

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>)

MONITORING & REPORTING PROGRAM (MRP) R5-20XX-XXXX



ORDER INFORMATION

Order Type(s):	Monitoring & Reporting Program (MRP)
Status:	TENTATIVE
Program:	Title 27 Discharges to Land
Region 5 Office:	Sacramento (Rancho Cordova)
Discharger(s):	Nevada County Department of Public Works
Facility:	McCourtney Road Landfill
Address:	14741 Wolf Mountain Road, Grass Valley, California 95949
County:	Nevada County
Parcel Nos.:	25-120-12, 25-130-08, 25-130-46, 25-130- 47, 53-310-15, 53-310-17, 53-310-18, 53-310-37, 53-310-38, 530-310-39 and 53-310-40
GeoTracker ID:	L10004835054
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Prior Order(s):	R5-2014-0022; R5-2004-0022; R5-1996-0027; R5-1991- 0229; R5-1987-0189; R5-1972-0185

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 [Month] 2026.

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>

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GLOSSARY

89-90 Cell	6.3-acre Containment Cell, Landfill Unit 1
90-91 Cell	5.1-acre Containment Cell, Landfill Unit 2
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
DTW	Depth To Water
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
MRF	Materials Recovery Facility
MSW	Municipal Solid Waste
MSWLF	Municipal Solid Waste Landfill
N/A	Not Applicable
OLM	Old Landfill Mass (24.9- acre Containment Cell, Landfill Unit 1)
OP	Onsite Perimeter (Gas Probe)
PID	Photo Ionization Detector
POC	Point of Compliance for Water Quality Protection Standard
QA/QC.....	Quality Assurance/Quality Control
QCFB	Quality Control, Field Blank
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
SPG.....	Soil Pore Gas
SI.....	Surface Impoundment
SI-1.....	Surface Impoundment 1 (1.4-acres; 5.2 million gallons)
SI-2.....	Surface Impoundment 2 (0.4-acres; 1.3 million gallons)
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 the Nevada County Department of Public Works which owns and operates the McCourtney Road Landfill (Facility) in Nevada County. Additional information regarding the Facility is set forth in the enumerated findings of Waste Discharge Requirements Order R5-20XX-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

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 Specifications” in the Facility’s operative Title 27 WDRs Order (WDRs R5-2014-0022) if and until the Central Valley Water Board amends, modifies, revises, or rescinds WDRs R5-2014-0022, 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 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. Detection Monitoring Program (DMP)

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

Groundwater, unsaturated zone and surface water¹ detection monitoring networks shall be revised (as needed) with the construction of any new landfill cell or module.

1. Groundwater

¹ I.e., to the extent that surface water detection monitoring is required under this Order.

a. Required Network

The Facility's groundwater monitoring well network consists of the wells listed in **Table 1**.² As of the date of this Order, the network meets the requirements of Title 27. (Title 27, § 20415, subd. (b).)

Table 1—Groundwater Monitoring Network

Well	Program	Monitored Unit	Point of Compliance (WQPS)	Zone	Status
MW-A-1*	Corrective Action	Landfill Unit 1	No	Upper	Active
MW-A-2*	Corrective Action	Landfill Unit 1	No	Lower	Active
MW-1	Corrective Action	Landfill Unit 1	No	Upper	Piezometer Only
MW-2	Corrective Action	Landfill Unit 1	No	Upper	Active
MW-3	Detection	Landfill Unit 1; Class II SI	Yes	Upper	Active
MW-4	Corrective Action	Landfill Unit 1	No	Upper	Active
MW-4A	Corrective Action	Landfill Unit 1	No	Lower	Active
MW-5	Corrective Action	Landfill Unit 1	No	Upper	Active
MW-6	Corrective Action	Landfill Unit 1	No	Upper	Active

² Non-background monitoring wells at the Point of Compliance constitute "Monitoring Points" for purposes of the Water Quality Protection Standard (WQPS).

