene oxide dimer acid	Laboratory	ng/L
4,8-Dioxa-3 <i>H</i> -perfluorononanoic acid	Laboratory	ng/L
Perfluoro-3-methoxypropanoic acid	Laboratory	ng/L
Perfluoro-4-methoxybutanoic acid	Laboratory	ng/L
Nonafluoro-3,6-dioxaheptanoic acid	Laboratory	ng/L
Ether sulfonic acids		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	Laboratory	ng/L
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	Laboratory	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid	Laboratory	ng/L
Fluorotelomer carboxylic acids		
3-Perfluoropropyl propanoic acid	Laboratory	ng/L
2H,2H,3H,3H-Perfluorooctanoic acid	Laboratory	ng/L
3-Perfluoroheptyl propanoic acid	Laboratory	ng/L

PFAS Monitoring Constituents	Method	Units			
EIS Compounds					
Perfluoro-n-[ <sup>13</sup> C <sub>4</sub> ]butanoic acid	Laboratory	ng/L			
Perfluoro-n-[¹³C₅]pentanoic acid	Laboratory	ng/L			
Perfluoro-n-[1,2,3,4,6- <sup>13</sup> C <sub>5</sub> ]hexanoic acid	Laboratory	ng/L			
Perfluoro-n-[1,2,3,4- <sup>13</sup> C <sub>4</sub> ]heptanoic acid	Laboratory	ng/L			
Perfluoro-n-[ <sup>13</sup> C <sub>8</sub> ]octanoic acid	Laboratory	ng/L			
Perfluoro-n-[ <sup>13</sup> C <sub>9</sub> ]nonanoic acid	Laboratory	ng/L			
Perfluoro-n-[1,2,3,4,5,6- <sup>13</sup> C <sub>6</sub> ]decanoic acid	Laboratory	ng/L			
Perfluoro-n-[1,2,3,4,5,6,7- <sup>13</sup> C <sub>7</sub> ]undecanoic acid	Laboratory	ng/L			
Perfluoro-n-[1,2- <sup>13</sup> C <sub>2</sub> ]dodecanoic acid	Laboratory	ng/L			
Perfluoro-n-[1,2- <sup>13</sup> C <sub>2</sub> ]tetradecanoic acid	Laboratory	ng/L			
Perfluoro-1-[2,3,4- <sup>13</sup> C <sub>3</sub> ]butanesulfonic acid	Laboratory	ng/L			
Perfluoro-1-[1,2,3- <sup>13</sup> C <sub>3</sub> ]hexanesulfonic acid	Laboratory	ng/L			
Perfluoro-1-[ <sup>13</sup> C <sub>8</sub> ]octanesulfonic acid	Laboratory	ng/L			
Perfluoro-1-[ <sup>13</sup> C <sub>8</sub> ]octanesulfonamide	Laboratory	ng/L			
N-methyl-d3-perfluoro-1-octanesulfonamidoacetic acid	Laboratory	ng/L			
N-ethyl-d5-perfluoro-1-octanesulfonamidoacetic acid	Laboratory	ng/L			
1H,1H,2H,2H-Perfluoro-1-[1,2- <sup>13</sup> C <sub>2</sub> ]hexane sulfonic acid	Laboratory	ng/L			
1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluoro-1-[1,2- <sup>13</sup> C <sub>2</sub> ]octane sulfonic acid	Laboratory	ng/L			
1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluoro-1-[1,2- <sup>13</sup> C <sub>2</sub> ]decane sulfonic acid	Laboratory	ng/L			
Tetrafluoro-2-heptafluoropropoxy-13C3-propanoic acid	Laboratory	ng/L			
N-methyl-D7-perfluorooctanesulfonamidoethanol	Laboratory	ng/L			

PFAS Monitoring Constituents	Method	Units
N-ethyl-D9-perfluorooctanesulfonamidoethanol	Laboratory	ng/L
N-ethyl-D5-perfluoro-1-octanesulfonamide	Laboratory	ng/L
N-methyl-D3-perfluoro-1-octanesulfonamide	Laboratory	ng/L
NIS Compounds		
Perfluoro-n-[2,3,4- <sup>13</sup> C <sub>3</sub> ]butanoic acid	Laboratory	ng/L
Perfluoro-n-[1,2,3,4- <sup>13</sup> C <sub>4</sub> ]octanoic acid	Laboratory	ng/L
Perfluoro-n-[1,2- <sup>13</sup> C <sub>2</sub> ]decanoic acid	Laboratory	ng/L
Perfluoro-n-[1,2,3,4- <sup>13</sup> C <sub>4</sub> ]octanesulfonic acid	Laboratory	ng/L
Perfluoro-n-[1,2,3,4,5-¹³C₅] nonanoic acid	Laboratory	ng/L
Perfluoro-n-[1,2- <sup>13</sup> C <sub>2</sub> ]hexanoic acid	Laboratory	ng/L
Perfluoro-1-hexane[18O2]sulfonic acid	Laboratory	ng/L

#### a. Table A-4 Provisions

- i. The Discharger shall initially sample semiannually for the first two years. If no PFAS constituents in MRP Table A-4 are detected in groundwater within the initial two year period, the sampling frequency for PFAS monitoring will be amended by issuing a revised individual MRP that modifies the PFAS sampling schedule from semiannual monitoring to a once every 5-year sampling schedule in alignment with the Part I.E.2.b.iii COC sampling schedule. If any PFAS constituents in MRP Table A-4 are detected in groundwater as a result from a release from a WMU, the Discharger must evaluate the results in accordance with Part III.B of this MRP.
- ii. Laboratory analytical methods include any approved US EPA method that provides the lowest practicable detection limit or as specified in an Executive Officer approved sampling and analysis plan in accordance with **Part II.A** of this MRP.
- iii. Laboratory-derived parameters/constituents must be evaluated using statistical, non-statistical, and graphical assessment methods, as required by **Part III**.
- iv. Units are defined as follows: ng/L nanograms per liter.

# 6. Stormwater Monitoring

- a. **Annually**, the Discharger must sample stormwater within the sediment retention basins, and/or other drainage facilities, monitoring locations identified in **Part I.E.2.a**, Table A-1 for the monitoring parameters included in **Part I.E.3**, Table A-2 **and Part I.e.4**, Table A-4.
- b. Conditional Stormwater Monitoring: If leachate/condensate from spills or seeps contacts surface waters or stormwater, the Discharger must sample applicable onsite/offsite stormwater and surface water monitoring locations identified in **Part I.E.2.a**, Table A-1 for the monitoring parameters included in **Part I.E.3**, Table A-2 **and Part I.e.4**, Table A-4.
- c. **Annually**, if applicable based on site-specific conditions, the Discharger must collect a sediment sample from the appropriate site-specific identified retention sedimentation basin, and analyze for the metals listed in <a href="CCR">CCR</a>, title <a href="title-22">22</a>, §64431</a>. Sediment sampling is not required if the Discharger removes each basins' accumulated sediments prior to October 1 of each year.

# 7. Landfill Gas Monitoring

The Discharger must monitor all perimeter landfill gas probes and landfill gas collection header prior to the flare for the gas monitoring parameters listed in **Part I.E.7,Table A-5** below at the frequency specified in **Part I.E.2.a**, Table A-1 above.

Table A-53 Landfill	Gas	Monitoring	<b>Parameters</b>
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Moni	toring Parameters	Method	Units
	Methane	Field	ppm
	Carbon Dioxide	Field	ppm
	Oxygen	Field	ppm
Volatile	Organic Compounds	TO-15	ppb

# a. Table A-5 Provisions

- i. Laboratory methods include any US EPA method that provides the lowest practicable detection limit or as specified in an Executive Officer approved sampling and analysis plan in accordance with **Part II.A** of this MRP.
- ii. Field meters include Landtec GEM 5000, or equivalent, per California Department of Resources Recycling and Recovery (CalRecycle) requirements for perimeter monitoring (probes subject to on-going review and evaluation by CalRecycle). The Discharger must document that field meters are calibrated according to manufacturer specifications prior to use.

iii. Landfill gas VOC sample collection is conditional; if gas probes or landfill collection header contain methane concentrations greater than 5%, the Discharger must collect and analyze landfill gas for VOCs. Landfill gas VOC monitoring is required once **annually** per landfill gas monitoring point with methane greater than 5%.

