

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

1515 Clay Street, Suite 1400
Oakland, CA 94612
(510) 622-2300

[Regional Board Website](https://www.waterboards.ca.gov/SanFranciscoBay) (<https://www.waterboards.ca.gov/SanFranciscoBay>)

**[TENTATIVE] WASTE DISCHARGE REQUIREMENTS
GENERAL ORDER R2-2026-XXXX
FOR CLOSED LANDFILL FACILITIES**

ORDER INFORMATION

Order Type:	Waste Discharge Requirements (WDRs)
Status:	Tentative
Program:	Land Disposal Program
Discharger(s):	Enrolled Dischargers
Facility:	Closed Landfill Facilities
County:	Multiple Counties

CERTIFICATION

I, Eileen White, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on [Month] _____, 2026.

EILEEN M. WHITE, P.E.
Executive Officer

TABLE OF CONTENTS

Glossary.....	3
Findings	6
Introduction	6
Scope of Order.....	8
Termination Procedure	10
Facility-Specific Self-Monitoring Programs	11
Corrective Action.....	13
Financial Assurances.....	14
Other Regulatory Matters.....	14
Requirements	19
A. Discharge Prohibitions for Closed Landfills	19
B. Post-Closure Maintenance Requirements for Closed Landfills.....	19
C. Financial Assurance Requirements for Enrolled Facilities.....	21
D. Stormwater Requirements.....	22
E. Corrective Action Requirements	23
F. Monitoring Requirements	23
G. Reporting Requirements.....	24
H. Other Provisions	25
Attachment A—Initial List of Eligible Facilities under Order.....	28
Attachment B—List of Facilities Subject to Subsequent Enrollment.....	32
Attachment C—Detection Monitoring Program.....	33
A. Groundwater.....	33

[TENTATIVE] WASTE DISCHARGE REQUIREMENTS GENERAL
ORDER R2-2026-XXXX
CLOSED LANDFILL FACILITIES
TABLE OF CONTENTS

2

B. Surface Water.....	35
C. Concentration Limits for Constituents of Concern	35
D. Procedures to Confirm Evidence of Release	36
E. Statistical Analyses.....	37
F. Sample Collection and Analysis	38
Attachment D—Flood Protection Reporting Requirements	40
A. Long-Term Flood Protection Plan.....	40
B. Applicable Reporting Requirements	41
Attachment E—Leachate Collection and Removal System Monitoring	42
A. Operations, Maintenance, and Testing.....	42
B. Monitoring.....	42

GLOSSARY

Antidegradation Policy	Statement of Policy with Respect to Maintaining High Quality Waters in California, State Water Resources Control Board Resolution 68-16
Basin Plan	Water Quality Control Plan for the San Francisco Bay Region
CAI Unit	Closed, Abandoned, or Inactive Unit as described in Title 27, § 20080
CalRecycle	California Department of Resources Recycling and Recovery
CAO	Cleanup and Abatement Order
CEQA	California Environmental Quality Act
CEQA Guidelines	California Code of Regulations, Title 14, section 15000 et seq.
C.F.R.	Code of Federal Regulations
COCs	Constituents of Concern
CPCMP	Closure and Post-Closure Maintenance Plan
CQA Plan	Construction Quality Assurance Plan
ELAP	State Water Resources Control Board's Environmental Laboratory Accreditation Program
EMP	Evaluation Monitoring Plan
GCL	Geocomposite Liner
Industrial General Permit	Statewide General Permit for Stormwater Discharges Associated with Industrial Activities, National Pollutant Discharge Elimination System Permit No. CAS000001
JTD	Joint Technical Document
LCRS	Leachate Collection and Removal System

LEA	Local Enforcement Agency
Leachate	Liquid formed by the drainage of liquids from waste or by the percolation or flow of liquid through waste. Leachate includes any constituents extracted from the waste and dissolved or suspended in the fluid. (Title 27, § 20164.)
LFG	Landfill Gas
LTFPP	Long-Term Flood Protection Plan
MDL	Method Detection Limit
MSW	Municipal Solid Waste regulated under 40 C.F.R. part 258
MSWLF	Municipal Solid Waste Landfill
MW	Monitoring Well
NOA	Notice of Applicability
Flood Protection Orders	Order R2-2022-0031 and Order R2-2024-0002
PFAS	Per- and polyfluoroalkyl Substances
PCMP	Post-Closure Maintenance Plan
POC	Point of compliance
PQL	Practical Quantitation Limit
QA/QC	Quality assurance/quality control
QA/QC samples	Field, trip, or laboratory blanks
Qualified Professional	Professional Civil Engineer, Professional Geologist, or Certified Engineering Geologist licensed by the State of California
Regional Water Board	California Regional Water Quality Control Board, San Francisco Bay Region
RCRA	Resource Conservation and Recovery Act
RL	Reporting Limit

ROWD	Report of Waste Discharge
SLR	Sea level rise
SMP	Self-Monitoring Program
State Water Board	State Water Resources Control Board
Subtitle D	USEPA-promulgated MSW regulations under RCRA (see 40 C.F.R. part 258)
SWPPP	Storm Water Pollution Prevention Plan
Title 22	California Code of Regulations, Title 22
Title 23	California Code of Regulations, Title 23
Title 27	California Code of Regulations, Title 27
Trace Results	Results between Method Detection Limit (MDL) and Practical Quantitation Limit (PQL)
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WDRs	Waste Discharge Requirements
WMU	Waste Management Unit
WQOs	Water Quality Objectives
WQPS	Water Quality Protection Standard

FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board) hereby finds as follows:

Introduction

1. This Order prescribes Waste Discharge Requirements (WDRs) for “Closed Landfills (or Facilities)” that are:
 - a. Subject to the prescriptive requirements of California Code of Regulations, Title 27 (Title 27), section 20005 et seq., and are within the Post-Closure Maintenance Period, as defined in Finding 4 below; or
 - b. Considered “Closed, Abandoned, or Inactive (CAI) Units” for the purposes of Title 27, section 20080, and are within the Post-Closure Maintenance Period, as defined below. In order to protect water quality and human health, this latter category of units are subject to certain Title 27 standards on a discretionary basis.
2. For the purposes of this Order, a Closed Landfill is a Waste Management Unit¹ (WMU or Unit) that meets all of the following criteria:
 - a. The WMU no longer accepts waste of any kind for disposal;
 - b. The WMU is not subject to the requirements for “Class I” WMUs under California Code of Regulations, Title 23 (Title 23), section 2510 et seq.;
 - c. The WMU either operated as a landfill during its active life, or in the case of a former surface impoundment or waste pile, the WMU has been “closed as a landfill” in lieu of clean-closure (Title 27, §§ 21400(b)(2)(A), 21410(a)(2)(a));
 - d. The WMU’s entire lateral footprint has been covered; and

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

- e. The WMU has undergone all operations necessary for post-closure maintenance in accordance with an approved Closure and Post-Closure Maintenance Plan (CPCMP) or equivalent document.
- 3. For the purposes of this Order, a “Type 1” WMU is a Closed Landfill that falls under the category described in Finding 1(a), and a “Type 2” WMU is a Closed Landfill that falls under the category described in Finding 1(b).
- 4. The Post-Closure Maintenance Period for each WMU commences upon completion of closure of the entire unit, and ends when the Executive Officer determines in writing that the waste in the WMU no longer poses a threat to water quality.² (Title 27, § 20950, subd. (a)(1).) For enrolled facilities regulated by the California Department of Resources Recycling and Recovery (CalRecycle), the period shall be no less than 30 years. (Title 27, § 21180, subd. (a).)
- 5. For purposes of Title 27 prescriptive standards:
 - a. Closure is the process during which a WMU undergoes all operations necessary to prepare for post-closure maintenance in accordance with an approved CPCMP or equivalent document. (Title 27, § 20164.) For landfills and other WMUs “closed as landfills,” closure includes construction of a Final Cover, which serves as the principal containment feature. (Title 27, § 20950, subd. (a)(2)(A)1.) The goal of closure is to minimize the infiltration of water into waste, thereby minimizing production of leachate³ and landfill gas (LFG). (Title 27, § 20950, subd. (a)(2)(A)1.)
 - b. A Final Cover generally consists of the following layers (in ascending order): (1) a foundation layer; (2) a low-hydraulic conductivity layer; and (3) an uppermost erosion-resistant layer. (Title 27, § 21090, subd. (a).) The Final Cover design may deviate from the prescriptive standard described above, as an engineered alternative under Title 27. Engineered alternatives previously approved by the Regional Water Board constitute a compliant Final Cover for the purposes of Finding 2.d above, and WMUs

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

³ Leachate is defined as liquid formed by the drainage of liquids from waste or by the percolation or flow of liquid through waste. Leachate includes any constituents extracted from the waste and dissolved or suspended in the fluid. (Title 27, § 20164.)

incorporating an approved engineered alternative are eligible for enrollment under this Order.