Well	Program	Monitored Unit	Point of Compliance (WQPS)	Zone	Status
MW-6A	Corrective Action	Landfill Unit 1	No	Lower	Active
MW-7	Abandoned	N/A	No	N/A	Abandoned
MW-8	Abandoned	N/A	No	N/A	Abandoned
MW-9	Detection	Landfill Unit 1	Yes	Upper	Active
MW-10	Abandoned	N/A	No	N/A	Abandoned
MW-11	Detection	Landfill Unit 1	Yes	Upper	Active
MW-12	Abandoned	N/A	No	N/A	Abandoned
MW-13	Corrective Action	Landfill Unit 1	No	Upper	Active
MW-14	Corrective Action	Landfill Unit 1	No	Upper	Active
MW-15	Blind field blank	N/A	No	N/A	Active
MW-16	Corrective Action	Landfill Unit 1	No	Upper	Active
MW-17	Corrective Action	Landfill Unit 1	No	Upper	Active
MW-18	Corrective Action	Landfill Unit 2	No	Upper	Piezometer Only
MW-19	Background	Landfill Unit 1	No	Upper	Active
MW-20A	Corrective Action	Landfill Unit 1	No	Lower	Active
MW-20B	Corrective Action	Landfill Unit 1	No	Upper	Active

Well	Program	Monitored Unit	Point of Compliance (WQPS)	Zone	Status
MW-21	Designated blind field blank (QCFB)	N/A	No	N/A	Active
MW-22	Corrective Action	Landfill Unit 1	No	Lower	Active
MW-23	Corrective Action	Landfill Unit 1	Yes	Lower	Active
MW-24	Corrective Action	Landfill Unit 1	Yes	Upper	Active
MW-25	Corrective Action	Landfill Unit 1	Yes	Upper	Active
MW-26	Corrective Action	Landfill Unit 1, Unit 2	No	Lower	Active
PW-1	Corrective Action	90/91 Cell dewatering well	No	Upper	Active
DW-1	Corrective Action	Landfill Unit 2	No	Upper	Active
DW-2	Background	Landfill Unit 1, Unit 2	Background	Lower	Active
PZ-100	DTW	Landfill Unit 2	LFG Monitoring	Upper	Active
PZ-101	DTW	Landfill Unit 2	LFG Monitoring	Upper	Active
PZ-102	DTW	Landfill Unit 2	LFG Monitoring	Upper	Active

Well	Program	Monitored Unit	Point of Compliance (WQPS)	Zone	Status
PZ-103	DTW	Landfill Unit 1	No	Lower	Not Reliable
PZ-104	DTW	Landfill Unit 1, Unit 2	No	Lower	Active
PZ-105	Corrective Action / DTW	Landfill Unit 2	LFG Monitoring	Upper	Active
PZ-106	DTW	Landfill Unit 1	No	Upper	Converted to MW-14
PZ-107	DTW	Background	Background	Upper	Active
PZ-108	DTW	Landfill Unit 1	No	Upper	Converted to MW-13
PZ-109	DTW	Landfill Unit 1	No	Upper	Active
PZ-110	DTW	Landfill Unit 2	No	Upper	Active
PZ-111	DTW	Background	No	Upper	Active
PZ-112	DTW	Landfill Unit 2	No	Upper	Active
PZ-113	DTW	Landfill Unit 2	LFG Monitoring	Upper	Active
PZ-114	DTW	Landfill Unit 1	No	--	Inoperable
PZ-115	DTW	Landfill Unit 2	No	Upper	Active
PZ-116	DTW	Landfill Unit 1	LFG Monitoring	Lower	Active, Duplicate for PZ-103

See Glossary for definitions of terms and abbreviations in table.

* MW-A is a dual nested well with the completions designated "MW-A-1" and "MW-A-2."

b. Sample Collection and Analysis

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

Table 2—Groundwater Detection Monitoring, Physical Parameters

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

See Glossary for definitions of terms and abbreviations in table.