# 8. Groundwater Flow Rate and Direction

- a. For each monitored groundwater body, the Discharger must measure the water elevation in each well, at least **semiannually**, including the times of expected highest and lowest elevations of the water level, and determine the presence of vertical gradients, and groundwater flow rate and direction for the respective groundwater body. Groundwater elevations for all wells in a given groundwater body must 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 [CFR, title 40, part 258.53(d)].
- b. The Discharger must compare observed groundwater characteristics with those from previous determinations, noting the appearance of any trends and of any indications of a change in the hydrogeologic conditions. The Discharger must evaluate groundwater separation from WMU using critical groundwater cross sections.

# 9. Sample Procurement Limitation

For any given monitored medium, the Discharger must collect samples from monitoring points with a span **not exceeding 30 days** within a given monitoring period and collect samples in a manner that ensures sample independence to the greatest extent feasible per CCR, title 27, §20415(e)(12)(B).

# PART II. SAMPLE COLLECTION AND ANALYSIS

The Discharger must collect and analyze samples in a manner that ensures the quality of the monitoring data. Unless otherwise indicated, the Discharger must report all sampling and analysis as outlined in **Part IV**.

# A. SAMPLE COLLECTION AND ANALYSIS

The Discharger must perform sample collection, storage, and analysis according to methods approved by the US EPA and in accordance with a sampling and analysis plan approved by the Central Coast Water Board's Executive Officer. A laboratory certified for these analyses by the State of California Environmental Laboratory Program (ELAP) must perform all water analyses and they must identify the specific methods of analysis. The director of the laboratory whose name appears in the certification must supervise all analytical work in his/her laboratory and must sign reports of such work submitted to the Central Coast Water Board. In addition, the Discharger is responsible for confirming that the laboratory analysis of samples from all monitoring points meets the following restrictions:

#### 1. Method Selection

The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% nonnumerical determinations in historical data for that medium, the analytical method having the lowest method detection limit<sup>4</sup> (MDL) must be selected from among those methods which would provide valid results in light of any matrix effects<sup>5</sup> involved.

#### 2. Trace Results

The Discharger must report trace results [i.e., results falling between the MDL and the practical quantitation limit<sup>6</sup> (PQL)] and the result must be accompanied by both the (nominal or estimated) MDL and PQL values for that analytical run.

### 3. Nominal or Estimated MDL and PQL

The laboratory must derive MDLs and PQLs for each analytical procedure according to State of California laboratory accreditation procedures. Both limits must reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the laboratory, rather than simply being quoted from US EPA analytical method manuals. If the laboratory suspects that, due to a change in matrix or their effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the laboratory must flag the results accordingly and the laboratory must include an estimate of the MDL/PQL actually achieved.

4. Quality Assurance/Quality Control (QA/QC) Data

<sup>&</sup>lt;sup>4</sup> The lowest concentration at which a given laboratory, using a given analytical method to detect a given constituent, can differentiate with 99% reliability, between a sample which contains the constituent and one which does not. The method detection limit must reflect the detection capabilities of the specific analytical procedure and equipment used by the laboratory.

<sup>&</sup>lt;sup>5</sup> Any increase in the MDL or PQL for a given constituent as a result of the presence of other constituents, either of natural origin or introduced through a release, that are present in the sample being analyzed.

<sup>&</sup>lt;sup>6</sup> The lowest acceptable calibration standard (acceptable as defined for a linear response or by actual curve fitting) times the sample extract dilution factor times any additional factors to account for matrix effect. The PQL must reflect the quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. PQLs reported by the laboratory must not simply be restated from US EPA analytical method manuals. Laboratory derived PQLs are expected to closely agree with published US EPA estimated quantitation limits (EQL).

The Discharger and laboratory must report QA/QC data along with the sample results to which it applies. The laboratory must report sample results unadjusted for blank results or spike recovery. The QA/QC data submittal must include:

- a. Method, equipment, and analytical detection limits.
- b. Recovery rates, an explanation for any recovery rate that is outside the US EPA specified recovery rate.
- c. Results of field, trip, equipment, and method blanks.
- d. Results of spiked and surrogate samples.
- e. Frequency of quality control analysis.
- f. Chain of custody logs.
- g. Name and qualifications of the person(s) performing the analyses.

# 5. Common Laboratory Contaminants

Upon receiving written approval from the Executive Officer, the Discharger can use an alternative statistical or non-statistical procedure for determining the significance of analytical results for a constituent that is a common laboratory contaminant [i.e., methylene chloride, acetone, 2-butanone, diethylhexyl phthalate, di-n-octyl phthalate, disulfide, and bis(2-ethylhexyl)phthalate] during any given Monitoring Period in which QA/QC samples show evidence of laboratory contamination for that constituent. The Discharger must report and flag analytical results involving detection of these analytes for easy reference by Central Coast Water Board staff.

#### 6. Unknowns

For unidentified chromatographic peaks, the Discharger must request the laboratory report tentatively identified compounds (TICs), along with an estimate of the concentration of the unknown analyte. When unidentified chromatographic peaks are encountered, the laboratory must perform second column or second method confirmation procedures to attempt to identify and more accurately quantify the unknown analyte(s). The Discharger must report the TIC results as estimated (i.e., J flag or qualifier code).

# 7. Contaminants in QA/QC Samples

In cases where contaminants are detected in QA/QC samples (i.e., field, trip, equipment, method blanks), the Discharger must appropriately flag the accompanying sample results.

#### **B. CONCENTRATION LIMIT DETERMINATION**

The Discharger must propose concentration limits for each monitoring parameter in accordance with CCR, title 27, §20400.

1. For the purpose of establishing concentration limits for monitoring parameters detected in greater than 10% of a medium's samples the Discharger must:

- a. Statistically analyze existing monitoring data (**Part III**), and propose, to the Executive Officer, statistically derived concentration limits for each monitoring parameter at each monitoring point for which sufficient data exists.
- b. In cases where sufficient data for statistically determining concentration limits do not exist, the Discharger must collect samples and analyze for monitoring parameter(s), which require additional data. Once sufficient data are obtained, the Discharger must submit proposed concentration limit(s) to the Executive Officer for approval. This procedure must take no longer than two calendar years.
- c. Sample and analyze new monitoring points, including any added by this General Order, until sufficient data is available to establish a proposed concentration limit for all monitoring parameters. Once sufficient data are obtained, the Discharger must submit the proposed concentration limit(s) to the Executive Officer for approval. This procedure must take no longer than two calendar years.
- 2. In cases where the monitoring parameter's MDL is exceeded in less than 10% of historical samples, the MDL is the concentration limit.
- 3. Once established, the Discharger must review concentration limits a minimum of **annually** and propose new concentration limits, when appropriate.

#### C. RECORDS TO BE MAINTAINED

The Discharger or laboratory must maintain records in accordance with <u>CCR</u>, <u>title 27</u>, <u>§21720(f)</u>, and retain them for a minimum of five years. The Discharger must extend the period of retention during the course of any unresolved litigation or when requested by the Executive Officer. Such records must show the following for each sample:

- 1. Identification of sample and monitoring point from which the sample was taken, along with the identity of the individual who obtained the sample.
- Date and time of sampling.
- 3. Date and time that analyses were started and completed, and the name of personnel performing each analysis including the field sheets.
- 4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.
- 5. Results of analyses, and MDL and PQL for each analysis.
- 6. A complete chain of custody log.

