

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

Fresno Office
1685 "E" Street
Fresno, CA 93706-2007

Sacramento Office (Main)
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Redding Office
364 Knollcrest Drive #205
Redding, CA 96002

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

[TENTATIVE] MONITORING & REPORTING PROGRAM (MRP)
R5-2022-XXXX



ORDER INFORMATION

Order Type(s):	Monitoring & Reporting Program (MRP)
Status:	TENTATIVE
Program:	Title 27 Discharges to Land
Region 5 Office:	Fresno
Discharger(s):	Chemical Waste Management, Inc.
Facility:	Bakersfield Facility
Address:	27001 Round Mountain, Bakersfield, CA 93308
County:	Kern County
Parcel Nos.:	093-010-05, 093-10-06
GeoTracker ID:	L10009752374
Prior Order(s):	R5-2011-0046, 99-088, 90-264, 79-211 and 72-297

CERTIFICATION

I, PATRICK PULUPA, 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, Central Valley Region, on XX December 2022.

PATRICK PULUPA,
Executive Officer

REGIONAL BOARD INFORMATION

Sacramento Office (Main)

Rancho Cordova, CA 95670-6114
11020 Sun Center Drive #200
Telephone: (916) 464-3291

Fresno Office

1685 "E" Street
Fresno, CA 93706-2007
Telephone: (559) 445-5116

Redding Office

364 Knollcrest Drive #205
Redding, CA 96002
Telephone: (530) 224-4845

[Regional Board Website](https://www.waterboards.ca.gov/centralvalley)

<https://www.waterboards.ca.gov/centralvalley>

TABLE OF CONTENTS

TABLE INDEX	iv
GLOSSARY	v
PREFACE	1
MONITORING & REPORTING PROGRAM	2
A. General Provisions	2
1. Incorporation of Standard Provisions	2
2. Monitoring Provisions in WDRs Order	2
3. Compliance with Title 27	2
4. Sample Collection and Analysis Plan (SCAP)	2
B. Corrective Action Monitoring Program (CAMP)	3
1. Groundwater	3
a. Required Network	3
b. Sample Collection and Analysis	3
c. Five-Year COCs	5
d. Groundwater Conditions	5
e. Groundwater Corrective Action Monitoring Parameters	6
2. Unsaturated Zone	6
3. Surface Water	6
4. Summary of Water Quality Protection Standard (WQPS) Components	6
a. Compliance Period	6
b. Monitoring Points	7
c. Point of Compliance (POC)	7

d. Constituents of Concern (COCs)	7
e. Monitoring Parameters.....	7
f. Five-Year COCs	7
g. Concentration Limits	8
h. Retesting Procedures	8
C. Additional Facility Monitoring	9
1. Leachate Collection & Removal System (LCRS)	9
a. Annual Sump Inspection	9
b. Leachate Monitoring	9
c. Five-Year COCs	10
2. Leachate Seepage.....	11
3. Regular Visual Inspection.....	12
4. Annual Facility Inspections.....	13
5. Major Storm Events and Earthquakes.....	13
D. Reporting Requirements.....	13
1. Annual Monitoring Reports (AMRs).....	14
2. Leachate Seep Reporting.....	16
3. Annual Facility Inspection Report.....	17
4. Major Storm Event Reports	17
5. Water Quality Protection Standard Report	17
6. General Reporting Provisions	18
a. Transmittal Letters	18
b. Monitoring Data and Reports	19

c. Compliance with SPRRs.....	20
d. Additional Requirements for Monitoring Reports	20
E. Record Retention Requirements	20
6. The results of all analyses, as well as the MDL and PQL for each analysis (all peaks shall be reported).....	20
ATTACHMENT A—DISSOLVED INORGANICS (FIVE-YEAR COCS).....	22
ATTACHMENT B—VOLATILE ORGANIC COMPOUNDS, (FIVE-YEAR COCS)	23
ATTACHMENT C—SEMI-VOLATILE ORGANIC COMPOUNDS (FIVE-YEAR COCS)	25