Table 3—Groundwater Detection Monitoring, Constituent Parameters

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
TDS	TDS	mg/L	Semiannually	Semiannually
Chloride	CL	mg/L	Semiannually	Semiannually
Carbonate	CACO3	mg/L	Semiannually	Semiannually
Bicarbonate	BICACO3	mg/L	Semiannually	Semiannually
Sulfate	SO4	mg/L	Semiannually	Semiannually
Calcium	CA	mg/L	Semiannually	Semiannually
Nitrate as Nitrogen	NO3N	mg/L	Semiannually	Semiannually
Magnesium	MG	mg/L	Semiannually	Semiannually

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Potassium	K	mg/L	Semiannually	Semiannually
Sodium	NA	mg/L	Semiannually	Semiannually
Short List VOCs (Attachment A)	(various)	µg/L	Every 5 Years	Every 5 Years
1,2,3-Trichloropropane per Method SRL-524M-TCP	TCPR123	µg/L	Every 5 Years	Every 5 Years

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 2021 and shall be analyzed again in 2026. (Title 27, § 20420, subd. (g).)

Table 4—Groundwater Detection Monitoring, Five-Year COCs

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

See Glossary for definitions of terms and abbreviations in table.

d. Groundwater Conditions

Each quarter, the Discharger shall monitor the Groundwater Conditions specified in **Table 5**, with the results of such monitoring being reported semiannually per **Section E.1.**³ (Title 27, § 20415, subd. (b)(1).)

Table 5—Groundwater Detection Monitoring, Groundwater Conditions

Groundwater Condition	GeoTracker Code	Monitoring Freq.	Reporting Freq.
Elevation (Well-Specific)	ELEV	Quarterly	Semiannually
Gradient	(none)	Quarterly	Semiannually
Flow Rate	(none)	Quarterly	Semiannually

2. Unsaturated Zone

a. Required Network

The Facility's unsaturated zone monitoring network consists of the lysimeter and landfill gas (LFG) monitoring points specified in **Table 6** and piezometer monitoring points specified in **Table 1**. As of the date of this Order, the network meets the requirements of Title 27. (Title 27, § 20415, subd. (d).)

Table 6—Unsaturated Zone Monitoring Network

Monitoring Point ¹	Program	Monitored Unit	Status
LV-1	Corrective Action	89-90 Cell	Active

³ 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).)

Monitoring Point ¹	Program	Monitored Unit	Status
LV-2	Corrective Action	89-90 Cell	Non-Functional
LV-3	Corrective Action	89-90 Cell	Non-Functional
LV-4	Corrective Action	89-90 Cell	Non-Functional
LY-1	Corrective Action	OLM	Active
LY-2	Corrective Action	OLM	Non-Functional
LY-3	Corrective Action	Landfill Unit 2	Active
LY-4	Corrective Action	OLM	Active

See Glossary for definitions of terms and abbreviations in table.

1. LY-2 Non-functioning beginning in 2003.

b. Soil Pore Gas (SPG) Monitoring

Soil Pore Gas (SPG) for each Landfill Waste Management Unit, listed in **Table 1**, shall be monitored for Methane and Method TO-15 VOCs⁴ in accordance with **Table 7**, provided that samples may be prescreened to determine if such analyses will be required.⁵ (Title 27, § 20420, subds. (e)-(f).)

⁴ Volatile Organic Compounds associated with USEPA Method TO-15.

⁵ A gas analyzer for methane concentrations or a Photo Ionization Detector (PID) for total VOCs concentrations may be used. If methane concentrations exceed 1 percent by volume OR organic vapors (total VOCs) exceed 1 ppm, a gas sample shall be obtained and analyzed for VOCs using Method TO-15. Both the screening results and lab analysis results shall be reported. Otherwise, the methane or total VOC screening results shall be reported, and no further lab analysis will be required.

**Table 7—Unsaturated Zone Detection Monitoring (Soil Pore Gas),
Constituent Parameters**

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Method TO-15 VOCs	(various)	µg/cm ³	Semiannually	Semiannually
Methane	CH4	%	Semiannually	Semiannually

See Glossary for definitions of terms and abbreviations in table.

c. Monthly Lysimeter Inspection

For each landfill Waste Management Unit listed in **Table 1**, the lysimeters shall be inspected monthly for the presence of liquid, which shall then be analyzed for the Monitoring Parameters in **Table 8** (Physical Parameters) and **Table 9** (Constituent Parameters). (Title 27, § 20420, subds. (e)-(f).) If liquid is detected in a previously dry lysimeter, the Discharger shall notify Central Valley Water Board staff within seven days of the detection.