#### PART III. DATA ANALYSIS

## A. STATISTICAL ANALYSIS

For groundwater monitoring wells, the Discharger must use statistical methods to analyze monitoring parameters that exhibit concentrations that equal or exceed their

respective MDL in at least ten percent of applicable historical samples. The Discharger may propose and use any statistical method that meets the requirements of CCR, title 27, §20415(e)(7). All statistical methods and programs proposed by the Discharger are subject to Executive Officer approval.

## **B. NON-STATISTICAL ANALYSIS**

For groundwater monitoring wells, the Discharger must use the following non-statistical method for analyzing constituents which are detected in less than 10% of applicable historical samples. This method involves a two-step process:

- 1. For constituents to which this non-statistical method applies, compile a specific list of constituents that exceed their respective MDL. The Discharger must compile the list based on either data from the single sample or in cases of multiple independent samples, from the sample, which contains the largest number of constituents.
- 2. Evaluate whether the listed constituents meet either of two possible triggering conditions. Either the list from a single sampling location contains two or more constituents or contains one constituent that equals or exceeds its PQL. If either condition is met, the Discharger must conclude that a release is tentatively indicated and must immediately implement the appropriate re-test procedure under Part III.D.

## C. GRAPHICAL ANALYSIS

For groundwater monitoring wells, the Discharger must graphically evaluate the complete history of laboratory analytical data as outlined in Part IV.B.3.

- 1. The Discharger must evaluate long-term trends and variations in the laboratory analytical data.
- 2. For major cation/anions (calcium, magnesium, sodium, potassium, bicarbonate, chloride, sulfate), the Discharger must evaluate leachate, leak detection systems, and groundwater monitoring wells using Piper and Stiff diagrams.
- 3. If graphical methods support evidence of a tentative release, the Discharger must carry out the requirements of Part IV.D.4.

# D. RE-TEST PROCEDURE

- 1. In the event that the Discharger concludes that a tentative release occurred, the Discharger must carry out the reporting requirements of Part IV.D.2 and, within 30 days of receipt of analytical results, collect two independent samples for the indicated monitoring parameter(s) at each indicating monitoring point, collecting at least as many samples per monitoring point as were used for the initial test.
- 2. Analyze each of the two samples re-test analytical results using the same statistical method (or non-statistical comparison) that provided the tentative indication of a release. If the test results of either (or both) of the re-tested

sampling data confirm the original indication, the Discharger must conclude that a release has been discovered and must carry out the requirements of **Part IV.D.4**.

3. The Discharger must carry out re-tests only for the monitoring point(s) for which a release is tentatively indicated, and only for the monitoring parameter(s) which triggered the indication. When an analyte of the VOC composite parameter is retested the results of the entire VOC composite must be reported.

# **PART IV. REPORTING**

## A. ELECTRONIC SUBMITTAL

The Discharger must submit the following monitoring information to GeoTracker pursuant to the General Order and <u>CCR</u>, <u>title 23</u>, <u>division 3</u>, <u>chapter 30</u> and <u>CCR</u>, <u>title 27</u>, <u>division 3</u>:

- Boring logs as a GEO\_BORE PDF file. Boring logs must be prepared by an appropriate registered professional and include monitoring well screen depth and interval.
- 2. Groundwater monitoring well horizontal sampling location longitude (X) and latitude (Y), and top-of-casing elevation (Z) as a GEO\_XY text file and GEO\_Z text file, respectively. Collection of information related to the exact location of groundwater wells, required by <a href="CCR">CCR</a>, title 23, §2729-2729.1, constitutes "land surveying," as the term is defined in <a href="Business and Professions Code">Business and Professions Code</a>, §8726 and the collection of data is restricted to those who are licensed to practice land surveying in California.
- 3. Site map as a GEO\_MAP file. The acceptable format for the GEO\_MAP file is PDF (preferred), GIF, TIFF (TIF), or JPEG (JPG). The Closed Landfill site map includes facility information (e.g., property line, waste footprint, waste management units, leachate tanks, buildings, waste processing/diversion/recycling areas, surface waters, ponds, stormwater discharge points) and all current and historical monitoring locations including groundwater monitoring wells, boreholes, transient sampling points (i.e. direct push subsurface or surface sampling points), landfill gas probes, or any other field points utilized for leachate, landfill gas, soil, groundwater, surface water, or stormwater sampling.
- 4. Groundwater well measurement information for each sampling event as a GEO\_WELL file. Measurement must be completed from the top of the well casing to the groundwater surface to the nearest +/-0.01-foot accuracy.
- 5. Analytical sampling results for each sampling event as an Electronic Deliverable Format (EDF) file.
- 6. Complete monitoring report for regulatory review as a GEO\_REPORT PDF file. Please note, technical reports are also submitted as GEO\_REPORT PDF files. The monitoring report should include the signed transmittal sheet, text, graphs,

diagrams, tables, maps, figures, and appendices that would have been included in a hard copy paper report.

#### **B. MONITORING REPORT**

The Discharger must submit a monitoring report **semiannually** by **January 31** and **July 31** of each year<sup>7</sup>. Submit the monitoring reports in an electronic format, with transmittal letter, text, tables, figures, laboratory analytical data, and appendices in a PDF (one PDF for the entire report). The Discharger is required to upload the full monitoring report into GeoTracker along with corresponding laboratory data in EDF, pursuant to <u>CCR</u>, title 23, division 3, chapter 30 and <u>CCR</u>, title 27, division 3. The monitoring report must address all facts of the Landfill's monitoring program. The monitoring report must include, but should not be limited to the following:

## 1. Letter of Transmittal

A letter transmitting the essential points must accompany each monitoring report. At a minimum, this transmittal letter shall identify any violations found since the last report was submitted and a description of the actions taken or planned for correcting those violations, including any references to previously submitted time schedules. If no violations have occurred since the last submittal, this shall be stated in the transmittal letter. The Discharger must sign both the monitoring report and the transmittal letter as prescribed in General Order **Reporting F.1** and include the following statement:

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

# 2. Compliance Summary

The summary must discuss compliance with the General Order, concentration limits, release indications, and any corrective actions taken.

# 3. Graphical Presentation of Data

For each monitoring point in each medium, submit, in graphical format, the complete history of laboratory analytical data. Graphs must effectively illustrate trends and/or variations in the laboratory analytical data. Each graph must plot a single constituent concentration over time at one (for intra-well comparison) or more (for inter-well comparisons) monitoring points in a single medium. Concentration limits must be graphed along with constituent concentrations. If

<sup>&</sup>lt;sup>7</sup> Semiannual or annual monitoring report submittal dates and related monitoring periods may be revised on a site-specific basis if requested by the Discharger and approved by the Executive Officer.

appliable, maximum contaminant levels (MCL) must also be graphed along with constituent concentrations. When multiple samples are taken, graphs must plot each datum, rather than plotting mean values.

For leachate, leak detection systems, groundwater subdrains, and groundwater monitoring wells, evaluate cation/anion balance using Piper and Stiff diagrams.

Determine horizontal and vertical gradients, groundwater flow rate, and flow direction for each respective groundwater body. This data must be presented on a figure that depicts groundwater contours, flow directions, and gradient. Include one figure for each groundwater level monitoring event in the semi-annual monitoring report. If appropriate, include figures for critical groundwater/WMU cross sections to evaluate groundwater separation from WMUs.

# 4. Map(s)

The Landfill base map for the monitoring report must consist of a current aerial photograph or include relative topographical features, along with monitoring points and features of the Closed Landfill (e.g., surface waters, drainage facilities, stormwater discharge points, WMU disposal areas, scale house, buildings, waste processing/diversion/recycling areas).