TABLE INDEX

Table 1—Groundwater Monitoring Network	3
Table 2—Groundwater Corrective Action Monitoring, Physical Parameters	4
Table 3—Groundwater Corrective Action Monitoring, Constituent Parameters.....	4
Table 4—Groundwater Corrective Action Monitoring, Five-Year COCs	5
Table 5—Groundwater Corrective Action Monitoring, Groundwater Conditions.....	5
Table 6—Groundwater Corrective Action Monitoring, Additional Constituent Parameters	6
Table 7—LCRS Sump Monitoring, Monthly Inspection Parameters	9
Table 8—LCRS Sump Monitoring	9
Table 9—LCRS Sump Monitoring, Five-Year COCs	10
Table 10—Leachate Seep Monitoring, Physical Parameters	11
Table 11—Leachate Seep Monitoring, Constituent Parameters	11
Table 12—Criteria for Regular Visual Inspections.....	12
Table 13—Regular Visual Inspection Schedule	iv
Table 14—Summary of Required Reports	13

GLOSSARY

AMR	Annual Monitoring Report
CalRecycle	California Department of Resources Recycling and Recovery
CAMP	Corrective Action Monitoring Program
C.F.R.....	Code of Federal Regulations
CIWQS	California Integrated Water Quality System Project
COCs	Constituents of Concern
DMP	Detection Monitoring Program
DWR.....	California Department of Water Resources
EC	Electrical Conductivity
ELAP	State Water Board's Environmental Laboratory Accreditation Program (formerly administered by California Department of Public Health)
EMP	Evaluation Monitoring Program
EW	Extraction Well
Five-Year COCs	Five-Year Constituents of Concern
GeoTracker	State Water Board's Data Management System for Sites with Potential Groundwater Impact
GP.....	Gas Probe
LCRS.....	Leachate Collection and Removal System
LF	Landfill
LFG	Landfill Gas
MDL.....	Method Detection Limit

Method TO-15 VOCs.....	Volatile Organic Compounds associated with USEPA Method TO-15
MRP	Monitoring and Reporting Program
MSW	Municipal Solid Waste
MSWLF	Municipal Solid Waste Landfill
N/A	Not Applicable
PID	Photo Ionization Detector
POC	Point of Compliance for Water Quality Protection Standard
QA/QC.....	Quality Assurance/Quality Control
Qualified Professional	Professional Civil Engineer or Geologist licensed by the State of California
RCRA	Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq.
RL.....	Reporting Limit
ROWD / JTD	Report of Waste Discharge / Joint Technical Document
SCAP	Sample Collection and Analysis Plan
SGP.....	Soil Pore Gas
SI.....	Surface Impoundment
SMR	Semiannual Monitoring Report
SPRRs / Standard Provisions	Standard Provisions and Reporting Requirements for Nonhazardous Solid Waste Discharges Regulated by Subtitle D and/or Title 27 Municipal Solid Waste Facilities, December 2015 Edition
TDS	Total Dissolved Solids

Title 27	California Code of Regulations, Title 27
USEPA.....	United States Environmental Protection Agency
VOCs.....	Volatile Organic Compounds
WDRs.....	Waste Discharge Requirements
WMU	Waste Management Unit
WQPS	Water Quality Protection Standard

UNITS

ft ³ / min	Cubic Feet per Minute
°F	Degrees Fahrenheit
Gallons/Day.....	Gallons per Day
mg/L	Milligrams per Liter
µg/L.....	Micrograms per Liter
µmhos/cm.....	Microsiemens per Centimeter
µg/cm ³	Micrograms per Cubic Centimeter
NTUs	Nephelometric Turbidity Units
% Vol.....	Percent by Volume
Inches Hg	Inches of Mercury (Barometric Pressure)
MM Hg Vacuum	Millimeters of Mercury (Barometric Pressure)

PREFACE

Adopted by the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) pursuant to Water Code section 13267, subdivision (b)(1), this Order establishes a Monitoring and Reporting Program (MRP) for Chemical Waste Management, Inc. (Discharger), which owns the Bakersfield Facility (Facility) in Kern County. Additional information regarding the Facility is set forth in the enumerated findings of Waste Discharge Requirements Order R5-2022-XXXX (WDRs Order). Except as otherwise provided in the following MRP, these findings are incorporated herein.

The MRP also contains supplemental findings related to monitoring and reporting activities, and/or Facility conditions. For the purposes of California Code of Regulations, title 27 (Title 27) (e.g., §§ 21720, 20380-20435), the findings and provisions of this Order are conversely incorporated as part of the WDRs Order as well.

Although adopted with the WDRs Order, this is a separate order subject to subsequent revision by the Executive Officer in accordance with delegated authority per Water Code section 13223. For the purposes of Title 27, such revisions shall be automatically incorporated as part of the WDRs Order.