**Table 8—Unsaturated Zone Detection Monitoring (Lysimeters),
Physical Parameters**

Physical Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Electrical Conductivity	SC	µmhos/cm	Semiannually	Semiannually
pH	PH	pH Units	Semiannually	Semiannually
Volume of Removed Liquid	(none)	Gallons	Semiannually	Semiannually

See Glossary for definitions of terms and abbreviations in table.

**Table 9—Unsaturated Zone Detection Monitoring (Lysimeters),
Constituent Parameters**

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
TDS	TDS	mg/L	Semiannually	Semiannually
Chloride	CL	mg/L	Semiannually	Semiannually
Carbonate	CACO3	mg/L	Semiannually	Semiannually
Bicarbonate	BICACO3	mg/L	Semiannually	Semiannually
Sulfate	SO4	mg/L	Semiannually	Semiannually
Calcium	CA	mg/L	Semiannually	Semiannually
Magnesium	MG	mg/L	Semiannually	Semiannually
Potassium	K	mg/L	Semiannually	Semiannually
Sodium	NA	mg/L	Semiannually	Semiannually
Short List VOCs (Attachment A)	(various)	µg/L	Semiannually	Semiannually
1,2,3-Trichloropropane per Method SRL-524M-TCP	TCPR123	µg/L	Every 5 Years	Every 5 Years

See Glossary for definitions of terms and abbreviations in table.

d. Five-Year COCs

For each landfill Waste Management Unit listed in **Table 1**, every five years, liquid from each lysimeter shall be analyzed for the Five-Year COCs listed below in **Table 10**. Five-Year COCs were last monitored in 2021 and shall be analyzed again in 2026. (Title 27, § 20420, subd. (g).)

**Table 10—Unsaturated Zone Detection Monitoring (Lysimeter),
Five-Year COCs**

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

See Glossary for definitions of terms and abbreviations in table.

3. Surface Water

Runoff from the Facility is collected in one or more sedimentation basins, which periodically discharge to either of two (2) ephemeral streams, both of which flow to French Ravine, which may be affected by a release. (See Title 27, § 20415, subd. (c)(1).)

a. Required Network

The Facility's surface water monitoring network consists of the monitoring points listed in **Table 11**. As of the date of this Order, the network meets the requirements of Title 27. (See § 20415, subd. (c).)

Table 11—Surface Water Detection Monitoring Network

Monitoring Point	Function	Monitored Unit
SW-101	Detection	East Sedimentation Basin (SB-E)
SW-102	Detection	South Sedimentation Basin 2 (SB-S2)
SW-103	Detection	North Sedimentation Basin (SB-N)
SW-104	Background	Northwest
SW-105	Background	Southeast
SW-106	Filed Blank	n/a

See Glossary for definitions of terms and abbreviations in table.

b. Sample Collection and Analysis

When surface water is present at monitoring points in **Table 11** at any point during the monitoring period, samples shall be collected from each monitoring point and analyzed for the Monitoring Parameters in **Table 12** (Physical Parameters) and **Table 13** (Constituent Parameters), in accordance with the specified schedule. (Title 27, § 20420, subds. (e)-(f).)

Table 12—Surface Water Detection Monitoring, Physical Parameters

Physical Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Electrical Conductivity	SC	µmhos/cm	Semiannually	Semiannually
Temperature	TEMP	°F	Semiannually	Semiannually
pH	PH	Std. Units	Semiannually	Semiannually
Turbidity	TURB	NTUs	Semiannually	Semiannually

See Glossary for definitions of terms and abbreviations in table.