# 5. Corrective Action Summary

Discuss significant aspects of any corrective action measures conducted during the monitoring period and the status of any ongoing corrective action efforts, including constituent trend analysis. Calculate pollutant load removed from the site's impacted media (water, gas, leachate) by mass removal system(s). Based on the mass removal calculations on actual analytical data as required by **Part I.D**, present discussion and indications, relating mass removal data to the violation the corrective action is addressing.

# 6. Laboratory Result

A tabular report and summary discussion of laboratory results and statements demonstrating compliance with **Part II** including the current monitoring periods laboratory data sheets. Also provide results of analyses performed at the Landfill that are outside of the requirements of this Monitoring and Reporting Program and are water quality related. For each constituent, the Discharger must note the chemical abstraction service (CAS) number associated with the constituent and, if applicable, the associated water quality objective. If the reporting limit for a certain chemical is higher than the water quality objective and no other US EPA method can analyze using a lower reporting limit, the Discharger will justify the reason for the high reporting limit.

# 7. Sampling Summary

For each monitoring point addressed by the report, describe and summarize: 1) the method and time of water level measurement, 2) the method of purging and purge rate and well recovery time, and 3) the field parameter readings.

For each monitoring point addressed by the report, a description of the type of sampling device used, its placement for sampling, and a description of the sampling procedure (number of samples, field blanks, trip blanks, and duplicate samples taken; the date and time of sampling; the name and qualification of the person actually taking the samples; and description of any anomalies).

# 8. Pollution Control Systems

A summary of the total volume of leachate or water collected each month and disposal method(s) since the previous monitoring report for pollution control systems (e.g., LCRS, LDS, surface water runoff collected as leachate). Also include fluid level measurements in LCRS and LDS, along with transducer calibration records, and whether liquid was observed/removed from the LDS.

## 9. General Discussion

A summary of site inspections, drainage system inspections, and rainfall data for the Landfill recorded during the monitoring period (**Part I**).

## C. ANNUAL SUMMARY REPORT

The Discharger must submit an annual report to the Central Coast Water Board covering the previous monitoring year. The annual monitoring period ends on December 31 each year. Submit this annual summary report no later than **January 31 of each year**. The Discharger may combine the annual summary report with the second semiannual monitoring report of the year. The annual report must include the information outlined in **Part IV.B** above and the following:

# 1. Discussion

Include a comprehensive discussion of the compliance record as it related to Waste Discharge Requirements Order No. R3-2024-0036, a review of the past year's significant monitoring system and operational changes, a summary of corrective action results and milestones, and a review of construction projects, with water quality significance, completed or commenced in the past year or planned for the upcoming year.

## 2. Concentration Limit Review

Proposed concentration limits for all monitoring parameters. The Discharger must review concentration limits a minimum of annually and revise them as necessary. The Discharger must discuss data collected during the past year and consider for inclusion in, and determination of, proposed concentration limits for the coming year. For statistical concentration limits that are changed from the previous year, include a comprehensive discussion of the proposed concentration limit for Executive Officer review and consideration.

# 3. Pollution Control Systems

Results of the annual pollution control systems testing, as required by **Part I.D**. The Discharger must verify that disposal methods for leachate, condensate, or impacted groundwater are appropriate based on annual sampling results.

#### 4. Final Cover

Most recent final cover survey as required by the General Order and a summary of final cover repairs. The Discharger must maintain records of cumulative waste subsidence or settlement in final cover areas based on the most recent and historical final cover surveys. The Discharger must document final cover repairs (e.g., adding vegetative soils to restore grading and/or prevent ponding) with sufficient details to facilitate future evaluations of final cover differential settlement.

# 5. Map(s)

A map, or set of maps, that indicate the type of cover materials in place (final, long-term intermediate, or intermediate) over inactive and completed areas.

## D. CONTINGENCY RESPONSE

# 1. Leachate Seep/Spill

The Discharger must, **within 24 hours**, report by telephone and email, the discovery of a leachate spill or previously unreported seepage from the WMU. If the primary Central Coast Water Board case worker is unavailable, the Discharger must call the Central Coast Water Boards main office at (805) 549-3147. The Discharger must additionally submit a written report within seven days, containing at least the following information:

- a. A map showing the location(s) of seepage or spill along with photographic documentation.
- b. An estimate of the flow rate and duration of seep or spill.
- c. Location of sample(s) collected for laboratory analyses. Unless otherwise directed by Central Coast Water Board staff, the Discharger must sample all leachate seeps and spills, and applicable downgradient surface water or stormwater monitoring locations for the monitoring parameters in **Part I.E.3**, Table A-2. In the event multiple seeps occur in a similar localized area (slope or bench), the Discharger may use professional judgment to reduce the number of leachate seep samples provided the Discharger collects a representative sample. The Discharger must photo document sample location(s), all observed seeps/spills, and document the sample location(s) on a map or diagram. The Discharger is also required to sample stormwater in accordance with **Part I.E.6**.
- d. A description of the nature of the discharge (e.g., pertinent observations and analysis).
- e. A summary of corrective measures both taken and proposed.

# 2. Initial Release Indication Response

Should the initial statistical or non-statistical comparison (under **Part III.A or Part III.B**) indicate that a new release is tentatively identified, the Discharger must:

- a. Within 24 hours, notify the Central Coast Water Board by telephone and email of the monitoring point(s) and constituent(s) or parameter(s) involved. If the primary Central Coast Water Board case worker is unavailable, the Discharger must call the Central Coast Water Boards main office at (805) 549-3147.
- b. Provide written notification of the tentatively identified release by certified mail within seven days; and
- c. Either of the following:
  - i. Carry out a discrete re-test in accordance with Part III.D. If the re-test confirms the existence of a release or the Discharger fails to perform the re-test, the Discharger must carry out the requirements of Part IV.D.4. In any case, the Discharger must inform the Central Coast Water Board of the re-test outcome within 24 hours of the results becoming available, following up with the written results submitted by certified mail within seven days; or
  - ii. Make a determination, in accordance with <a href="CCR">CCR title 27, §20420(k)(7)</a>, that a source other than the MWU(s) caused the release or that the evidence is an artifact caused by an error in sampling, analysis, or statistical evaluation or by natural variation in the groundwater, surface water, or the unsaturated zone.

# 3. Physical Evidence of a Release

If either the Discharger or the Executive Officer determines that there is physical evidence of a new release pursuant to <a href="CCR">CCR</a>, title 27, §20385(a)(3), the Discharger must conclude that a release has been discovered and must:

- a. **Within seven days** the Discharger shall notify the Executive Officer of this fact by certified mail (or acknowledge the Executive Officer's determination).
- b. Carry out the requirements of **Part IV.D.4** for potentially affected medium/media.
- c. Carry out any additional investigations stipulated in writing by the Executive Officer for the purpose of identifying the cause of the indication.

# 4. Release Discovery Response

If the Discharger concludes that a new release has been discovered the following steps must be carried out:

a. If this conclusion is not based upon monitoring for COC, the Discharger must sample for COC at monitoring points in the affected medium. Within seven days of receiving the laboratory analytical results, the Discharger must notify the Executive Officer, by certified mail, of the concentration of COC at each monitoring point. This notification must include a synopsis showing, for each monitoring point, those constituents that exhibit an unusually high concentration.

- b. The Discharger must, within 90 days of discovering the release, submit to the Executive Officer a revised report of waste discharge proposing an evaluation monitoring and reporting program that: (1) meets the requirements of CCR, title 27, §20420 and §20425; and (2) satisfies the requirements of CFR, title 40, part 258.55(g)(1)(ii) by committing to install at least one monitoring well directly down-gradient of the center of the release.
- c. The Discharger must, **within 180 days** of discovering the release, submit to the Executive Officer a preliminary engineering feasibility study meeting the requirements of <u>CCR</u>, title <u>27</u>, §20420.
- d. The Discharger must immediately begin delineating the nature and extent of the release by installing and monitoring assessment wells as necessary to assure that the Discharger can meet the requirements of <a href="CCR">CCR</a>, title 27, <a href="S20425">§20425</a> to submit a delineation report within 90 days of when the Executive Officer directs the Discharger to begin the evaluation monitoring program.