- c. The majority of Closed Landfills regulated under this Order are also subject to federal Municipal Solid Waste (MSW) regulations promulgated pursuant to the Resource Conservation and Recovery Act (RCRA). (42 U.S.C. § 6901 et seq.) Typically referred to as “Subtitle D,” these MSW regulations are now codified as 40 Code of Federal Regulations (C.F.R.) part 258, and implemented in part through Title 27, and in accordance with State Water Resources Control Board (State Water Board) Resolution 93-62. Landfills subject to these federal regulations are referred to as Municipal Solid Waste Landfills (MSWLFs). Unless specifically noted however, the provisions of this Order are applicable to all Closed Landfills.
6. CAI WMUs were not subject to Title 27 prescriptive standards for closure, and in many cases, do not have a final cover that corresponds to the description above. However, most CAI WMUs have a limited cover over the waste column. The purpose of this Order is to ensure that the owners of such WMUs take steps necessary to protect the integrity of that cover and to prevent the infiltration of water into, or daylighting of, the existing waste.
7. In addition to those WMUs concurrently regulated as “solid waste landfills” by CalRecycle and the designated Local Enforcement Agency⁴ (LEA), this Order is also intended to regulate certain Closed Landfills that are not subject to CalRecycle or LEA oversight (e.g., surface impoundments and waste piles “closed as landfills”).

Scope of Order

8. This Order only applies to (permits) enrolled facilities. The Facilities listed in Attachment A are hereby automatically enrolled under this Order.
9. Other closed landfills (i.e., not listed in Attachment A) may be subsequently enrolled under this Order upon the issuance of a Notice of Applicability (NOA) by the Executive Officer. Attachment B contains a list of additional facilities that are

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

hereby preliminarily determined to be eligible for subsequent enrollment, subject to the Executive Officer's discretion. These and other facilities may be required to submit a Notice of Intent for enrollment at a later date.

10. In addition to the Facilities listed in Attachment A, there are several pre-regulation solid waste facilities within the region that have never been regulated by WDRs. These additional facilities are not being automatically enrolled under this Order at this time. However, the Executive Officer may direct such facilities to submit a Notice of Intent to enroll under this Order. Once the necessary information⁵ is submitted, such facilities will be issued a NOA for enrollment.
11. For the purposes of this Order, Discharger[s] refers to the Enrolled Facility owners and/or operators, who are responsible for compliance with the WDRs of this Order. The Dischargers identified in Attachment A or the Executive Officer's NOA are the only parties permitted under this Order; to transfer coverage under this Order, the new parties must obtain a new NOA from the Executive Officer in accordance with Requirements section H.7.
12. The Executive Officer may decline to issue a NOA if the subject Facility is not eligible for coverage (i.e., not a Closed Landfill per Finding 2), or where it would be inappropriate to regulate a Closed Landfill under this Order (i.e., in favor of an individual WDRs order).
13. Additionally, the Executive Officer may terminate coverage under this Order where an Enrolled Facility, including one specified in Attachment A, would be more appropriately regulated under an individual WDRs order.
14. For facilities listed in Attachment A, the provisions of this Order shall immediately supersede the previously prescribed WDRs for those facilities; however, the existing Self-Monitoring Programs (SMPs) associated with those WDRs shall remain in effect for those facilities until the Executive Officer has approved a new Facility-Specific SMP for those facilities.
15. For other facilities receiving a NOA for enrollment under this Order, the Executive Officer shall issue a Facility-Specific SMP, or approve a proposed SMP, concurrent with the NOA.

⁵ Necessary information includes, at a minimum, Discharger contact information, operator information if different from owner, reasons for filing, existing permits if applicable (e.g., stormwater permit, solid waste facility permit), landfill closure date, amount and type of waste received, current site conditions, and future site conditions.

16. Following enrollment under this Order, all prior WDRs orders will be formally terminated at a subsequent Regional Water Board public meeting.
17. This Order does not apply to Regional Water Board-supervised cleanup actions to address waste discharges at historical disposal sites. (See Title 27, § 20090.)

Termination Procedure

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

Flood Protection Reporting

21. This Order is intended to replace Order R2-2022-0031 and Order R2-2024-0002 (Flood Protection Orders) for enrolled facilities,⁶ by incorporating the Board's existing long-term flood protection reporting requirements for Bay and oceanfront solid waste facilities (landfills and industrial facilities with WMUs).
22. The locations of the facilities subject to these Flood Protection Orders make them inherently vulnerable to sea level rise (SLR), extreme storm events, king tides, and groundwater rise which can occur when higher sea levels cause shallow water tables to rise.
23. Most of the Bay and ocean-adjacent landfills were constructed and closed before Title 27 prescriptive standards went into effect, and wastes were disposed of in direct contact with Bay mud and/or groundwater that is mixed to varying degrees with water from the Bay or ocean. Groundwater and landfill leachate are

⁶ These Orders shall remain in full effect for non-enrolled facilities in "Table 1" of those Orders.

commonly commingled in these older unlined landfills, and as the sea level and groundwater rise, contamination could migrate to other aquifers or to surface waters. Tidal influence from the Bay and ocean can already cause groundwater and leachate levels to fluctuate through the landfill waste mass. Projected climate change-related trends, such as more severe storm events, SLR, and shallow groundwater rise, are expected to exacerbate this fluctuation, which may contribute to an increase in leachate production; mobilization of contaminants from the waste mass into leachate and groundwater; and a potential increase in landfill gas generation and/or migration.

24. Flooding risk can also be exacerbated by land subsidence, which is already monitored and accounted for at active landfills through settlement analyses. Landfills closed prior to Title 27 requirements, and constructed atop highly compressible Bay mud, have likely already experienced substantial land subsidence due to waste settlement and consolidation of Bay mud and artificial fill along the shoreline. Bay and oceanfront landfills, some of which rely on perimeter protection structures from the Bay, will need to consider land subsidence while adaptation planning for future SLR.
25. Based on the foregoing, this Order requires certain enrolled facilities to comply with the provisions of Attachment D, and to develop a Long-Term Flood Protection Plan (LTFPP) that assesses the Facility's vulnerability to SLR based on the most current climate science available and describes how vulnerable features and infrastructure will be protected.

Facility-Specific Self-Monitoring Programs

26. Under this Order, Dischargers are required to submit an updated Facility-Specific SMP for Executive Officer approval. Upon approval, the proposed Facility-Specific SMP will be incorporated herein and supersede the provisions of any existing SMPs. Until the Facility-Specific SMP is approved by the Executive Officer, the Dischargers will be required to comply with the existing SMPs under their prior individual WDRs.
27. All "Type 1" facilities are required to conduct groundwater monitoring, as well as surface water monitoring (as applicable under the circumstances). Certain "Type 2" facilities—as specified in Attachment A or in the NOA (for future enrollments)—are also required to conduct such monitoring.
28. For those facilities that are required to implement groundwater or surface water monitoring, the Facility-Specific SMPs will establish the Water Quality Protection Standard (WQPS)—i.e., the analytical framework for monitoring groundwater, the

unsaturated zone, and surface water to detect a release from Closed Landfills at the earliest possible time.⁷ (Title 27, § 20420, subd. (b).)