Table 13—Surface Water Detection Monitoring, Constituent Parameters

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
TDS	TDS	mg/L	Semiannually	Semiannually
Chloride	CL	mg/L	Semiannually	Semiannually
Nitrate as Nitrogen	NO3N	mg/L	Semiannually	Semiannually
Sulfate	SO4	mg/L	Semiannually	Semiannually
Short List VOCs (Attachment A)	(various)	µg/L	Every 5 Years	Every 5 Years
1,2,3-Trichloropropane per Method SRL-524M-TCP	TCPR123	µg/L	Every 5 Years	Every 5 Years

See Glossary for definitions of terms and abbreviations in table.

c. Five-Year COCs

The Discharger shall analyze surface water samples for the Five-Year COCs listed in **Table 14** Five-Year COCs were last monitored in 2021 and shall be analyzed again in 2026. (Title 27, § 20420, subd. (g).)

Table 14—Surface Water Detection Monitoring, Five-Year COCs

Five-Year Constituent	GeoTracker Code	Units	Sampling & Reporting Freq.
Total Organic Carbon	TOC	mg/L	Every 5 Years
Dissolved Inorganics (Attachment B)	(various)	µg/L	Every 5 Years
Extended List VOCs (Attachment C)	(various)	µg/L	Every 5 Years
Semi-Volatile Organic Compounds (Attachment D)	(various)	µg/L	Every 5 Years

Five-Year Constituent	GeoTracker Code	Units	Sampling & Reporting Freq.
Chlorophenoxy Herbicides (Attachment E)	(various)	µg/L	Every 5 Years
Organophosphorus Compounds (Attachment F)	(various)	µg/L	Every 5 Years

See Glossary for definitions of terms and abbreviations in table.

4. Liquids Discharge Monitoring

The Discharger shall monitor the volume and flow of all liquid wastes discharged at the Facility, including, but not necessarily limited to, landfill subdrain liquid, groundwater from de-watering wells, impacted groundwater, LFG condensate, septage and chemical toilet waste, contact storm water, and MRF/transfer station washwater including at the monitoring points identified in **Table 15** according to the schedule in **Table 16**. The Discharger shall monitor liquid wastes at PS-1, PS-2, and PS-3 for the parameters in **Table 2** and the constituents in **Table 3**. If initial data or other evidence indicate additional sampling is necessary to understand landfill impacts, the Discharger may be required to monitoring points identified in **Table 15** for the parameters in **Table 2** and the constituents in **Table 3**.

Table 15—Liquid Discharge Monitoring Points

Monitoring Point	Source	Waste Type
PS-1	Toe Buttress Drain	Leachate, Groundwater
PS-1	OLM interceptor trenches, 89-90 Cell LCRS	Leachate, LFG Condensate
PS-1	PS-1	Leachate, groundwater & LFG condensate
PS-2	90-91 Cell LCRS	Leachate1
PS-3	90-91 Cell Interceptor Trench and LFG condensate line	Leachate, LFG Condensate

Monitoring Point	Source	Waste Type
PS-4	MRF / Transfer Station Former Public Receiving Area	Washwater
PS-5	MRF / Transfer Station Public Receiving Area	Washwater
90-91 Cell Subdrain Sump	90-91 Cell Subdrain	Groundwater
Septage Vault	Facility Buildings	Septage and chemical toilet waste
Central Manhole	Various	Various
Leachate Tank Farm	Landfill Unit 1; Landfill Unit 2; Septage, Transfer Station Washwater	Leachate / Wastewater

See Glossary for definitions of terms and abbreviations in table.

Table 16—Liquid Discharge Monitoring Point Schedule

Monitoring Point	Units	Sampling & Reporting Freq.
Liquid Type	---	Monthly
Discharge Location	---	Monthly
Quantity Discharged	Gallons	Monthly
Average Flow Rate	Gallons per day	Monthly

See Glossary for definitions of terms and abbreviations in table.

5. 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, i.e., the Detection Monitoring Program (DMP). (See Title 27, § 20390, subd. (a).) 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 B** (Detection Monitoring Program)—specifically **Table 1** (Groundwater), **Table 6** (Unsaturated Zone) and **Table 11** (Surface Water).

c. Background

A Background Monitoring Point is a well, device, or location specified in the waste discharge requirements at which monitoring for background water quality or background soil quality is conducted (Title 27 § 20164). Title 27 requires a sufficient number of background monitoring points installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer that represent the quality of groundwater that has not been affected by a release from the WMU.