# 5. Release Beyond the Facility Boundary

Any time the Discharger or Executive Officer concludes that a release from the WMU has proceeded beyond the Closed Landfill boundary, the Discharger must notify the affected persons<sup>8</sup> who either own or reside upon the land that directly overlies any part of the plume.

- a. Initial notification to affected persons must be accomplished within 14 days of making this conclusion and must include a description of the Discharger's current knowledge of the nature and extent of the release.
- b. **Within 30 days** of making this conclusion, the discharger shall submit a well map that identifies all water wells within one mile outside of the facility boundary and must notify any additional affected person if previously unknown water wells are identified.
- c. Subsequent to initial notification, the Discharger must provide updates to affected persons, including any persons newly affected by a change in the boundary of the release, **within 14 days** of concluding there has been any material change in the nature or extent of the release.
- d. Each time the Discharger sends a notification to affected persons (under a. or b. above), the Discharger must, within seven days of sending such notification, provide the Executive Officer with both a copy of the notification and a current mailing list of affected persons.

This MRP may be revised or modified by the Executive Officer at any time.

<sup>&</sup>lt;sup>8</sup> Individuals who either own or reside upon the land which directly overlies any part of that portion of a gas or liquid phase release that may have migrated beyond the facility boundary.

ORDERED BY:

for Ryan E. Lodge,

Officer

Executive Officer



# ATTACHMENT B - LIST OF CLOSED LANDFILLS

SUBJECT TO

# WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2024-0036 FOR CLOSED LANDFILL FACILITIES IN THE CENTRAL COAST REGION

**Table B-1: Central Coast Region Closed Landfills** 

Landfill	GeoTracker Global ID	Existing Order	ROWD Submittal Date
Vandenberg Air Force Base Class III Landfill	L10008940784	R3-2004-0151	November 1, 2024
New Cuyama Closed Landfill	L10005509940	R3-1997-0018	November 1, 2024
Ben Lomond Class III Landfill	L10009318484	R3-2001-0054	November 1, 2024
Jolon Road Class III Landfill	L10009469306	R3-2001-0032	November 1, 2024
Lake San Antonio North Shore Class III Landfill	L10005444338	R3-2002-0056	February 1, 2025
Lewis Road Class III Landfill	L10009786549	R3-2003-0109	February 1, 2025
Pacheco Pass Class III Landfill	L10006062799	R3-2004-0111	February 1, 2025
Los Osos Class III Landfill	L10004709809	R3-2007-0023	May 1, 2025
Foxen Canyon Landfill	L10004697449	R3-2007-0027	May 1, 2025
Crazy Horse Landfill	L10009691580	R3-2013-0016	May 1, 2025

The Executive Officer will issue a site-specific monitoring and reporting program (MRP), after which the landfill will be enrolled in the General Order. The MRP will be available on the California State Water Resources Control Board's GeoTracker system (<a href="https://geotracker.waterboards.ca.gov/">https://geotracker.waterboards.ca.gov/</a>).

## ATTACHMENT C - ADDITIONAL FINDINGS

# WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2024-0036 FOR CLOSED LANDFILL FACILITIES IN THE CENTRAL COAST REGION

Additional findings of the California Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board) presented below describe the legal requirements and technical rational that serve as the basis for the requirements of Waste Discharge Requirements Order No. R3-2024-0036 (General Order) and Monitoring and Reporting Program (MRP) Order No. R3-2024-0036.

## ADDITIONAL FINDINGS

## A. PURPOSE

- The purpose of this General Order is to provide updated and consistent waste discharge requirements for closed landfill facilities (Closed Landfill) within the Central Coast Water Board's regional boundaries (Central Coast Region).
- 2. In accordance with the California Water Code (Water Code), the Central Coast Water Board has the authority to regulate waste discharges that could affect the quality of the waters of the State. Under <a href="Water Code">Water Code</a>, §13050(e), "waters of the State" include any surface or groundwater within the boundaries of the State.
- 3. In accordance with Water Code, §13263(i), the Central Coast Water Board may prescribe general waste discharge requirements for a category of discharges if the Central Coast Water Board determines that all the following criteria apply to the discharges in that category:
  - a. The discharges are produced by the same or similar operations.
  - b. The discharges involve the same or similar types of waste.
  - c. The discharges require the same or similar treatment standards.
  - d. The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

Given the nature of the waste and the WMU operations as described in General Order **Finding 2**, p. 1, *supra*, Central Coast Water Board finds that the Closed Landfills listed in Attachment B meet all the categories listed in <u>Water Code</u>, <u>§13263(i)</u> and that the discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

# **B. ENROLLMENT PROCESS**

1. Any Closed Landfill (defined in **Finding 2**) in its post-closure maintenance period (defined in **Finding 3**) is eligible for enrollment. **Attachment B** contains a list of

facilities that currently meet the eligibility requirements for coverage under this General Order.

- 2. To avoid multiple permits imposing similar requirements on the same discharge, when a Closed Landfill that is currently regulated by individual waste discharge requirements (WDR) enrolls in this General Order, the then-existing individual WDR regulating the discharge is terminated upon issuance of an NOA.
- 3. <u>Water Code, §13260</u>, requires any entity discharging waste or proposing to discharge waste, which could affect the quality of the waters of the State, to file a report of waste discharge (ROWD) with the Central Coast Water Board.
- 4. All Closed Landfills listed in **Attachment B** must submit a ROWD consisting of a form 200 and a copy of the Executive Officer approved Post-Closure Maintenance Plan by the respective submittal dates listed in **Attachment B**. If updates to the Post-Closure Maintenance Plan are needed to conform to current post-closure maintenance activities, a revised Post-Closure Maintenance Plan must be submitted for Executive Officer review and approval in lieu of the outdated Executive Officer approved plan.
- 5. For landfill facilities that have not completed closure as defined by Finding 4 but intend to enroll under the General Order once closure is complete, the owner and/or operator (Discharger) must submit a ROWD consisting of a form 200 and a copy of the Executive Officer approved Post-Closure Maintenance Plan.
- 6. Following the review and approval of a ROWD, the Central Coast Water Board will issue a site specific MRP in accordance with **Finding 6** and a notice of applicability (NOA), at which point the Closed Landfill will be enrolled under the General Order.
- An annual fee is required for coverage under the General Order. The annual fee
  is based on the Closed Landfill's threat to water quality and complexity rating as
  defined by the <u>CCR</u>, title 23, §2200.

# C. TERMINATION PROCEDURE

- 1. 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 <a href="Water Code">Water Code</a>, § 13167.5; <a href="CCR">CCR</a>, title 27, § 21730.)
- 2. Until the Executive Officer issues a notice of termination, or individual WDRs are adopted specifically for the Closed Landfill, the WMU at the enrolled Closed Landfill shall remain subject to this General Order.

#### D. REGULATORY REQUIREMENTS

 CCR, title 27, effective July 18, 1997, and Code of Federal Regulations (CFR), title 40, chapter I, subchapter I, parts 257 and 258, Solid Waste Facility Disposal Criteria, Final Rule, as promulgated on October 9, 1991 (hereafter "CFR, title 40 part 258" or "Subtitle D") includes design, construction, operation, closure, and post-closure requirements for landfill facilities.

# E. FACILITY AND WASTE MANAGEMENT UNIT CLASSIFICATION

- 1. "Landfill facility" or "waste management facility" pursuant to <u>CCR</u>, title 27, §20164 is:
  - "...the entire parcel of property at which solid waste discharge operations are conducted."