MONITORING & REPORTING PROGRAM

IT IS HEREBY ORDERED, pursuant to Water Code section 13267: that all previously issued Monitoring and Reporting Program(s) for the discharge of solid waste at the Facility are rescinded (except for enforcement purposes); and that the Discharger, their agents, employees and successors shall comply with the following Monitoring and Reporting Program (MRP). The Discharger shall not implement any changes until a revised MRP is issued by the Central Valley Water Board or its Executive Officer.

A. General Provisions

1. Incorporation of Standard Provisions

Other than as modified through an approved engineered alternative (Title 27 §20080(b)), the Discharger shall comply with all relevant provisions of the *Standard Provisions and Reporting Requirements for Nonhazardous Solid Waste Discharges Regulated by Subtitle D and/or Title 27 Municipal Solid Waste Facilities, December 2015 Edition* (SPRRs or Standard Provisions), which are incorporated herein. See, e.g., SPRRs section I (*Standard Monitoring Specifications*) and section J (*Response to Release*).

2. Monitoring Provisions in WDRs Order

The Discharger shall comply with all “Monitoring Provisions” in the Facility’s operative Title 27 WDRs Order, which are also incorporated herein.

3. Compliance with Title 27

The Discharger shall comply with all of Title 27 provisions as they pertain to activities described in this MRP (including SPRRs).

4. Sample Collection and Analysis Plan (SCAP)

All samples shall be collected, preserved, and transported in accordance with the most recently approved Sample Collection and Analysis Plan (SCAP) and the Quality Assurance/Quality Control (QA/QC) standards specified therein. The Discharger may use alternative analytical test methods (including new USEPA-approved methods), provided that the alternative methods have method detection limits (MDLs) equal to or lower

than the analytical methods specified in this MRP and are identified in the approved SCAP.

B. Corrective Action Monitoring Program (CAMP)

To demonstrate the effectiveness of ongoing corrective action at the Facility, the Discharger shall perform the following additional monitoring in accordance with subdivision (d) of Title 27, § 20430.

1. Groundwater

a. Required Network

The Facility's groundwater monitoring well network consists of the wells listed in **Table 1**.

Table 1—Groundwater Monitoring Network

Well	Program	Monitored Unit
NWC	Corrective Action	Western WMU
MW06	Corrective Action	Western WMU
MW01	Corrective Action	Western WMU
CW10	Corrective Action	Western WMU

See Glossary for definitions of terms and abbreviations in table.

b. Sample Collection and Analysis

Groundwater samples shall be collected from each well and analyzed for the parameters listed in **Table 2** (Field Parameters) and **Table 3** (Hydrochemical Parameters), in accordance with the specified schedule for each parameter. (Title 27, § 20420, subs. (e)-(f).)

Table 2—Groundwater Corrective Action Monitoring, Field Parameters

Physical Parameter	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
Temperature	TEMP	°F	Annually	Annually
Electrical Conductivity	SC	µmhos/cm	Annually	Annually
pH	PH	pH Units	Annually	Annually
Turbidity	TURB	NTUs	Annually	Annually

See Glossary for definitions of terms and abbreviations in table.

Table 3—Groundwater Corrective Action Monitoring, Hydrochemical Parameters

Constituent Parameter	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
TDS	TDS	mg/L	Annually	Annually
Chloride	CL	mg/L	Annually	Annually
Carbonate	CACO3	mg/L	Annually	Annually
Bicarbonate	BICACO3	mg/L	Annually	Annually
Sulfate	SO4	mg/L	Annually	Annually
Calcium	CA	mg/L	Annually	Annually
Magnesium	MG	mg/L	Annually	Annually
Potassium	K	mg/L	Annually	Annually
Sodium	NA	mg/L	Annually	Annually

See Glossary for definitions of terms and abbreviations in table.

c. Five-Year COCs

The Discharger shall analyze for groundwater samples from each well for the Five-Year Constituents of Concern (Five-Year COCs) listed in **Table 4**. Five-Year COCs were last monitored in 2022 and shall be analyzed again in 2027. (Title 27, § 20420, subd. (g).)

Table 4—Groundwater Corrective Action Monitoring, Five-Year COCs

Five-Year Constituent	GeoTracker Code	Units	Sampling & Reporting Frequency
Phenols (total), dissolved	(various)	µg/L	Every 5 Years
Dissolved Inorganics (Attachment A)	(various)	µg/L	Every 5 Years
Five-Year COC VOCs (Attachment B)	(various)	µg/L	Every 5 Years
Five-Year COC Semi-VOCs (Attachment C)	(various)	µg/L	Every 5 Years

See Glossary for definitions of terms and abbreviations in table.

d. Groundwater Conditions

The Discharger shall monitor the Groundwater Conditions specified in **Table 5**, with the result of such monitoring being reported annually per **Section 0**. (Title 27, § 20415, subd. (b)(1).)