The groundwater monitoring system may include background monitoring points that are not hydraulically upgradient of a WMU if the Discharger demonstrates to the satisfaction of the Central Valley Water Board that sampling at other background monitoring points will provide samples that are representative of the background quality of groundwater or are more representative than

those provided by the upgradient background monitoring points (Title 27, § 20415(b)(2)).

d. 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).) The Facility's POC monitoring wells are listed above in **Table 1**.

e. 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.)

f. Monitoring Parameters

Monitoring Parameters are a predetermined set of COCs and 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:

- i. For **Groundwater**, those in **Table 2** and **Table 3**; and
- ii. For the Unsaturated Zone, those in **Table 7**, **Table 8** and **Table 9**;
- iii. For **Surface Water**, those in **Table 12** and **Table 13**

g. 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).) Analytical results for Five-Year COCs were last submitted to the Central Valley Water Board as part of the 2021 Annual Monitoring Report and are due again in 2026. For the purposes of this MRP, the Five-Year COCs are listed in:

- i. **Attachment B** (*Dissolved Inorganics*);
- ii. **Attachment C** (*Extended List VOCs*);
- iii. **Attachment D** (*Semi-Volatile Organic Compounds*);
- iv. **Attachment E** (*Chlorophenoxy Herbicides*);
- v. **Attachment F** (*Organophosphorus Compounds*); and
- vi. Any other COCs listed in **Table 4** (*Groundwater*), **Table 10** (*Unsaturated Zone*), and **Table 14** (*Surface Water*).

h. 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 20415.⁶ (Title 27, § 20400, subds. (a), (b).) Methods for calculating Concentration Limits were proposed in *Water Quality Protection Standard (WQPS) Report* dated 31 July 2014 (WQPS Report). The groundwater concentration limits for non-statistical constituents of concern (e.g., VOCs) shall be non-detect.

The groundwater concentration limits for statistical constituents of concern (e.g., inorganic constituents), the approved methods rely on the Discharger’s use of statistical modeling software known as “DUMPStat®.” Analyses of detection monitoring parameters are calculated by either a parametric or non-parametric basis, depending on the specific characteristics of each background data set. The Discharger updates the analyses for each monitoring event, provided new background data are available.

Using first semester 2014 data from MW-3, MW-9, MW-11, and 2015 data from MW-26 the Discharger performed both interwell analysis and intrawell analysis with respect to background groundwater conditions and demonstrated that due to the

⁶ 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.

complexity of the hydrogeologic system and apparent natural spatial variability in water quality conditions, intrawell analysis is representative of background conditions.

The concentration limits for statistical constituents of concern (e.g., inorganics) shall be determined based on an intrawell monitoring procedure.

The concentration limits for corrective action monitoring shall be the same as those for detection monitoring absent approval of a proposal for concentration limits greater than background (CLGBs) under Title 27 Section 20400(c) and revision of the WDRs. An intrawell statistical procedure (e.g., the Sens Slope Method) shall be used for trend analysis to monitor corrective action progress.

Concentration limits for naturally occurring constituents in the unsaturated zone shall be developed based on a representative background lysimeter (e.g., sufficiently far from the unit so as not to be affected by a release from it) at each Landfill Waste Management Unit listed in **Table 1** or, where applicable, historical data predating the placement of waste in the unit.

Concentration limits for naturally occurring constituents in surface water shall be developed based on a representative background monitoring point upstream of the Facility.

Concentration Limits shall be proposed and/or updated by the Discharger every two years, in the First Semi-Annual period Monitoring Report (due August 1 of each monitoring year) submitted per **Section E.2** here. As of the date of this Order, Concentration Limits were last updated in the First Semi-Annual 2025 monitoring report (August 1, 2025) and shall be updated again as part of the First Semi-Annual 2027 monitoring report (August 1, 2027), and again every two years thereafter.