Landfill facilities typically include access roads; the scale area; maintenance buildings; waste processing, diversion or recycling areas; soil borrow, stockpiling, and staging areas; drainage infrastructure, monitoring areas, and waste disposal areas or waste management units (WMUs).

- 2. CCR, title 27, §20164, defines "waste management unit" or "WMU" as:
  - "...an area of land, or a portion of a waste management facility, at which waste is discharged. The term includes containment features and ancillary features for precipitation and drainage control, and for monitoring."

# F. SITE-SPECIFIC MONITORING AND REPORTING PROGRAM

- 1. Upon enrollment under the General Order, the Executive Officer will issue an NOA and a site-specific monitoring and reporting program (MRP).
- 2. Water Code, §13267 (b)(1), provides:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters 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. When requested by the person furnishing a report, the portions of a report that might disclose trade secrets or secret processes may not be made available for inspection by the public but shall be made available to governmental agencies for use in making studies. However, these portions of a report shall be available for use by the state or any state agency in

judicial review or enforcement proceedings involving the person furnishing the report."

3. Technical reports are necessary to evaluate the Discharger's compliance with the terms and conditions of this General Order and to ensure that applicable water quality objectives are in fact being met. Consistent with <u>Water Code</u>, §13267, this General Order requires the implementation of an MRP that is designed to determine the effects of the Discharger's activity on protecting water quality, to verify the effectiveness of management practices designed to comply with applicable water quality objectives, to verify the adequacy and effectiveness of the General Order's conditions, and to evaluate Discharger compliance with the terms and conditions of the General Order. The burden of these reports bears a reasonable relationship to the need for the report and the benefits to be obtained from the reports. Failure to submit reports in accordance with schedules established by this General Order, attachments to this General Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer, may subject the Discharger to enforcement action pursuant to <u>Water Code</u> §13268.

The Central Coast Water Board has considered the cost and need for monitoring and reporting required pursuant <a href="CCR">CCR</a>, title 27, §20385</a> and implemented through this MRP. The costs of complying with this MRP will be dependent on site specific conditions and are estimated to range from approximately \$14,600 to \$58,900 annually. Additionally, in accordance with <a href="CCR">CCR</a>, title 27, §20420(g), the MRP requires 5-year constituent of concern monitoring which is estimated to add an additional cost of \$6,800 to \$33,800 once every five years. Although the costs are significant, the costs are reasonable because the data collected under the MRP are required pursuant <a href="CCR">CCR</a>, title 27, §20385 and are needed to evaluate compliance with the discharger requirements of this General Order, ensure the protection of water quality and confirm that beneficial uses are protected. The cost of implementing this MRP may be reduced after two years if monitoring conducted under Part I.E.5 of the MRP documents non-detections for Per- and polyfluoroalkyl substances (PFAS).

4. Monitoring and Reporting Program — Monitoring and Reporting Program No. R3-2024-0036 (MRP) included as **Attachment A** to this General Order, provides the basis and expectations for a more facility specific MRP that will be issued by the Central Coast Water Board's Executive Officer upon enrollment in the General Order. The MRP will be renamed "Monitoring and Reporting Program No. R3-2024-0036 as modified for {landfill name}" and revised to include site-specific monitoring points and operations. The site-specific modified MRP will require the Discharger to monitor and report on groundwater, leachate collection and removal, landfill gas, stormwater drainage, rainfall data, and physical landfill observations. The site-specific modified MRP will establish monitoring points, monitoring frequency, monitoring parameters, constituents of concern, criteria for sample collection and analyses, methods for analyzing data both statistically and non-statistically, minimum monitoring report content, and definition of terms.

- Groundwater Monitoring Groundwater monitoring is required for all Dischargers enrolled in this General Order. Specific groundwater monitoring network configurations and estimated groundwater gradients are included in each landfill's Executive Officer approved Closure and Post-Closure Maintenance Plan (CPCMP).
- Leachate Monitoring All closed landfill WMUs equipped with a leachate collection and removal systems shall collect and analyze leachate samples in accordance with the site-specific modified MRP and determine the proper disposal method.
- 7. Stormwater Monitoring If the Closed Landfill is enrolled under the State Water Resources Control Board (State Water Board) General Storm Water Permit for Industrial Activities, the Discharger shall conduct stormwater sampling in accordance with the site-specific modified MRP. All closed landfills equipped with stormwater retention basins shall collect and analyze samples in accordance with the site specific modified MRP.
- 8. Unsaturated Zone Monitoring All closed landfills WMU equipped with unsaturated zone monitoring systems, such as pan lysimeters, suction lysimeters, and/or underdrains shall be monitored in accordance with the site-specific modified MRP.
- 9. Landfill Gas Monitoring Dischargers shall measure landfill gas quantity and quality regularly in accordance with the site-specific modified MRP.
- 10. CCR, title 27, §20400, requires the Central Coast Water Board to specify concentration limits in waste discharge requirements. The Central Coast Water Board complies with the intent of CCR, title 27, §20400, by requiring the Discharger to establish and review concentration limitations on an annual basis in accordance with MRP Order No. R3-2020-0001.

## G. FINANCIAL ASSURANCE

1. CCR, title 27, §22207, §22212, and §22220, et seq., and CFR, title 40, part 258 Subpart G require Dischargers obtain and maintain financial assurance instruments to address closure, post-closure, and corrective action. The California Department of Resources Recycling and Recovery (CalRecycle), in coordination with Central Coast Water Board, verify that the Discharger has demonstrated availability of financial resources to conduct closure and post-closure maintenance activities and an appropriate financial assurance instrument for corrective action for a reasonably foreseeable water or non-water release at the landfill. The financial instruments for closure, post-closure maintenance, and corrective action adjust annually for inflation.

# H. BASIN PLAN

1. The Water Quality Control Plan for the Central Coastal Basin (<u>Basin Plan</u>) is the Central Coast Water Board's master water quality control planning document and

was first adopted in 1975. The Basin Plan designates beneficial uses and water quality objectives for waters of the state, including surface waters and groundwaters. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Central Coast Water Board and approved by the State Water Board, the Office of Administrative Law (OAL), and the US EPA, where required. The Basin Plan may be amended in accordance with Water Code, §13240 et seq.

- 2. Pursuant to chapter II of the Basin Plan, the beneficial uses of inland surface waters of the Central Coast Region may include the beneficial use listed below. Where surface water bodies are not specifically listed, the Basin Plan designates beneficial uses based on the waters to which they are tributary:
  - a. Municipal and Domestic Supply (MUN)
  - b. Agricultural Supply (AGR)
  - c. Industrial Process Supply (PRO)
  - d. Industrial Service Supply (IND)
  - e. Groundwater Recharge (GWR)
  - f. Fresh Water Replenishment (FRSH)
  - g. Navigation (NAV)
  - h. Hydropower Generation (POW)
  - i. Water Contact Recreation (REC-1)
  - j. Non-contact Water Recreation (REC-2)
  - k. Commercial and Sport Fishing (COMM)
  - I. Aquaculture (AQUA)
  - m. Warm Fresh Water Habitat (WARM)
  - n. Cold Fresh Water Habitat (COLD)
  - o. Inland Saline Water Habitat (SAL)
  - p. Estuarine Habitat (EST)
  - q. Wildlife Habitat (WILD)
  - r. Preservation of Biological Habitats of Special Significance (BIOL)
  - s. Rare, Threatened, and/or Endangered Species (RARE)
  - t. Migration of Aquatic Organisms (MIGR)
  - u. Spawning, Reproduction, and/or Early Development (SPWN)
  - v. Shellfish Harvesting (SHELL)
- 3. The Basin Plan identifies present and anticipated beneficial uses for surface waters in the Central Coast Region. Surface water beneficial uses within the

Central Coast Region are specified by water body in the Basin Plan. Surface waters that do not have beneficial uses designated in the Basin Plan have beneficial uses of municipal and domestic water supply and protection of both recreation and aquatic life.