Table 5—Groundwater Corrective Action Monitoring, Groundwater Conditions

Groundwater Condition	GeoTracker Code	Frequency
Elevation (Well-Specific)	ELEV	Annually
Gradient	(none)	Annually
Flow Rate	(none)	Annually

e. Groundwater Corrective Action Monitoring Parameters

In addition to parameters in **Table 2** (Field Parameters) and **Table 3** (Hydrochemical Parameters), the Monitoring Parameters shall be calculated as specified in **Table 6**.

Table 6—Groundwater Corrective Action Monitoring Parameters

Additional Constituents	Frequency
Sodium Ion Percent	Annually
Sulfate-to-Calcium Ratio	Annually

2. Unsaturated Zone

There are no unsaturated zone monitoring requirements for the Facility.

3. Surface Water

There are no surface water monitoring requirements for the Facility.

4. Summary of Water Quality Protection Standard (WQPS) Components

The Water Quality Protection Standard (WQPS) is the Title 27 analytical framework through which an individual WMU is monitored for releases and impacts to water quality. As explained in further detail below, for the duration of the Compliance Period, the Monitoring Points situated at a WMU's Point of Compliance are sampled and analyzed for Monitoring Parameters indicative of a release. If concentrations of Constituents of Concern exceed Concentration Limits, the results are confirmed through Retesting Procedures.

a. Compliance Period

The "compliance period" is the minimum time for which a water quality monitoring will be required—i.e., equal to the sum of active years and the closure period. (Title 27, § 20410.) The period restarts each time an Evaluation Monitoring Program (EMP) is initiated for a given WMU. (Id., §§ 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. (Id., § 20410, subd. (c).)

b. Monitoring Points

For WQPS purposes, a “monitoring point” is any well, device, or location where monitoring is conducted, and is specified in the Facility’s WDRs and subject to the WQPS. (Title 27, § 20164.) Monitoring Points are listed in **Section 0**—specifically **Table 1** (Groundwater).

c. Point of Compliance (POC)

The Point of Compliance (POC) is a vertical plane at the WMU’s hydraulically downgradient limit, extending through the uppermost underlying aquifer. (Title 27, §§ 10164, 20405(a).)

d. Constituents of Concern (COCs)

Constituents of Concern (COCs) are 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.)

e. Monitoring Parameters

Monitoring Parameters are a predetermined set of COCs or measurable physical characteristics (e.g., temp., electrical conductivity, pH), which serve as reliable indicators of a WMU release, and for which samples will therefore be routinely analyzed. (Title 27, §§ 20164, 20395(a), 20420(e)-(f).) For the purposes of this MRP, the Monitoring Parameters are those in **Table 2** and **Table 3**.

f. Five-Year COCs

In addition to the Monitoring Parameters described above, this Order requires the quinquennial analysis of samples for a larger range of constituents that are reasonably expected to be found in, or derived from, the waste contained within each unit at the Facility. (Title 27, §§ 20395, 20420(g).) Groundwater wells were last sampled for COCs in 2022 and results will be submitted to the Central Valley Water Board as part of the 2022 Annual Monitoring Report. The next Five-Year COC sampling event is scheduled for

2027. For the purposes of this MRP, the Five-Year COCs are listed in:

- i. **Attachment A** (*Dissolved Inorganics*);
- ii. **Attachment B** (*Five-Year COC VOCs*);
- iii. **Attachment C** (*Five-Year Semi-VOCs*);
- iv. Any other COCs listed in **Table 4** (*Groundwater*).

g. Concentration Limits

The Concentration Limit for each COC is the “background concentration,” as determined by the statistical methods outlined in subdivision (e)(8) of Title 27, section 20415.¹ (Title 27, § 20400, subds. (a), (b).) Methods for calculating Concentration Limits were proposed in the *Site-Specific Groundwater Monitoring Plan*. The approved methods use intrawell prediction limits.

Concentration Limits shall be proposed and/or updated by the Discharger after every four monitoring events, in the Annual Monitoring Report (AMR) submitted per **Section D.1**.