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

⁷ For most enrolled facilities, surface water monitoring will not be required because there are no waterbodies immediately adjacent to Closed Landfills.

- f. **Five-Year COCs.** Five-Year COCs are a subset of COCs for which analyses are only required every five years. They are essentially COCs that do not require more frequent monitoring.
- g. **Concentration Limits.** The Concentration Limit is the “background concentration” for each Monitoring Parameter, as determined by the statistical methods outlined in subdivision (e)(8) of Title 27, section 20415. (Title 27, § 20400, subds. (a), (b).)
- h. **Retesting Procedures.** If monitoring results indicate “measurably significant” evidence of a release, the Facility-Specific SMP will require the Dischargers to follow Title 27-compliant retesting procedures.

Per- and Polyfluoroalkyl Substances Monitoring

- 30. In 2019, the State Water Board issued Technical Reporting Order 2019-0005 DWQ, which required certain MSWLFs to conduct investigation/monitoring activities of per- and polyfluoroalkyl substances (PFAS). The results of the investigations confirmed that PFAS were present in the groundwater underlying and/or adjacent to almost all the subject landfills.
- 31. The Regional Water Board subsequently issued Technical Reporting Order R2-2025-0005 for other landfills within the San Francisco Bay Region. Once again, PFAS was detected at almost every subject landfill.
- 32. The State Water Board and Regional Water Board orders only required one-time sampling and analysis for PFAS. However, additional data are necessary to adequately evaluate impacts to groundwater and potential threats to human health and the environment. For this reason, this Order requires Facilities with an existing groundwater monitoring network to propose a PFAS sampling frequency as part of their Facility-Specific SMP.
- 33. Based on the results of the groundwater monitoring, PFAS may be added as a Five-Year COC, or a COC if more frequent monitoring is needed.

Corrective Action

- 34. In the event a release is confirmed from a Closed Landfill via the applicable Retesting Procedure, the Facility-Specific SMP will require that the Dischargers submit a *Corrective Action Feasibility Study* evaluating potential remedial options to address the release.
- 35. In lieu of individual WDRs with Facility-Specific corrective action requirements, all further corrective actions to address the release shall be implemented pursuant to a Cleanup and Abatement Order (CAO) issued by the Executive Officer under

Water Code section 13304. (See Title 27, § 20090, subd. (d).) This General Order therefore requires the Dischargers to comply with any CAOs issued for their Enrolled Facility.

Financial Assurances

36. Title 27 requires the Dischargers to demonstrate their ability to pay for the estimated costs of post-closure maintenance (Title 27, §§ 20950, 22210, 22212) and known or reasonably foreseeable corrective action in response to a release from a Closed Landfill (Title 27, §§ 20380, 22220, 22222). These requirements are automatically applicable to all “Type 1” WMUs, as described in Finding 3.
37. For most “Type 2” WMUs, as described in Finding 3, financial assurances are also necessary to ensure compliance with post-closure maintenance. Accordingly, the Regional Water Board is exercising its discretion to impose Title 27 financial assurance requirements on such WMUs. For initially-enrolled Type 2 facilities, **Attachment A** specifies which facilities are subject to financial assurance requirements for post-closure maintenance or corrective action.
38. This Order requires enrolled facilities to submit and update Post-Closure Maintenance Plans (PCMPs). For enrolled facilities that are required to provide financial assurances, either pursuant to prescriptive standards or imposed on a discretionary basis, the PCMPs will include cost estimates for post-closure maintenance and corrective action, as discussed above. The financial assurances demonstration must correspond to those estimates. This Order requires estimates to be updated every five years.
39. For “Type 1 WMUs” that are concurrently regulated as “solid waste landfills” by CalRecycle, post-closure maintenance cost estimates are included in the Dischargers’ Closure and Post-Closure Maintenance Plan; corrective action cost estimates are submitted separately. CalRecycle is ultimately responsible for the review, approval, and management of financial assurance mechanisms for these WMUs, though the Regional Water Board will assist CalRecycle in evaluating the adequacy of the Dischargers’ cost estimates for post-closure maintenance and corrective action. (Title 27, § 20950, subd. (f).)
40. For all other enrolled facilities that are not regulated by CalRecycle (i.e., most “Type 2 WMUs”), the Dischargers are responsible for submitting their financial assurance cost estimates and mechanisms directly to the Regional Water Board.

Other Regulatory Matters

41. This Order is issued in part pursuant to Water Code section 13263, subdivision (a), which provides as follows:

The regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge..., with relation to the conditions existing in the disposal area ... into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of [Water Code] Section 13241.

42. By incorporating Title 27 standards for the post-closure maintenance and monitoring, this Order implements the Regional Water Board's Water Quality Control Plan for the San Francisco Bay Region (Basin Plan), which designates beneficial uses for surface water and groundwater and establishes water quality objectives (WQOs) necessary to preserve such beneficial uses. Specifically, this Order contains WDRs intended to prevent any degradation of surface water and groundwater, thereby protecting established beneficial uses.
43. This Order prescribes general WDRs for multiple categories of enrolled facilities in accordance with Water Code section 13263, subdivision (i), which provides in relevant part as follows:

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

- (1) The discharges are produced by the same or similar operations.
 - (2) The discharges involve the same or similar types of waste.
 - (3) The discharges require the same or similar treatment standards.
 - (4) The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.
44. Enrolled facilities subject to regulatory coverage under this Order are appropriately regulated under general WDRs based on the following considerations:

- a. Regarding the first requirement (Wat. Code, § 13263, subd. (i)(1)), wastes are no longer being discharged to enrolled facilities. During the Post-Closure Maintenance Period, the principal obligations are to maintain the WMUs' existing waste containment systems (particularly the final cover), to conduct monitoring to detect any releases (as applicable), and in the event of a verified release, to perform any necessary corrective action to address the release. These obligations are dictated by Title 27 prescriptive standards or imposed on a discretionary basis in a uniform manner.
 - b. Regarding the second requirement (Wat. Code, § 13263, subd. (i)(2)), closed WMUs contain previously-discharged wastes that have been classified based on their potential to impair water quality. (Wat. Code, § 13172, subd. (a).) Specifically, enrolled facilities contain nonhazardous solid waste (Class III), designated waste⁸ (Class II), and/or municipal solid waste (which may be either class). During the Post-Closure Maintenance Period, the obligations do not depend on whether wastes are classified as Class II or Class III.⁹
 - c. Regarding the third requirement (Wat. Code, § 13263, subd. (i)(3)), there are no treatment activities occurring at enrolled facilities.
 - d. Regarding the fourth and final requirement (Wat. Code, § 13263, subd. (i)(4)), enrolled facilities are more appropriately regulated under this General Order than under individual WDRs. Due to the uniform application of Title 27 standards, the same requirements are applicable to each Enrolled Facility. This is especially true during the Post-Closure Maintenance Period, as there are no lateral expansions, design approvals, new constructions, new engineered alternatives, or new waste discharges. This General Order is adopted in part to standardize the provisions applicable to numerous facilities.
45. The State Water Board's *Statement of Policy with Respect to Maintaining High Quality Waters in California*, Resolution 68-16 (*Antidegradation Policy*) prohibits the Regional 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;

⁸ Designated Waste is defined as hazardous waste subject to variance from management requirements per Health and Safety Code section 25143; and (b) Nonhazardous Waste containing pollutants that, under ambient conditions, could be released in concentrations exceeding applicable WQOs, or that could reasonably be expected to affect beneficial uses of water. (Wat. Code, § 13173.)

⁹ The definition of "Closed Landfill" explicitly excludes "Class I" WMUs.

and (3) is minimized through the discharger's best practicable treatment or control.