- 4. The Basin Plan designates beneficial uses for groundwater throughout the Central Coast Region. Except for that found in the Carrizo Plain groundwater basin, all groundwater within the Central Coast Region is suitable for municipal and domestic supply, agricultural supply, and industrial service supply. None of the facilities covered by this General Order are located in the Carrizo Plain.
- 5. Pursuant to <a href="Water Code">Water Code</a>, §13263(a)</a>, this General Order implements the Basin Plan including consideration of the beneficial uses of water, the water quality objectives reasonably required for protection of those beneficial uses, other waste discharges, and the need to prevent nuisance conditions. Water quality objectives are the limits or levels of water quality constituents or characteristics that are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area (<a href="Water Code">Water Code</a>, §13050(h)). Water quality objectives apply to all waters within a surface water or groundwater resource for which beneficial uses have been designated.
- 6. This General Order requires the containment of all wastes within WMUs to prevent degradation of waters of the state pursuant to <u>CCR</u>, <u>title 27</u> and <u>CFR title 40</u>, <u>part 258</u>, and therefore implements the Basin Plan's water quality objectives and protects beneficial uses.

# I. STATE ANTIDEGRADATION POLICY (RESOLUTION 68-16)

- 1. The State Water Board's Statement of Policy with Respect to Maintaining High Quality Waters in California, Resolution 68 16 (Antidegradation Policy) prohibits the Central Coast 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.
- 2. Consistent with <u>CCR</u>, <u>title 27</u>, this General 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, the Discharger is required to address such releases through a Corrective Action Program (see, 27 CCR §§ 20385, 20415, 20430). Because this General Order authorizes no water quality degradation, it complies with the Antidegradation Policy.

# J. STATE CLEANUP POLICY (RESOLUTION 92-49)

- State Water Board Resolution No. 92-49, Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code §13304 (Resolution 92-49), adopted June 18, 1992, and amended on April 21, 1994, and October 2, 1996, sets forth the policies and procedures to be used during an investigation or cleanup of discharged wastes that threaten or create conditions of pollution or nuisance.
- 2. Resolution 92-49 requires that cleanup levels be consistent with Antidegradation Policy. Resolution 92-49 requires the waste to be cleaned up to background, or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with <a href="CCR">CCR</a>, title 23, <a href="S2550.4">§2550.4</a>. Any alternative cleanup level to background must (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board.
- 3. Pursuant to <a href="CCR">CCR</a>, title 27, §20420</a>, if the Discharger or the Executive Officer determines that there is evidence of a release from any portion of the WMU, this General Order requires the Discharger to implement the procedures outlined in <a href="CCR">CCR</a>, title 27, §20380</a>, §20385</a>, §20425</a>, §20430</a>, and MRP No. R3-2024-0036. If evidence of a release is confirmed, pursuant to <a href="CCR">CCR</a>, title 27, §20425</a>, the Discharger is required to propose corrective actions to remove waste constituents or treat them in place (corrective action program). Pursuant to <a href="CCR">CCR</a>, title 27, §20385</a>, the corrective action program must meet the requirements of <a href="CCR">CCR</a>, title 27, §20430</a>. Corrective action programs compliant with <a href="CCR">CCR</a>, title 27, §20430</a>. Corrective action programs compliant with <a href="CCR">CCR</a>, title 27, §20430</a> are consistent with the policies and procedures for investigation and cleanup required by Resolution 92-49.
- 4. This General Order regulates discharges associated with the Discharger's corrective action program and its implementation by requiring the Discharger to submit and receive Executive Officer approval for a corrective action program that includes a proposed scope of action and monitoring to demonstrate the effectiveness of corrective actions pursuant <a href="CCR">CCR</a>, title 27, §20430. If the Executive Officer approves the corrective action program, the site-specific MRP will be revised to include corrective action monitoring as necessary.

## K. STATE WATER BOARD RESOLUTION 93-62

- 1. State Water Board Resolution No. 93-62, Policy for Regulation of Discharges of Municipal Solid Waste, adopted June 17, 1993, and amended on July 21, 2005, directed each Regional Water Board to revise the waste discharge requirements for each Discharger in its region who owns or operates a municipal solid waste landfill that received waste after October 9, 1991, to address identified deficiencies between State and Federal regulations.
- 2. On October 8, 1993, the Central Coast Water Board adopted Order No. 93-84 Waste Discharge Requirements Amendment for All MSW Landfills in the Central

Coast Region, To Implement State Water Board Resolution No. 93-62, Adopted June 17, 1993, As State Policy for Water Quality Control Under §13140 of the Water Code. Order No. 93-84 established Subtitle D Federal Deadline Extensions for Dischargers to comply with Subtitle D.

- 3. This General Order implements State Water Board Resolution No. 93-62 and Central Coast Water Board WDR Order No. 93-84, by requiring compliance with both <u>CCR</u>, title <u>27</u>, and <u>CFR</u>, title <u>40</u>, part <u>258</u>. If any applicable regulatory requirements overlap or conflict in any manner, the most water quality protective requirement or requirements governs, unless specifically stated otherwise in this General Order, or as directed by the Executive Officer pursuant to this General Order.
- 4. In accordance with State Water Board Resolution No. 93-62, Central Coast Water Board WDR Order No. 93-84, and this General Order, the permitted waste disposal footprint for a Class III landfill facility includes: 1) WMU disposal areas that received waste as of the federal deadline extensions (October 9, 1993, April 9, 1994, or October 9, 1995, based on landfill volume acceptance criteria as of October 1,1993) established by the Central Coast Water Board's Waste Discharge Requirements.

# L. ENFORCEMENT

- 1. Water Code, §13000 et seq., authorizes the State and Regional Water Boards to implement and enforce water quality laws, regulations, policies, plans, to protect waters of the state. The Central Coast Water Board has broad authority to take a variety of enforcement actions both informal (e.g., oral and written correspondence, notices of violation) and formal (e.g., notices to comply, 13267 investigation orders, cleanup and abatement order (CAO), time schedule orders, cease and desist orders, modification or rescission of WDRs, administrative civil liabilities) under the Water Code. Enforcement is implemented in accordance with the State Water Board Water Quality Enforcement Policy (Enforcement Policy) that defines an enforcement process that addresses water quality problems in the most fair, efficient, effective, and consistent manner. The Enforcement Policy became effective on October 5, 2017. If the Enforcement Policy is updated, revised, or amended by the State Water Board, the Central Coast Water Board will implement the most current version of the Enforcement Policy.
- 2. The Enforcement Policy provides guidance for the application of the Water Code's enforcement provisions in a fair, firm, consistent, progressive, and transparent manner and addresses recently adopted legislation and Water Board policies on environmental justice and the human right to water.
- 3. The Enforcement Policy governs implementation of enforcement with respect to water quality by the State and Regional Water Boards. The Central Coast Water Board will evaluate compliance with the terms and conditions of the General Order based threat of water quality impairment, content of technical reports,

results of inspections, and water quality monitoring data. In addition to the determination of noncompliance and water quality impairment, the Central Coast Water Board will enforce the conditions of the General Order consistent with the Enforcement Policy, focusing on the highest priority water quality issues and most severely impaired waters. The Enforcement Policy recommends formal enforcement actions for the highest priority violations, chronic violations, and/or threatened violations. Violations of this General Order that will be considered a priority include, but are not limited to:

- a. Failure to comply with the monitoring and reporting requirements as prescribed in the MRP;
- b. Failure to investigate and cleanup water quality impacts;
- c. Failure to comply with the discharge prohibitions of this General Order;
- d. Failure to comply with the post-closure maintenance requirements of this General Order:
- e. Falsification of information; and
- f. Failure to submit required and complete reports on time.