Unless expressly rejected by the Executive Officer in writing, these Concentration Limits shall be incorporated as part of this Order.

h. Retesting Procedures

If monitoring results indicate measurably significant evidence of a release, as described in Section I.45 of the SPRRs (Standard Monitoring Specifications), the Discharger shall apply the following:

- v. **Non-Statistical Retesting Procedures (SPRRs, § I.46)** for analytes detected in less than 10 percent of background samples (e.g., non-naturally occurring COCs); and

¹ Concentration Limits are initially proposed by the discharger, then reviewed and approved by the Central Valley Water Board (subject to any necessary revisions). The limits specified herein are approved and incorporated as part of the Facility’s WDRs.

- vi. **Statistical Retesting Procedures (SPRRs, § 1.46)** for analytes detected in at least 10 percent of background samples (e.g., naturally occurring COCs).

C. Additional Facility Monitoring

1. Leachate Collection & Removal System (LCRS)

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

a. Annual Sump Inspection

All LCRS sumps shall be inspected annually for the accumulation of leachate. As provided in **Table 7**, the total flow and flow rate for leachate in each sump shall be recorded after each inspection and reported annually per **Section D.1**.

Table 7—LCRS Sump Monitoring, Annual Inspection Parameters

Physical Parameter	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
Total Flow	(none)	Gallons	Annually	Annually
Flow Rate	FLOW	Gallons/Day	Annually	Annually

See Glossary for definitions of terms and abbreviations in table.

b. Leachate Monitoring

Whenever leachate is present at sufficient thickness to effectively pump, the leachate shall be sampled and analyzed in accordance with the specified sampling and reporting schedule in **Table 8**.

Table 8—LCRS Sump Monitoring

Constituent Parameter	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
Electrical Conductivity	SC	µmhos/cm	Annually	Annually
pH	PH	pH Units	Annually	Annually

Constituent Parameter	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
TDS	TDS	mg/L	Annually	Annually
Chloride	CL	mg/L	Annually	Annually
Carbonate	CACO3	mg/L	Annually	Annually
Bicarbonate	BICACO3	mg/L	Annually	Annually
Nitrate (as Nitrogen)	NO3N	mg/L	Annually	Annually
Sulfate	SO4	mg/L	Annually	Annually
Calcium	CA	mg/L	Annually	Annually
Magnesium	MG	mg/L	Annually	Annually
Potassium	K	mg/L	Annually	Annually
Sodium	NA	mg/L	Annually	Annually

c. Five-Year COCs

If leachate is present at sufficient thickness to effectively pump, then at least once every five years, the Discharger shall sample and analyze leachate in the sump for the Five-Year COCs listed in **Table 9**.

Table 9—LCRS Sump Monitoring, Five-Year COCs

Parameter	GeoTracker Code	Units	Sampling & Reporting Frequency
Dissolved Inorganics (Attachment A)	(various)	µg/L	Every 5 Years
Five-Year COC VOCs (Attachment B)	(various)	µg/L	Every 5 Years
Five-Year COC Semi-VOCs (Attachment C)	(various)	µg/L	Every 5 Years

See Glossary for definitions of terms and abbreviations in table.

2. Leachate Seepage

Leachate that seeps to the surface from any landfill WMU shall, immediately upon detection, be sampled and analyzed for the Parameters in **Table 10** and **Table 11**. See **Section D.2** for Reporting Requirements. In the event of a reported leachate seep, Central Valley Water Board staff may direct additional sampling and analysis pursuant to Water Code section 13267, subdivision (b)(1).

Table 10—Leachate Seep Monitoring

Physical Parameter	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
Total Flow	(none)	Gallons	Upon Detection	Annually
Flow Rate	FLOW	Gallons/Day	(same)	(same)
Electrical Conductivity	SC	µmhos/cm	(same)	(same)
pH	PH	pH Units	(same)	(same)

See Glossary for definitions of terms and abbreviations in table.

Table 11—Leachate Seep Monitoring

Constituent Parameter	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
TDS	TDS	mg/L	Upon Detection	See MRP, § D.2
Chloride	CL	mg/L	(same)	(same)
Carbonate	CACO3	mg/L	(same)	(same)
Bicarbonate	BICACO3	mg/L	(same)	(same)
Nitrate as N	NO3N	mg/L	(same)	(same)
Sulfate	SO4	mg/L	(same)	(same)

Constituent Parameter	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
Calcium	CA	mg/L	(same)	(same)
Magnesium	MG	mg/L	(same)	(same)
Potassium	K	mg/L	(same)	(same)
Sodium	NA	mg/L	(same)	(same)

See Glossary for definitions of terms and abbreviations in table.