46. Consistent with Title 27, this Order requires the Dischargers to maintain their enrolled facilities to contain waste within the Closed Landfills, thereby preventing degradation of water quality. To the extent that there are releases from Closed Landfills, Dischargers will be required to address such releases through Corrective Action. (Title 27, §§ 20385, 20415, 20430.) Because this Order authorizes no water quality degradation, it complies with the *Antidegradation Policy*.
47. For the purposes of California Code of Regulations, Title 23 (Title 23), section 2200, enrolled facilities have a default¹⁰ Threat-Complexity Rating of 2-B, where:
 - a. Threat Category "2" reflects discharges that can impair receiving water beneficial uses, cause short-term WQO violations, cause secondary drinking water standard violations, and cause nuisances; and
 - b. Complexity Category "B" reflects dischargers with Class II or Class III WMUs.
48. However, any enrolled facilities with an existing lower Threat-Complexity Rating (i.e., 3-B) shall retain such designations until the Executive Officer directs otherwise in writing.
49. This Order is also issued in part pursuant to Water Code section 13267, subdivision (b)(1), which provides that:

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

¹⁰ Upon Discharger request, the Executive Officer may re-designate an Enrolled Facility with a lower Threat-Complexity Rating, as appropriate under the circumstances.

50. The technical reports required under this Order, as well as those required under the separately issued Facility-Specific SMPs, are necessary to ensure compliance with prescribed WDRs. Additionally, the burdens associated with such reports are reasonable relative to the need for their submission.
51. The enrolled facilities permitted under this Order are comprised exclusively of existing facilities, with no expansions of existing uses. Accordingly, the adoption of this Order (and enrollments hereunder) categorically is exempt from the procedural requirements of the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., pursuant to California Code of Regulations, Title 14, section 15301 (CEQA Guidelines).

REQUIREMENTS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13263 and 13267, that the owners and operators of enrolled facilities as identified in Attachment A and in subsequently-issued NOAs (collectively, Dischargers), shall comply with the following requirements.

A. Discharge Prohibitions for Closed Landfills

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

B. Post-Closure Maintenance Requirements for Closed Landfills

1. The Dischargers shall prepare and maintain a Post-Closure Maintenance Plan (or equivalent document) that meets the applicable requirements of Title 27, section 21769, subdivision (c)(2). Such plans shall be submitted to the Executive Officer for review and approval.
 - a. Initially enrolled facilities with an approved Final PCMP, or equivalent document, need not resubmit their plan following enrollment under this Order, provided that the PCMP includes cost estimates for all financial assurances applicable under this Order.
 - b. For initially enrolled facilities without a PCMP or equivalent document that has been approved by the Regional Water Board, as well as those approved PCMPs without the required financial assurance cost estimates discussed above, the Dischargers shall submit a PCMP (or updated version) within 90 days of this Order's adoption. The PCMP shall include cost estimates for all financial assurances applicable under this Order. See Attachment A for a list of facilities required to submit financial assurances, and Requirements section C below for enrolled facility requirements.

- c. For all other Facilities (including those enrolled after adoption of this Order), the Dischargers shall submit the PCMP as directed in writing by the Executive Officer or Regional Water Board staff.
 - d. Except as otherwise specified by the Executive Officer in writing, all financial assurances cost estimates under this Order shall be calculated in accordance with applicable CalRecycle-promulgated regulations in Title 27.
2. The Dischargers shall update their PCMP to account for any subsequent changes in land use or the SMP. Additionally, at least every five years, the Dischargers shall update any post-closure maintenance or corrective action cost estimates within the PCMP to account for annual inflation or other changed conditions.
3. For the duration of each Closed Landfill's Post-Closure Maintenance Period (see Finding 4), Dischargers shall do all of the following (as applicable):
 - a. Maintain the structural integrity and effectiveness of all containment structures, and maintain the final cover as necessary to correct the effects of settlement or other adverse factors;
 - b. Continue to operate any leachate collection and removal systems (LCRS) as long as leachate is generated and detected;
 - c. Monitor groundwater in accordance with the SMP;
 - d. Prevent erosion and related damage of the Closed Landfill's final cover due to drainage; and
 - e. Establish, protect, and maintain at least two surveyed monuments installed by a licensed land surveyor or by a registered civil engineer, in accordance with Title 27, section 21090, subdivisions (c)-(d).
4. When significant repairs are needed for any final cover, such repairs shall be conducted in accordance with an approved Construction Quality Assurance Plan (CQA Plan) and the operative PCMP (or equivalent). (Title 27, § 21090, subds. (a)(4)(C), (b)(1)(E).)
5. Dischargers shall periodically inspect and identify problems with the final cover including areas that require replanting, erosion, areas lacking free drainage, areas damaged by equipment operations, and localized areas identified in the required five-year iso-settlement survey. (Title 27, § 21090, subd. (a)(4)(B).)

6. After final cover installation, Dischargers may perform minor modifications to problematic areas, provided that: (a) the barrier layer of the final cover (e.g., geomembrane, geocomposite liner [GCL], and/or compacted clay layer) remains intact; and (b) the Regional Water Board approves of such modifications. For final covers incorporating an engineered alternative, Dischargers may perform remedial actions on the final cover in accordance with an approved workplan detailing how the final cover shall be restored so as to provide the full protection of its original design.
7. If the final cover incorporates a geomembrane barrier, all edges of the final cover shall remain sealed to the liner.
8. Dischargers shall ensure that methane and other LFG are adequately vented, removed from Closed Landfills, or otherwise controlled to prevent the danger of adverse health effects, nuisance conditions, degradation, or the impairment of the beneficial uses of water from migration through the unsaturated zone.

C. Financial Assurance Requirements for Enrolled Facilities

1. Type 1 WMUs subject to CalRecycle Financial Assurance Requirements

Dischargers shall provide assurances of financial responsibility for post-closure maintenance, as directed by CalRecycle. A copy of this demonstration shall be provided to the Regional Water Board upon written request.

2. Type 2 WMUs and Type 1 WMUs that are NOT subject to CalRecycle Financial Assurance Requirements

- a. As specified in **Attachment A** (i.e., for initially enrolled facilities), or as specified by the Executive Officer in writing (i.e., for subsequently enrolled facilities), the Dischargers shall demonstrate their ability to pay for the operative post-closure maintenance and corrective action cost estimates in accordance with the provisions and available mechanisms set forth in subchapter 3, articles 1-2 of Title 27, division 2, subdivision 1, chapter 6 (§§ 22225-22254).¹¹

¹¹ As applicable (e.g., establishment of an irrevocable fund), the Regional Water Board shall be named as a beneficiary or equivalent of the financial assurance mechanism.

- b. At least every five years (or more frequently if changed conditions have affected the cost of post-closure maintenance and/or corrective action), the Dischargers shall update any required cost estimates for post-closure maintenance or corrective action in accordance with applicable CalRecycle-promulgated regulations.

D. Stormwater Requirements

1. Dischargers without a valid Notice of Non-Applicability or an approved stormwater Notice of Termination shall comply with the operative Statewide General Permit for Stormwater Discharges Associated with Industrial Activities, National Pollutant Discharge Elimination System Permit No. CAS000001 (Industrial General Permit), and maintain a Storm Water Pollution Prevention Plan (SWPPP) and Monitoring Program and Reporting Requirements; or otherwise retain all stormwater onsite at the Enrolled Facility.
2. Closed Landfills shall be maintained to prevent inundation or washout due to floods with a 100-year return period. (Title 27, § 20260, subd. (c).)
3. Stormwater conveyance systems shall be designed for a 100-year, 24-hour storm event. (Title 27, § 21750, subd. (e)(3).)
4. Precipitation onto Closed Landfills, which is not diverted by covers or drainage control systems, shall be collected and managed through the LCRS (if one exists), which shall be designed and constructed to accommodate the precipitation conditions for each class unit. (Title 27, § 20365, subd. (b).)
5. Diversion and drainage features at the Enrolled Facility shall be designed, constructed, and maintained to (Title 27, § 20365, subd. (c)):
 - a. Accommodate the anticipated volume of precipitation and peak flows from surface runoff and under the precipitation conditions for each affected WMU;
 - b. Effectively divert sheet flow runoff laterally, via the shortest distance, into the drainage and collection features;
 - c. Prevent surface erosion;
 - d. Control and intercept run-on, in order to isolate uncontaminated surface waters from water that might have come into contact with waste;