Unless expressly rejected by the Executive Officer in writing, the updated Concentration Limits shall be incorporated as part of this Order. Several notable Concentration Limits, described in the First

Semi-Annual 2025 monitoring report are set forth below in **Table 17.**⁷

If the Discharger fails to submit periodically updated concentration limits, as provided in this Order, the existing concentration limits shall remain operative, provided that, where appropriate, the Executive Officer may revert to lower concentrations where warranted based on existing monitoring data.

Table 17—Notable Groundwater Concentration Limits, First Semi-Annual 2025 Report (WQPS)

Well	Analysis	Bicarbonate Alkalinity (mg/L)	Chloride (mg/L)	Nitrate as N (mg/L)	Sulfate (mg/L)	TDS (mg/L)
MW-3	Intrawell	234	6.5	1.9	22	257
MW-9	Intrawell	136	7.2	0.3	4.5	300
MW-11	Intrawell	194	7.5	0.4	8.2	229
MW-26	Intrawell	738	137	0.9	191	1,147

See Glossary for definitions of terms and abbreviations in table.

i. 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:

- vii. **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
- viii. **Statistical Retesting Procedures (SPRRs, § I.46)** for analytes detected in at least 10 percent of background samples (e.g., naturally occurring COCs).

C. Corrective Action Monitoring Program (CAMP)

⁷ The Concentration Limits set forth in **Table 17** is only a partial list of values that are provided for general informational purposes only. These limits shall be superseded once updated values are submitted as described herein.

The Facility corrective action plan (CAP) includes past final closure of the landfill units and ongoing LFG extraction pursuant to the operative Facility CAP and additional corrective action measures pursuant to Final Corrective Action Work Plan, McCourtney Road Landfill (7 August 2017), Addendum to Final Corrective Action Work Plan (12 February 2018), March 2018 Evaluation of Groundwater Separation (19 April 2018); and Corrective Action Measures Effectiveness Report (22 May 2019), including the following:

- Installation of additional landfill gas (LFG) extraction wells;
- Replacement of existing LFG wellheads; and
- Balancing and maintenance of the LFG extraction system;
- More frequent LFG probe monitoring;
- Evaluation of Landfill Unit 2 groundwater separation and subdrain improvements; and
- More frequent groundwater monitoring at wells MW-26 and PZ-102 for a limited period (October 2018 – March 2019).

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, section 20430.

1. Groundwater Corrective Action

In addition to parameters in **Table 2** (Physical Parameters) and **Table 3** (Constituent Parameters), corrective action monitoring wells shall be sampled as specified in **Table 18**.

**Table 18—Groundwater Corrective Action Monitoring,
Additional Constituent Parameters**

Well	Additional Constituents	Sampling Freq.
MW-A-1	Short List VOCs (Attachment A)	Semiannually
MW-A-2	Short List VOCs (Attachment A)	Semiannually

Well	Additional Constituents	Sampling Freq.
MW-4	Short List VOCs (Attachment A)	Semiannually
MW-4A	Short List VOCs (Attachment A)	Semiannually
MW-16	Short List VOCs (Attachment A)	Semiannually
MW-20A	Short List VOCs (Attachment A)	Semiannually
PZ-105	Short List VOCs (Attachment A)	Semiannually
DW-1	Short List VOCs (Attachment A)	Semiannually
MW-26	Short List VOCs (Attachment A)	Semiannually

See Glossary for definitions of terms and abbreviations in table.

2. Groundwater Separation Extraction / Monitoring

The Landfill Unit 2 subdrain system is beneath the lined portion of Landfill Unit 2 and is intended to intercept groundwater that encroaches beneath Landfill Unit 2. The subdrain system consists of a seven-foot deep subdrain trench installed along the southern toe of the unit. Construction records indicate that the subdrain has a two-percent minimum slope and contains a six-inch diameter, perforated, HDPE collection pipe encased in drain rock. The subdrain system drains to a collection sump below the southeastern end of Landfill Unit 2. When groundwater elevations in piezometers surrounding Landfill Unit 2 exceed the maximum stipulated elevation, a “high-water event” is recorded and dewatering well PW-1 is activated to maintain a 5-foot separation beneath Landfill Unit 2 waste and groundwater.