3. Regular Visual Inspection

The Discharger shall perform annual visual inspections at the Facility in accordance with **Table 12** (Criteria). Results of these regular visual inspections shall be included in Annual Monitoring Report per **Section D.1**.

Table 12—Criteria for Regular Visual Inspections

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

4. Annual Facility Inspections

Prior to **30 September** of each year, the Discharger shall inspect the Facility to assess repair and maintenance needs for drainage control systems, cover systems and groundwater monitoring wells; and preparedness for winter conditions (e.g., erosion and sedimentation control). If repairs are made as result of the annual inspection, problem areas shall be photographed before and after repairs. Any necessary construction, maintenance, or repairs shall be completed by 31 October or as agreed with by the Central Valley Water Board. See **Section D.3** for Reporting Requirements.

During 35 years of post-closure care no notable settlement has been identified, post closure surveys of the landfill cover are no longer required.

5. Major Storm Events and Earthquakes

Within seven days of any storm event capable of causing damage or significant erosion (Major Storm Event), the Discharger shall inspect the Facility for damage to any precipitation, diversion and drainage facilities, and all landfill side slopes. Necessary repairs shall be completed within 30 days of the inspection or as agreed by the Central Valley Water Board. The Discharger shall take photos of any problem areas before and after repairs. See **Section D.4** for Reporting Requirements.

The Discharger shall perform a facility inspection **within 7 days** following an earthquake that could potentially damage waste management units and/or the Facility. Necessary repairs shall be completed **within 30 days** of the inspection or as agreed with by the Central Valley Water Board. The Discharger shall report damage and subsequent repairs **within 45 days** of completion of the repairs.

D. Reporting Requirements

Table 13—Summary of Required Reports

Section	Report	Deadline
§ D.1	Annual Monitoring Reports (AMRs)	28 February

Section	Report	Deadline
§ D.2	Leachate Seep Reporting	Immediately upon Discovery of Seepage (<i>staff notification</i>) Within 7 Days (<i>written report</i>)
§ 0	Annual Facility Inspection Reports	November 15
§ 0	Major Storm Reporting	Immediately after Damage Discovery (<i>staff notification</i>) Within 14 Days of Completing Repairs (<i>written report, photos</i>)
§ 0	Water Quality Protection Standard Reports	If needed for Proposed Revisions (excluding Concentration Limits)

1. Annual Monitoring Reports (AMRs)

The Discharger shall submit Annual Monitoring Reports (AMRs) by **February 28**. AMRs shall contain the following materials and information:

- a. A statement affirming that all sampling activities referenced in the report were conducted in accordance with the approved SCAP (see § A.4).
- b. Map(s)/aerial photograph(s) depicting locations of all observation stations, monitoring points referenced in the report.
- c. In tabulated format, all monitoring data required to be reported on an annual basis, including Groundwater Conditions and Monitoring Parameters.
- d. For each groundwater monitoring point referenced in the AMR:
 - i. The times each water level measurement was taken;

- ii. The type of pump or other device used to purge and elevate pump intake level relative to screening interval;
 - iii. The purging methods used to stabilize water in the well bore before sampling (including pumping rate);
 - iv. The equipment and methods used for monitoring pH, temperature and electrical conductivity (EC) during purging activity, and the results of such monitoring;
 - v. Methods for disposing of purged water; and
 - vi. The type of device used for sampling, if different than the one used for purging.
- e. Evaluation of concentrations for all Parameters and Five-Year COCs (when analyzed), comparison to current Concentration Limits, and results of any Retesting Procedures.
 - f. Graphs of historical trends for all Monitoring Parameters and Five-Year COCs (if such analyses were performed) with respect to each monitoring point over the five prior calendar years.²
 - g. An evaluation of Hydrochemical Parameters with regard to the cation/anion balance, and graphical presentation of same in a Stiff diagram, Piper graph or Schoeller plot.
 - h. Time Series Graphs of the Sulfate/Calcium Ratio and the Sodium Ion Percent for each corrective action monitoring well showing the Sen's Slope Graphs.
 - i. All historical monitoring data for which there are detectable results, including data for the previous year, shall be submitted in tabular form in a digital file.
 - j. For each groundwater well, annual hydrographs showing the elevation of groundwater with respect to the top and bottom of the

² Each graph shall contain individual data points (not mean values) and be appropriately scaled to accurately depict statistically significant trends or variations in water quality.