- e. Consider the expected final contours of the closed unit, including its planned drainage pattern;
 - f. Consider the possible effects of the WMU's drainage pattern on and by the regional watershed;
 - g. Consider the design capacity of drainage systems of downstream and adjacent properties by providing for the gradual release of retained water downstream in a manner which does not exceed the expected peak flow rate at the point of discharge if there were no waste management facility; and
 - h. Preserve the diversion and drainage system's function.
- 6. Dischargers shall periodically remove accumulated sediment from the sedimentation or detention basins as needed to preserve the design capacity of the system. (Title 27, § 20365, subd. (c)(6).)
 - 7. Collection and holding features associated with precipitation and drainage control systems shall be managed to maintain the design capacity of the system. (Title 27, § 20365, subd. (d).)
 - 8. Surface and subsurface drainage from outside of the Closed Landfill shall be diverted from the WMU. (Title 27, § 20365, subd. (e).)
 - 9. Cover materials shall be graded to divert precipitation from the Closed Landfill, to prevent ponding of surface water over wastes, and to resist erosion as a result of precipitation. (Title 27, § 20365, subd. (f).)
 - 10. Any drainage layer in the final cover shall be designed and constructed to intersect with the final drainage system for the Closed Landfill in a manner promoting free drainage from all portions of the drainage layer. (Title 27, § 20365, subd. (f).)

E. Corrective Action Requirements

In the event of a verified release from a Closed Landfill at their Enrolled Facility, Dischargers shall comply with any Cleanup and Abatement Orders (i.e., for Corrective Action).

F. Monitoring Requirements

- 1. Within 180 days, the Dischargers shall submit a proposed Facility-Specific SMP to the Executive Officer for review and approval. The proposed SMP

shall comply with all of the applicable requirements of the Order, as specified in Attachment A.

2. Dischargers shall comply with their Facility-Specific SMP, which shall be incorporated herein upon issuance by the Executive Officer. To the extent directed in the SMP, the Dischargers shall conduct detection monitoring activities and reporting in accordance with the provisions of Attachment C.
3. If a Discharger determines that there is significant physical evidence of a release, the Discharger shall immediately verbally notify Regional Water Board staff and provide written notification by certified mail within seven days. (Title 27, §§ 20385(a)(3), 20420(l)(1)-(2).)

G. Reporting Requirements

1. **Electronic Submittal via GeoTracker.** Reports, analytical data (EDF), well gauging data (GEO_WELL), and well surveying data (GEO_XY and GEO_Z) shall be submitted electronically via the State Water Board's [GeoTracker Database](https://geotracker.waterboards.ca.gov) (<https://geotracker.waterboards.ca.gov>). After uploading, Dischargers shall notify Regional Water Board staff assigned to the case.
2. **Preparation of Technical Reports by Qualified Professionals.** All technical reports submitted under this Order shall be prepared by, or under the direct supervision of, a licensed civil engineer, professional geologist, or certified engineering geologist (Qualified Professional). A "technical report" is a report incorporating the application of scientific or engineering principles.
3. **Certifications for Submittals.** All submittals under this Order shall be accompanied by a transmittal containing the following certification that is signed by the Discharger's authorized representative:

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

H. Other Provisions

1. **General Maintenance.** Dischargers shall maintain in good working order any feature, control system, or monitoring device installed to achieve compliance with this General Order or the Facility-Specific SMP.
2. **Fluid in Sumps.** Dischargers shall maintain the depth of the fluid in the sump (where applicable) of each Closed Landfill at the minimum needed for efficient pump operation (the depth at which the pump turns on given the pump intake height and maximum pump cycle frequency).
3. **Copies of Orders at Enrolled Facility.** Dischargers shall maintain at the enrolled facility a copy of this Order, and the operative Facility-Specific SMP (where possible). These materials shall be made available to all operating personnel, who shall be familiar with the contents of such materials.
4. **Enrolled Facility Inspections.** Dischargers and their agents shall permit Regional Water Board staff to inspect the enrolled facility to verify compliance with WDRs. Failure to consent to a reasonable request for inspection constitutes a violation of this Order.
5. **Prior Notification for Other Changes at Facility.** In addition to the requirements of Water Code sections 13260 and 13264, Dischargers shall notify the Board in writing prior to any changes at the enrolled facility with regard to site operations, site features, and proposed closure procedures (including changes to cost estimates). This notification shall be provided at a reasonable time before the changes are made or become effective, in addition to any other prerequisites specifically provided for under the Water Code, Subtitle D, Title 27, and this Order. Additionally, no changes shall be made without Regional Water Board approval following authorization for closure pursuant to Notification of Closure. (Title 27, § 21710, subd. (a)(4).)
6. **Required Mitigation.** Dischargers shall take all reasonable steps to minimize any adverse impact to the waters of the State resulting from noncompliance with this Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature, extent, and impact of the noncompliance.
7. **Changes in Enrolled Facility Ownership or Responsibility for Operations.**
 - a. Prior to any changes in Enrolled Facility ownership, or any changes in operators (including parties responsible for performing activities

to comply with this Order), Dischargers shall notify (in writing) the prospective owners or operators of the existence of this General Order and the Facility-Specific SMP. Copies of this written notification shall be provided to the Regional Water Board.

- b. For any changes in ownership of enrolled facilities with Closed Landfills subject to CalRecycle jurisdiction, Dischargers shall comply with the provisions of Title 27, section 21200. Copies of materials submitted to CalRecycle and the LEA per section 21200, subdivisions (a)-(b) of section 21200, shall also be contemporaneously sent to the Regional Water Board.
- c. In addition to compliance with Title 27, section 21200 (if applicable), prior to the transfer of ownership or operations, Dischargers shall notify the Regional Water Board of the effective date, and submit a signed statement by the new parties, affirming that post-closure maintenance and monitoring will be conducted in accordance with this Order and the SMP. (Title 27, § 21710, subd. (c)(1).)
- d. To assume ownership or operation under regulatory coverage of this Order, the new owner or operator must apply in writing to the Regional Water Board requesting transfer of coverage **within 14 days** of assuming ownership or responsibility for operation. The request shall contain the applicant's full legal name; place of incorporation (if a corporation); names, addresses, and telephone numbers of designated contact persons; and a signed statement affirming that the new owner or operator assumes full responsibility for compliance with this General Order and the SMP. Failure to submit the request shall be considered a discharge without requirements, which is a violation of the Water Code.
- e. Transfers of coverage under this General Order and the SMP are subject to approval by the Executive Officer, and not effective until a new NOA is issued.

ENFORCEMENT

If, in the opinion of the Executive Officer, the Dischargers fail to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268,

13350, and 13385. The Regional Water Board reserves its right to take any enforcement actions authorized by law.

ADMINISTRATIVE REVIEW

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

LIST OF ATTACHMENTS

Attachment A—List of Facilities Immediately Enrolled under Order

Attachment B—List of Eligible Facilities Subject to Subsequent Enrollment

Attachment C—Detection Monitoring Program Requirements

Attachment D—Flood Protection Reporting Requirements

Attachment E—Leachate Collection and Removal Requirements

ATTACHMENT A— LIST FACILITIES IMMEDIATELY ENROLLED UNDER ORDER

Facility Name	County	Discharger(s)	Orders	Facility Type	Requirements			
					LTFPP	Groundwater Monitoring	Financial Assurance	PFAS Sampling
Albany Landfill	Alameda	City of Albany	WDR 99-068	2	☒	No	No	No
All Cities Landfill	Alameda	Alameda County Flood Control District	CAO 87-098	2	☒	☒	☒	☒
American Canyon Landfill	Solano	Napa Vallejo Waste Management Authority	WDR R2-2019-0010	1	☒	☒	☒	☒
Berkeley Landfill (Cesar Chavez Park)	Alameda	City of Berkeley	WDR R2-2010-0064	2	☒	☒	☒	☒
Brisbane Landfill	San Mateo	Universal Paragon Corp. (f.k.a. Turntex Properties, Sunquest Properties)	WDR R2-2001-0041	2	☒	☒	☒	☒
Burlingame Landfill (Topgolf)	San Mateo	City of Burlingame	WDR R2-2023-0005	1	☒	☒	☒	☒
Doolittle (Alameda City)	Alameda	City of Alameda	WDR 95-189	2	☒	☒	☒	No
East 3rd Ave Landfill	San Mateo	City of San Mateo	WDR 95-056	2	☒	☒	☒	☒
East Canyon Landfill	Solano	East Canyon Holdings, LLC	WDR R2-2004-0029	2	No	No	☒	No
Galbraith Dredge Disposal (Metropolitan Golf Course)	Alameda	The Port of Oakland	WDR R2-2005-0003	1	☒	☒	☒	No
Half Moon Bay Landfill	San Mateo	San Mateo County	WDR 97-048	2	☒	☒	☒	No
Highway 237 Landfill	Santa Clara	WCSJ LLC	WDR R2-2022-0012	2	☒	☒	☒	☒