## M. HUMAN RIGHT TO WATER

- 1. Pursuant to <u>Water Code</u>, <u>§106.3</u>, the state statutorily recognizes that "[...] every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." The human right to water extends to all Californians, including underrepresented individuals and groups and communities in rural and urban areas. This General Order protects the human right to water by providing requirements that are protective of groundwater and surface water resources within the Central Coast Region.
- 2. This General Order requires that all known affected parties impacted by a release from a Closed Landfill be notified within 14 days of identifying a release. The General Order also requires that in the event of a release the Discharger prepare a water well survey to identify all water wells within one mile of the Closed Landfill property boundary and notify any additional affected parties that were not notified initially.
- 3. This General Order requires the implementation of a Corrective Action Program in accordance with CCR, title27, §20430. When appropriate, corrective action measures will include water treatment and/or replacement water for parties affected by a release from the Closed Landfill. Compliance with a Corrective Action Program is in accordance with and furthers the human right to water.

#### N. UNDERREPRESENTED COMMUNITIES

1. Water Code section 189.7 requires the Central Coast Water Board to engage in equitable, culturally relevant community outreach to promote meaningful civil engagement from potentially impacted communities of proposed discharges of

waste that may have disproportionate impacts on water quality in disadvantaged communities <sup>12</sup> or tribal communities and ensure that outreach and engagement shall continue throughout the waste discharge planning, policy, and permitting processes. Water Code section 13149.2(c) requires regional water boards to make a concise programmatic finding on potential environmental justice, tribal impact, and racial equity consideration related to the issuance of any regional WDRs.

- 2. This General Order regulates discharges from WMUs that may impact a disadvantaged community (DAC) & tribes. 13 Pursuant to Water Code section 13149.2, the Central Coast Water Board reviewed readily available information concerning anticipated water quality impacts in disadvantaged and tribal communities and environmental justice concerns that may result from adoption of this General Order. Based on 2022 census data, one (1) disadvantaged community (DAC) census block group is within one mile of a Closed Landfill regulated by this General Order.
- 3. The Central Coast Water Board finds that the issuance of this General Order will not result in water quality impacts and/or environmental justice concerns within the scope of the Board's authority. As explained further in the staff report, this General Order regulates discharges produced by the same or similar operations, and involves similar kinds of waste discharges and treatment standards. There are monitoring plans and enforcement mechanisms built into the General Order to prevent impacts to water quality. However, if impacts to surface water or groundwater pollution results from the discharges regulated by the proposed General Order, Central Coast Water Board staff will help facilitate outreach and education to inform affected parties and connect them with available resources.
- 4. Site specific GeoTracker webpages for each WMU enrolled in this General Order are available to the public and will include monitoring reports required by this General Order, Central Coast Water Board staff's inspection reports, and official Central Coast Water Board letters. All interested parties are encouraged to sign up for email alerts on the upper right corner of site specific GeoTracker pages to receive email notifications when new reports and documents are uploaded. Each GeoTracker page also contains the associated Central Coast Water Board staff's

<sup>12</sup> "Disadvantaged community" is defined as "a community in which the median household income is less than 80 percent of the statewide annual median household income level." (§ 189.7, subd. (d)(1).) The statewide annual median household income from the U.S. Census Bureau from 2016-2020 was \$78,672.6 Based on this data, a community with a household income less than \$62,938 is a "disadvantaged community" as used in section 189.7.

<sup>&</sup>lt;sup>13</sup> To the extent that additional facilities may be enrolled in this General Order in the future, the Central Coast Water Board expects that the programmatic controls set forth herein will address any water quality impacts and/or environmental justice or racial equity concerns.

name with a hyperlink to that staff's contact information. Members of the public are encouraged to reach out to Central Coast Water Board staff if they have questions or concerns about any of the closed landfills covered by this General Order. GeoTracker can be accessed here:

[https://geotracker.waterboards.ca.gov/]

# O. CLIMATE CHANGE

- 1. The Central Coast faces the threat and the effects of climate change for the foreseeable and distant future. To proactively prepare and respond, the Central Coast Water Board's Climate Action Initiative, which identifies how the Central Coast Water Board's work relates to climate change and prioritizes actions such as water conservation, reuse and recycling to improve water supply resiliency, sea level rise and flood mitigation and adaptation, and that improve energy efficiency and reduce greenhouse gas production. The Climate Action Initiative is consistent with the Governor's Executive Order B-30-15 and the State Water Board's Climate Change Resolution No. 2017-0012.
- 2. Extreme weather events, including drought, high intensity precipitation, flooding, and extreme heat have occurred throughout much of California in the recent years, and are projected to increase in frequency, extent, or intensity due to climate change. Additional climate change impacts include prolonged fire seasons with larger and more intense fires, tree mortality, rising sea level and storm surges.
- 3. More frequent high intensity precipitation may result in damage to landfill covers and drainage facilities. This General Order requires the Discharger to design landfill drainages to handle 100-year, 24-hr storms and to inspect their landfill following wet weather. Due to climate change, Central Coast Water Board staff recognize that the 100-year, 24-hr storm design values may trend higher due to more frequent high intensity storms. If necessary, existing drainage facilities may need to be upgraded to handle updated 100-year, 24-hr storm design values.

# P. GENERAL FINDINGS

- 1. This Order does not authorize violation of any federal, state, or local law or regulation.
- 2. In accordance with <u>Water Code</u>, §13263(g), the discharge of waste into waters of the state is a privilege, not a right, and this Order does not create a vested right to continue discharge of a waste. Failure to prevent conditions that create, or threaten to create, pollution or nuisance will be reason to modify, revoke, or enforce this Order. In accordance with <u>Water Code</u>, §13263(g), no discharge into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, must create a vested right to discharge.

- 3. All discharges of waste into waters of the state are privileges, not rights. Central Coast Water Board authorization to discharge waste is conditioned upon the Discharger complying with provisions of <a href="Water Code">Water Code</a>, division 7 and with any more stringent limitations necessary to implement the <a href="Basin Plan">Basin Plan</a>, to protect beneficial uses, and to prevent nuisance. The Discharger's compliance with Order No. R3-2024-0036 should assure they meet conditions and mitigate any potential changes in water quality attributed to the Landfill.
- 4. The Central Coast Water Board and CalRecycle jointly regulate landfills pursuant to <a href="CCR">CCR</a>, title 27</a>. CalRecycle also works in partnership and certifies local enforcement agencies (LEA) (primarily county environmental health agencies) to regulate the operation and disposal activities of landfills covered by their Solid Waste Facility Permits. The Central Coast Water Board, CalRecycle, and LEAs, where applicable, regularly interact on permitting, inspections, construction, closure, post-closure, and financial assurance to facilitate landfill compliance under federal and state regulatory requirements.
- 5. The Closed Landfills listed in Attachment B may also be subject to the Statewide General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit or IGP), which implements the federally required storm water regulations in California for storm water associated with industrial activities discharging to waters of the United States.
- 6. Pursuant to <u>Water Code</u>, <u>§13267</u>, the burden, including costs, of the required reports bears a reasonable relationship to the need for those reports and the benefits to be obtained thereby.
- 7. Hyperlinks to codes of regulations may be out of date and were provided for reference only. Hyperlinks may contain broken links to websites that no longer exist or be out of date after the issuance of this Order. Please refer to the following websites for more information on individual codes and for information on when each website was last updated.
  - a. <u>The Electronic Code of Federal Regulations</u>, including CFR, title 40. (https://www.ecfr.gov/cgi-bin/ECFR?page=browse)
  - b. <u>California Codes</u>, including the Health and Safety Code, the Business and Professional Code, and the Water Code. (https://leginfo.legislature.ca.gov/faces/home.xhtml)
  - c. <u>California Code of Regulations</u>, including title 14, title 23 and title 27. (https://govt.westlaw.com/calregs/Index?bhcp=1&transitionType=Default&contextData=%28sc.Default%29)