screened interval, and the elevation of the pump intake, if applicable

- k. A comprehensive discussion of the Facility's compliance record, and the result of any corrective actions taken or planned which may be needed to attain full compliance with the WDRs.
- l. A summary of the monitoring results, indicating any changes made or observed since the previous AMR.
- m. When required per this Order, periodic updates to the Concentration Limits for all Monitoring Parameters and WQPS Monitoring Points.
- n. To assess the progress of ongoing Corrective Action at the Facility, the following parameters: sulfate/calcium ratio and sodium ion percent will be calculated.
- o. In the event of a verified exceedance of Concentration Limit(s), any actions taken per Section J of the SPRRs (*Response to Release*) for wells and/or constituents not already specifically addressed in Corrective Action Monitoring under this MRP.
- p. Evaluation as to effectiveness of existing leachate monitoring and control facilities, and runoff/run-on control facilities.
- q. Summaries of all Regular Visual Inspections conducted per **Section C.3** during the reporting period.
- r. For closed landfills, summaries of inspections, leak searches and final cover repairs conducted in accordance with an approved Post-Closure Maintenance Plan per Standard Provisions G.26-29 (*Standard Closure and Post-Closure Maintenance Specifications*).
- s. Laboratory statements of results of all analyses evaluating compliance with the WDRs.

2. Leachate Seep Reporting

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

- a. Map(s) depicting the location(s) of seepage;

- b. Estimated flow rate(s);
- c. A description of the nature of the discharge (e.g., all pertinent observations and analyses);
- d. Verification that samples have been submitted for analyses of the Parameters in **Table 10** and **Table 11**, and an estimated date that the results will be submitted to the Central Valley Water Board; and
- e. Corrective measures underway or proposed, and corresponding time schedule.

3. Annual Facility Inspection Report

By **15 November**, the Discharger shall submit a report with results of the Annual Facility Inspection per **Section 0**. The report shall discuss any repair measures implemented, any preparations for winter, and include photographs of any problem areas and repairs.

4. Major Storm Event Reports

Immediately following each post-storm inspection described in **Section 0**, the Discharger shall notify Central Valley Water Board staff of any damage or significant erosion (upon discovery). Subsequent repairs shall be reported to the Central Valley Water Board (together with before and after photos of the repaired areas) within 14 days of completion.

5. Water Quality Protection Standard Report

Any proposed changes³ to the Water Quality Protection Standard (WQPS) components (§ B.4), other than periodic update of the Concentration Limits (§ B.4.g), shall be submitted in a WQPS Report for review and approval. The report shall be certified by a “Qualified Professional” (§ B), and contain the following:

³ If subsequent sampling of the background monitoring point(s) indicates significant water quality changes due to either seasonal fluctuations or other reasons unrelated to onsite waste management activities, the Discharger may request modification of the WQPS.

- a. *Potentially Affected Waterbodies*—An identification of all distinct bodies of surface water and groundwater potentially affected by a WMU release (including, but not limited to, the uppermost aquifer and any permanent or ephemeral zones of perched groundwater underlying the Facility);
- b. *Map of Monitoring Points*—A map of all groundwater (including all background/upgradient and Point of Compliance monitoring points);
- c. *Groundwater Movement*—An evaluation of perennial direction(s) of groundwater movement within the uppermost zone(s);
- d. *Statistical Method for Concentration Limits*—A proposed statistical method for calculating Concentration Limits for Monitoring Parameters and Five-Year COCs (see § 0) detected in at least 10 percent of the background data (naturally-occurring constituents) using a statistical procedure from subdivisions (e)(8)(A)-(D) or (e)(8)(E) of Title 27, § 20415; and
- e. *Retesting Procedure*—A retesting procedure to confirm or deny measurably significant evidence of a release (Title 27, §§ 20415(e)(8)(E), 20420(j)(1)-(3)).

6. General Reporting Provisions

a. Transmittal Letters

Each report submitted under this MRP shall be accompanied by a Transmittal Letter providing a brief overview of the enclosed report, as well as the following:

- i. Any violations found since the last report was submitted, a description of all actions undertaken to correct the violation (referencing any previously submitted time schedules for compliance), and whether the violations were corrected; and
- ii. A statement from the submitting party, or its authorized agent, signed under penalty of perjury, certifying that, to the best of the signer's knowledge, the contents of the enclosed report are true, accurate and complete.

b. Monitoring Data and Reports

i. Electronic Submission via GeoTracker

All reports with monitoring data (e.g., SMRs and AMRs) shall be submitted electronically via the State Water Board's [Geotracker Database](https://geotracker.waterboards.ca.gov) (<https://geotracker.waterboards.ca.gov>). After uploading a report, the Discharger shall notify Central Valley Water Board staff via email at CentralValleyFresno@WaterBoards.ca.gov. The following information shall be included in the body of the email:

Attention:	Title 27 Unit
Report Title:	[Title of Report]
GeoTracker Upload ID:	L10009752374
Facility Name:	CWMI- Bakersfield Facility
County:	Kern County
CIWQS Place ID:	208581

ii. Data Presentation and Formatting

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. Additionally, data shall be summarized in a manner that clearly illustrates compliance/noncompliance with WDRs.

iii. Non-Detections / Reporting Limits

Unless the reporting limits (RL) are specified in the same table, non-detections and sub-RL concentrations shall be reported as "< [limit]" (e.g., "< 5 µg/L").

iv. Units

Absent specific justification, all monitoring data shall be reported in the units specified herein.

c. Compliance with SPRRs

All reports submitted under this MRP shall comply with applicable provisions of the SPRRs, including those in Section I (Standard Monitoring Specifications) and Section J (Response to Release).

d. Additional Requirements for Monitoring Reports

Every monitoring report submitted under this MRP (e.g., SMRs [§ E.1], AMRs [§ E.2]) shall include a discussion of relevant field and laboratory tests, and the results of all monitoring conducted at the site shall be reported to the Central Valley Water Board in accordance with the reporting schedule above for the calendar period in which samples were taken or observations made.

E. Record Retention Requirements

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

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

LIST OF ATTACHMENTS

Attachment A—Dissolved Inorganics (Five-Year COCs)
Attachment B—Volatile Organic Compounds, (Five-Year COCs)
Attachment C—Semi-Volatile Organic Compounds (Five-Year COCs)

ENFORCEMENT

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

ADMINISTRATIVE REVIEW

Any person aggrieved by this Central Valley 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.

ATTACHMENT A—DISSOLVED INORGANICS (FIVE-YEAR COCS)

Dissolved Inorganics List

Constituent	Analytical Method
Antimony	USEPA Method 7041
Arsenic	USEPA Method 7062
Barium	USEPA Method 6010
Cadmium	USEPA Method 7131A
Chromium	USEPA Method 6010
Copper	USEPA Method 6010
Iron	USEPA Method 6010
Lead	USEPA Method 7421
Magnesium	USEPA Method 6010
Mercury	USEPA Method 7470A
Molybdenum	USEPA Method 6010
Nickel	USEPA Method 7521
Selenium	USEPA Method 7742
Silver	USEPA Method 6010
Thallium	USEPA Method 7841
Zinc	USEPA Method 6010

ATTACHMENT B—VOLATILE ORGANIC COMPOUNDS, (FIVE-YEAR COCS)

USEPA Method 8260

Volatile Organic Compounds

Acetone

Benzene

Bromoform (Tribromomethane)

2-Butanone (MEK)

n-Butylbenzene

sec- Butylbenzene

Tert- Butylbenzene

Chlorobenzene

Dibromochloromethane (Chlorodibromomethane)

o Dichlorobenzene (1,2 Dichlorobenzene)

m Dichlorobenzene(1,3 Dichlorobenzene)

p Dichlorobenzene (1,4 Dichlorobenzene)

1,1 Dichloroethane (Ethylidene chloride)

1,2 Dichloroethane (Ethylene dichloride)

Ethylbenzene

2 Hexanone (Methyl butyl ketone)

4 Isopropyltoluene

Isopropylbenzene

4 Methyl 2 pentanone (Methyl isobutyl ketone)

Volatile Organic Compounds

Naphthalene

n-Propylbenzene

Tetrachloroethylene (Tetrachloroethene; Perchloroethylene;
PCE)

Toluene

1,2,4 Trichlorobenzene

Trichloroethylene (Trichloroethene; TCE)

1,2,4 Trimethylbenzene

1,3,5 Trimethylbenzene

m-Xylene

o-Xylene

p-Xylene

Xylene (total)

**ATTACHMENT C—SEMI-VOLATILE ORGANIC COMPOUNDS
(FIVE-YEAR COCS)**

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

Constituents

Acenaphthene

Anthracene

Benzo[a]anthracene (Benzanthracene)

Benzo[b]fluoranthene

Benzo[a]pyrene

Bis(2 ethylhexyl) phthalate

Di n butyl phthalate

Fluorene

2 Methylnaphthalene

4 Methylphenol

Pentachlorophenol

Phenanthrene

Pyrene