[TENTATIVE] WASTE DISCHARGE REQUIREMENTS GENERAL ORDER R2-2026-XXXX 29
 ENROLLED DISCHARGERS
 CLOSED LANDFILL FACILITIES, MULTIPLE COUNTIES

Facility Name	County	Discharger(s)	Orders	Facility Type	Requirements			
					LTFPP	Groundwater Monitoring	Financial Assurance	PFAS Sampling
Hillside Landfill Colma Dump	San Mateo	AMLOC Land Company	WDR R2-2008-0018	1	No	☒	☒	No
Hilltop West	Contra Costa	Chevron Land and Development Company	WDR R2-2003-0032	1	No	☒	No	No
Junipero Serra	San Mateo	Realty Income Corporation	WDR 96-080	2	☒	☒	☒	☒
Martin Park Landfill	Santa Clara	City of San Jose	WDR R2-2014-0033	1	No	☒	☒	No
Mussel Rock Landfill	San Mateo	City of Daly City	WDR R2-2015-0007	2	☒	☒	☒	☒
Napa Pipe	Napa County	Oregon Steel Mills, Napa Pipe Corp.	WDR R2-2005-0012	1	☒	☒	☒	☒
Oyster Bay/Davis Street	Alameda	Waste Management of Alameda County, East Bay Regional Park District	WDR R2-2019-0033	2	☒	☒	☒	No
Oyster Point	San Mateo	City of South San Francisco	WDR R2-2017-0046	2	☒	☒	☒	No
Palo Alto Landfill	Santa Clara	City of Palo Alto	WDR R2-2016-0029	1	☒	☒	☒	☒
Pescadero Landfill*	San Mateo	San Mateo County	WDR R2-2006-0083	1/2	☒	☒	☒	No
Petaluma Landfill	Sonoma	City of Petaluma	WDR R2-2024-0015	1	☒	No	☒	☒
Pier 94 Landfill	San Francisco	Port of San Francisco	WDR R2-2003-0055	1	No	No	☒	No
Roberts Avenue Landfill	Santa Clara	City of San Jose	WDR R2-2010-0002	1	No	☒	☒	No
San Quentin Solid Waste	Marin	CAL-POX, Inc. and Glendale West, LLC	WDR R2-2012-0064	2	☒	☒	☒	No

* Pescadero landfill has an older portion located along Pescadero Road that falls under the Type 2 category, and newer portion off of Bean Hollow Road that falls under the Type 1 category.

[TENTATIVE] WASTE DISCHARGE REQUIREMENTS GENERAL ORDER R2-2026-XXXX 30
 ENROLLED DISCHARGERS
 CLOSED LANDFILL FACILITIES, MULTIPLE COUNTIES

Facility Name	County	Discharger(s)	Orders	Facility Type	Requirements			
					LTFPP	Groundwater Monitoring	Financial Assurance	PFAS Sampling
Santa Clara All-Purpose	Santa Clara	City of Santa Clara	WDR R2-2017-0021	1	☒	☒	☒	☒
Shoreline Regional Park	Santa Clara	City of Mountain View	WDR R2-2020-0029	1	☒	☒	☒	No
Sierra Point	San Mateo	Sierra Point Environmental Management Association	WDR R2-2015-0006	2	☒	☒	☒	No
Singleton Road	Santa Clara	City of San Jose	WDR 95-057	2	No	☒	☒	No
Solano Disposal	Solano	Republic Services Inc.	WDR R2-2007-0028	2	☒	☒	☒	☒
Story Road Landfill	Santa Clara	City of San Jose	WDR R2-2003-0086	2	No	☒	☒	☒
Sunnyvale Solid Waste Disposal	Santa Clara	City of Sunnyvale	WDR R2-2004-0030	1	☒	☒	☒	No
Tony Lema Golf Course	Alameda	City of San Leandro	WDR 95-129	2	☒	☒	☒	No
Tri-Cities Landfill	Alameda	Waste Management Inc.	WDR R2-2014-0005	1	☒	☒	☒	No
Turk Island	Alameda	Turk Island Company	WDR R2-2012-0020	2	☒	☒	☒	☒
USS Posco	Contra Costa	USS-POSCO Industries	WDR-R2-1994-0040	1	No	☒	☒	No
West Contra Costa	Contra Costa	West County Landfill Inc.; West Contra Costa Sanitary Landfill Inc.; Republic Services	WDR R2-2022-0011	1	☒	☒	☒	☒
West Marin Landfill	Marin	West Marin Sanitary Landfill Inc.; Martinelli Family	WDR 98-074	1	No	☒	☒	No

[TENTATIVE] WASTE DISCHARGE REQUIREMENTS GENERAL ORDER R2-2026-XXXX 31
 ENROLLED DISCHARGERS
 CLOSED LANDFILL FACILITIES, MULTIPLE COUNTIES

Facility Name	County	Discharger(s)	Orders	Facility Type	Requirements			
					LTFPP	Groundwater Monitoring	Financial Assurance	PFAS Sampling
West Winton	Alameda	City of Hayward	WDR R2-2012-0028	1	☒	☒	☒	☒
Westport Landfill	San Mateo	Westport Office Park LLC	WDR R2-2003-0074	2	☒	☒	☒	No
Zanker Road	Santa Clara	Zanker Road Resource Management Ltd.	WDR R2-2018-0054	1	☒	☒	☒	☒

ATTACHMENT B—LIST OF ELIGIBLE FACILITIES SUBJECT TO SUBSEQUENT ENROLLMENT

Facility Name	County	Discharger(s)
Albany Plateau	Alameda	California State Parks and Recreation and East Bay Regional Park District
Alameda County Flood Control	Alameda	Alameda County Flood Control District
City of Newark	Alameda	City of Newark
Chuck Corica Golf Course	Alameda	City of Alameda
Emeryville Dump	Alameda	City of Emeryville
Mowry Road Site	Alameda	Carlton Hill
North Port of Oakland	Alameda	Port of Oakland
Oakland Airport North Field	Alameda	Port of Oakland
Point Emery	Alameda	City of Emeryville
San Leandro Marina	Alameda	City of San Leandro
Singh Harwinder	Alameda	Singh Harwinder
Old Pleasanton Landfill	Alameda	Pleasanton Garbage Service
Richmond Burn Dump (Chevron USA)	Contra Costa	Chevron USA
Martinez City Rubbish	Contra Costa	City of Martinez
Larkspur Disposal Site	Marin	City of Larkspur
Dunphy Park	Marin	City of Sausalito
Bellam Blvd. Landfill	Marin	City of San Rafael
Ghilotti Site	Marin	San Rafael Department of Public Works and San Rafael Land Company, LLC
Bayview Business Park	Marin	Multiple Owners
Veteran's Home Disposal Site	Napa	Veteran's Home of California
Pacific Union College	Napa	Pacific Union College
Pier 70	San Francisco	Port of San Francisco
Pier 98	San Francisco	Port of San Francisco
City College of San Francisco- Ocean Campus	San Francisco	City College of San Francisco
Bedwell Bayfront Park Landfill (Marsh Road)	San Mateo	City of Menlo Park
Belmont Island	San Mateo	Cit of Belmont
Madrone Landfill	Santa Clara	Santa Clara County
Campisi Landfill (West Valley)	Santa Clara	Multiple owners
Eastside (Hellyer) Landfill	Santa Clara	Santa Clara County
Pennsylvania Ave Landfill/Cordelia Rd	Solano	Greggory Gilbert
Benicia Landfill/ Benicia State Park	Solano	CA State Parks, Diablo Range District
Tapia Illegal Landfill	Solano	Seecon Financial & Construction Company Inc
Flatiron Construction	Solano	Goodyear Road Partners LLC

ATTACHMENT C—DETECTION MONITORING PROGRAM

The provisions in this attachment only apply to enrolled facilities that are required to monitor groundwater and as applicable, surface water, in accordance with Title 27, as specified in the Facility-Specific Self-Monitoring Program (SMP).

A. Groundwater¹²

1. **Monitoring Parameters.** The Facility's monitoring wells shall be sampled and analyzed for the Monitoring Parameters and frequencies specified in the Discharger's Facility-Specific SMP, as well as any other time a monitoring well is sampled (e.g., for other purposes).
2. **Five-Year Constituents of Concern.** Every five years, the Discharger shall also analyze groundwater samples for the Five-Year Constituents of Concern (COCs) specified in the Facility-Specific SMP. The results of such monitoring shall be reported in the next monitoring report submitted on an annual basis.
3. **Groundwater Conditions Monitoring.** The Discharger shall conduct Groundwater Conditions monitoring in accordance with the Facility-Specific SMP (per the specified frequencies). To the extent feasible, this information shall be determined separately for: (1) the uppermost aquifer; (2) any zones of perched water; and (3) any additional zone of saturation monitored based upon water level elevations taken prior to the collection of the water quality data submitted in the report. (Title 27, § 20415, subd. (e)(15).)
4. **Reporting of Results.** The results of monitoring conducted pursuant to sections A.1 and A.3 shall be reported in accordance with the reporting schedule specified in the Facility-Specific SMP.
5. **General Requirements.**
 - a. **Monitoring Points.** The monitoring network shall include a sufficient number of monitoring points, installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that represent the quality of groundwater

¹² To the extent authorized by law, the Executive Officer may waive groundwater detection monitoring for a Facility via the Facility-Specific SMP where it is established that the Facility no longer presents a threat to water quality.

passing the Point of Compliance (POC) to allow the detection of a release from the WMU at the earliest possible opportunity. (Title 27, § 20415, subd. (b)(1)(B)1.) Additional points shall be added as necessary to provide the best assurance of the earliest possible detection. (Title 27, § 20415, subd. (b)(1)(B)2.)

- b. **Security and Access.** The Discharger shall lock all groundwater monitoring wells with a lock on the well cap or monitoring well box. Further the devices shall be:
 - i. Clearly visible and labeled with the applicable designations (e.g., "MW-1");
 - ii. Easily accessible by authorized personnel; and
 - iii. Protected from damage by equipment or vehicles.
- c. **Maintenance and Replacement.** Groundwater monitoring wells shall be operated and maintained so that they perform to design specifications throughout the life of the monitoring program. (40 C.F.R. § 258.51(c)(2).) Devices that cannot be operated and maintained to perform to design specifications shall be replaced after review and approval of a report (i.e., work plan) for the proposed replacement devices.
- d. **New Well Construction.** The installation of new monitoring wells shall comply with the following requirements:
 - i. Prior to the installation of a new monitoring well, the Discharger shall submit a work plan to Regional Water Board staff for technical concurrence. At minimum, the work plan shall specify the location and depth of the new well, as well as the intended monitoring parameters (if different from other wells). The Discharger shall also notify Regional Water Board staff of the installation schedule.
 - ii. Groundwater wells and other monitoring systems shall be designed and certified by a Qualified Professional. (Title 27, § 20415, subd. (e)(1).)
 - iii. Drilling shall be conducted by a licensed drilling contractor (or by a drilling crew under the direct supervision of a

licensed engineer, professional geologist, or certified engineering geologist). (Title 27, § 20415, subd. (e)(2).)

- iv. Borings logs shall be prepared by, or under the supervision of, a professional geologist, certified engineering geologist or a registered civil engineer with expertise in stratigraphic well logging; and submitted to the Regional Water Board (via GeoTracker) and the Department of Water Resources following completion of drilling. (Wat. Code, § 13751; Title 27, § 20415, subds. (b)(3), (e)(2).) Additionally, the submittal shall include geologic log information for soils, rock, and saturated zones specified in subdivision (e)(2)(A)-(C) of Title 27, section 20415.
- v. Wells shall be cased and constructed in a manner that maintains bore hole integrity and prevents the bore hole from acting as a conduit for contaminant transport. (Title 27, § 20415, subd. (b)(4)(A).)
- e. **Sample Collection.** The sampling interval of each well shall be appropriately screened and fitted with an appropriate filter pack to enable collection of representative samples. (Title 27, § 20415, subd. (b)(4)(B).)

B. Surface Water

If required under the Facility-Specific SMP, the Discharger shall collect and analyze samples at each surface water monitoring point for Monitoring Parameters and Five-Year COCs specified in the SMP.

C. Concentration Limits for Constituents of Concern

- 1. The Concentration Limit for each COC is the “background concentration,” as determined by the statistical methods outlined in subdivision (e)(8) of section 20415. (Title 27, § 20400, subds. (a), (b).) Concentration Limits are initially proposed by the Discharger, then reviewed by Regional Water Board staff (subject to any necessary revisions).
- 2. Concentration Limits shall be proposed and/or periodically updated by the Discharger. Unless expressly rejected by the Executive Officer in writing, these Concentration Limits shall be incorporated as part of this Order.

D. Procedures to Confirm Evidence of Release

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

1. Procedures for Retesting in Event of Concentration Limit Exceedance.

Step 1: Initial Determination. The Discharger shall identify each analyte in the current detection monitoring point sample that exceeds either its respective method detection limit (MDL) or practical quantitation limit (PQL), and for which a release has not been previously confirmed.

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

Step 3: Discrete Retest. Within 30 days of either the Discharger or the Regional Water Board determining that there is a preliminary indication of a release, the Discharger shall implement a verification procedure/retest option in accordance with Title 27, section 20415, subdivision (e)(8)(E) and section 20420, subdivision (j)(2). (Title 27, §§ 20415(e)(8)(E), 20420(j).) However, the Discharger may use an alternate method previously approved in writing by the Regional Water Board. The Discharger shall collect a retest sample from the relevant monitoring points and analyze it for COCs at issue. (Title 27, §§ 20415(e)(8)(E), 20420(j)(1)-(3).)

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

submitted by certified mail or electronic mail within seven days of the verbal notification.

2. **Next Steps After Confirmation.** If a release has been confirmed per the above procedure, the Discharger shall comply with the next provision below. If the analyte at issue is a Five-Year COC, that analyte shall be added to list of Monitoring Parameters that are monitored on a more frequent basis.
3. **Physical Evidence of a Release.** If the Discharger determines that there is significant physical evidence of a release, the Discharger shall immediately verbally notify Regional Water Board staff and provide written notification by certified mail or electronic mail within seven days. (Title 27, §§ 20385(a)(3), 20420(l)(1)-(2).)

E. Statistical Analyses

1. The Discharger shall collect all data necessary for selecting appropriate data analysis methods for establishing background values for each Monitoring Parameter. (Title 27, § 20420, subd. (c).)
2. The Discharger shall propose a data analysis method that includes a detailed description of criteria used for determining “measurably significant” (as defined per Title 27, § 20164) evidence of a release and determining compliance with the Concentration Limits. (Title 27, § 20415, subd. (e)(6)-(7).)
3. For statistical analysis of data, the Discharger shall use one of the methods described in section 20415, subdivision (e)(8)(A)-(E). A non-statistical data analysis method may be used if the method can achieve the goal of the particular monitoring program at least as well as the most appropriate statistical method. (Title 27, § 20415, subd. (e)(8).) The Discharger shall use a statistical or nonstatistical data analysis method compliant with subdivision (e)(7)-(10) to compare the concentration of each COC or monitoring parameter with its respective background concentration to determine whether there has been a “measurably significant” evidence of a release. For any given monitoring point at which a given constituent has already exhibited a “measurably significant” indication of a release at that monitoring point, the Discharger may propose to monitor the constituent, at that well, using a concentration-versus-time plot.

4. The Discharger may propose, for review and approval, an alternate statistical method in lieu of methods listed in section 20415, subdivision (e)(8)(A)-(D). (Title 27, § 20415, subd. (e)(8)(E).)
5. The statistical method shall account for data below the practical quantitation limit (PQL) with one or more statistical procedures that are protective of human health and the environment. For any given constituent monitored at a background or downgradient monitoring point, “trace” indications (between MDL and PQL) shall be identified and used in appropriate statistical or non-statistical tests.

F. Sample Collection and Analysis

1. The Discharger’s proposed Facility-Specific SMP shall include the following elements:
 - a. Sample collection procedures, describing purging techniques, sampling equipment, and decontamination of sampling equipment;
 - b. Sample preservation information and shipment procedures;
 - c. Sample analytical methods and procedures;
 - d. Sample Quality Assurance/Quality Control (QA/QC) procedures;
 - e. Chain of Custody Control; and
 - f. Sample analysis information including sample preparation techniques to avoid matrix interferences; MDLs, PQLs, and reporting limits (RLs); and procedures for reporting results between the MDL and PQL (trace results).
2. All samples shall be collected, preserved, and transported in accordance with the approved Facility-Specific SMP.
3. Background for water samples shall be represented by the data from all samples taken from applicable background monitoring points during that reporting period (at least one sample from each background monitoring point).
4. Sample analyses shall be performed by a laboratory certified by the State Water Board’s Environmental Laboratory Accreditation Program (ELAP). (Wat. Code, § 13176, subd. (a).)

5. Where laboratory analysis is required, samples shall be analyzed using the most recent version of the USEPA Methods available. The Discharger shall propose an analytical method for written concurrence by Regional Water Board staff prior to use in satisfying the requirements of this SMP.
6. For any given monitored medium, the samples taken from all monitoring points and background monitoring points to satisfy the data analysis requirements for a given reporting period shall all be taken within a span not to exceed 30 days, unless a longer time period is approved in writing, and shall be taken in a manner that ensures sample independence to the greatest extent feasible.
7. Where laboratory analysis is required, the RL for all reported monitoring data shall be less than or equal to the PQL.
8. All “trace” results (between MDL and PQL) shall be reported as such, and shall be accompanied both by estimated MDL and PQL values for that analytical run.
9. All laboratory QA/QC data shall be reported, along with the sample results to which they apply, including the method, equipment, analytical detection and quantitation limits, the percent recovery, an explanation for any recovery that falls outside the QC limits, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name and signature of a responsible person from the laboratory. In cases where contaminants are detected in QA/QC samples (i.e., field, trip, or laboratory blanks), the accompanying sample results shall be appropriately flagged, but the analytical results shall not be adjusted.

ATTACHMENT D—FLOOD PROTECTION REPORTING REQUIREMENTS

The provisions in this attachment only apply to enrolled facilities that are required to submit a Long-Term Flood Protection Plan, as listed in Attachment A.

A. Long-Term Flood Protection Plan

The Discharger shall submit a climate change vulnerability assessment and adaptation plan acceptable to the Executive Officer. The plan shall identify strategies for the long-term protection of the landfill from flooding and inundation due to sea level rise (SLR), groundwater rise, and extreme climate/weather events. The plan shall:

1. Be prepared by qualified experts and consider and reference the most current official State of California climate change guidance documents.
2. Be based on providing protection from the estimated 100-year storm event, on top of the 2050 “intermediate” or “intermediate-high” risk aversion SLR scenarios as described in the most recent official State of California sea level rise guidance (e.g., the 2024 Ocean Protection Council Sea Level Rise Guidance). The 100-year storm event shall take into account astronomical tides and storm surge as well as wave run-up, seasonal effects (e.g., El Niño conditions), and discharge from local tributaries (e.g., as modeled by the United States Geological Survey [USGS] Coastal Storm Modeling System [CoSMoS] tool).
3. Describe how vulnerable features and infrastructure will be protected (e.g., landfill caps, monitoring wells, landfill gas wells, flares, levees), and how building uses and public access will be protected prior to the projected timing of SLR, groundwater rise, and extreme storm event impacts (e.g., prior to projected flooding).
4. Propose a phased adaptation strategy that briefly describes the potential future projects that may be necessary to provide for protection from the 2100 “intermediate” or “intermediate-high” risk aversion SLR scenarios as described in the most recent official State of California sea level rise guidance, as well as potential accompanying changes in groundwater rise and extreme storm events. The strategy shall allow for a range of future actions at different climate change thresholds to address uncertainty and allow for flexibility over the long term.
5. Provide technical justification for the selection of both the 2050 and 2100 sea level rise risk aversion scenarios.

6. Identify baseline conditions for the landfill and show at a minimum the following on a map(s): sitewide elevations, vulnerable infrastructure (e.g., waste containment features, wetlands, roads, buildings, remediation systems, piping, wells), existing groundwater levels, the degree of SLR, groundwater rise, and/or extreme storm event exposure already noted at the landfill (if any), sea level elevations at which flooding will impact the landfill, and areas potentially vulnerable to groundwater rise.
7. Be updated and submitted every five years with the most recently available and credible information and climate change adaptation guidance at the time of the update, including observed changes in sea levels, groundwater levels, and flooding measured at or as near as possible to the landfill (e.g., from local tide gauges and monitoring wells), and any observed or potential changes in the adaptive capacity and risk tolerance of vulnerable infrastructure, including an implementation schedule with key milestones that have been or will be met in the future.
8. When preparing and implementing adaptive management plans, the Discharger shall take into consideration how rising shallow groundwater and any associated flooding may affect long-term cap stability, increases in leachate amounts, leachate and landfill gas migration, and post-closure monitoring and maintenance goals at the site. Groundwater monitoring data from the site should be used for the most accurate water levels onsite; however, if groundwater wells are not present at the landfill, databases such as GeoTracker can be used to access water table elevations nearby, using USGS, California Department of Water Resources, or other nearby cleanup site well observations. Additionally, shallow groundwater response to SLR across five Bay Area counties has been developed and may be used as a resource (Pathways Climate Institute and San Francisco Estuary Institute, 2022 and 2025).

B. Applicable Reporting Requirements

The reports submitted pursuant to the requirements in this attachment shall comply with the following requirements in section G (Reporting Requirements) of this Order:

- (1) Section G.1 (Electronic Submittal via GeoTracker);
- (2) Section G.2 (Preparation of Technical Reports by Qualified Professionals); and
- (3) Section G.3 (Certifications for Submittals).

ATTACHMENT E—LEACHATE COLLECTION AND REMOVAL SYSTEM MONITORING

The provisions in this attachment only apply to enrolled facilities with Leachate Collection and Removal Systems (LCRS).

A. Operations, Maintenance, and Testing

1. The Discharger shall operate and maintain LCRS sumps, and conduct monitoring of any detected leachate seeps in accordance with the applicable provisions of Title 27.
2. Each LCRS shall be tested annually to demonstrate proper operation, with the results of each test being compared to the results of prior testing. (See Title 27, § 20340, subd. (d).) Results shall be reported as required in the SMP.

B. Monitoring

1. LCRS sumps shall be inspected monthly for the presence of leachate. The total flow and flow rate for leachate in each sump shall be recorded after each inspection and reported per the SMP.
2. Upon detecting leachate in a previously dry sump, the Discharger shall notify Regional Water Board staff within seven days, and immediately sample and analyze leachate for the parameters required in the SMP. Thereafter, whenever leachate is present in the same sump, it shall be sampled and analyzed for the same parameters, in accordance with the specified schedule.