The Discharger installed a dedicated pump in the Landfill Unit 2 subdrain sump during the second semester of 2018. The pump is equipped with an automatic liquid level sensor (pressure transducer) that is programmed to

record water levels when present in the sump) and automatically activates the pump. The pump is plumbed to discharge to Pump Station 2 (PS-2) and flow measurements are relayed to a control box at PS-2.

Groundwater extracted from PW-1 shall be monitored for parameters in in **Table 2** (Field Parameters) and the additional parameters specified in **Table 19**.

Table 19—Groundwater Separation / Extraction Monitoring, Landfill Unit 2

Parameter	Units	Sampling Freq.
Depth To Water	Feet	Monthly
Groundwater Elevation	Feet, msl	Monthly
“High Water Level Event”	Date	Per Occurrence
Volume Pumped	Gallons	Monthly
Discharge Location	---	Per Occurrence

See Glossary for definitions of terms and abbreviations in table.

3. LFG Extraction Well System

The Facility’s landfill gas (LFG) corrective action system was installed in 2004 and includes 32 extraction wells summarized in **Table 20**, a closed pipe collection network, and a Triton GF-400 flare. For Landfill Unit 1, the main header is an 8-inch diameter HDPE with 4-inch diameter laterals that reduce to 2-inch diameter at the HDPE flange adapter just before each extraction well. For Landfill Unit 2, the diameters are similar with the exception of the 6-inch diameter main header. The system includes seven isolation butterfly valves throughout the network.

Table 20—Groundwater Corrective Action, Extraction Well Network

Well	Monitored Units
EW-1	90-91 Cell
EW-2	90-91 Cell

Well	Monitored Units
EW-2A	90-91 Cell
EW-3	90-91 Cell
EW-4	OLM
EW-5	OLM
EW-6	OLM
EW-7	OLM
EW-8	OLM
EW-9	OLM
EW-10	OLM
EW-11	OLM
EW-12	OLM
EW-13	OLM
EW-13A	OLM
EW-14	OLM
EW-15	OLM
EW-16	OLM
EW-17	OLM
EW-18	OLM
EW-19	OLM
EW-20	OLM
EW-21	OLM
EW-22	OLM

Well	Monitored Units
EW-23	OLM
EW-24	OLM
EW-25	89-90 Cell
EW-26	89-90 Cell
EW-27	89-90 Cell
EW-28	OLM
PS-2 Riser	90-91 Cell
PVC17	OLM

See Glossary for definitions of terms and abbreviations in table.

The Discharger shall log all system shutdowns (including causes and stop/start dates), monthly downtime and monthly runtime. All shutdowns, regardless of the type of restart, shall be recorded. This information shall be reported semiannually per **Section E.1**. Additionally, system performance shall be monitored in accordance with **Table 21**.

Table 21—Landfill Gas Corrective Action Monitoring, Control System Performance

Parameter	Units	Sampling Freq.	Reporting Freq.
Control System Runtime	Hours	N/A	Semiannually
Control System Downtime	Hours	N/A	Semiannually
Temperature into Plant	°F	Monthly	Semiannually
Flare Combustion Temperature	°F	Monthly	Semiannually
System Vacuum	mm Hg vacuum	Monthly	Semiannually
Totalized Flow into Plant	ft ³	Monthly	Semiannually

Parameter	Units	Sampling Freq.	Reporting Freq.
Totalized Flow Rate into Plant	ft ³ / min	Monthly	Semiannually
VOCs per USEPA Method TO-15 in Influent	µg / cm	Quarterly	Semiannually
Methane in Influent	%	Monthly	Semiannually
Extraction Rate	Cu ft/min	Monthly	Semiannually
Total VOCs Removed, Annually	Lbs/yr	Annually	Annually
Total Cumulative VOCs Removed	Lbs	Annually	Annually

See Glossary for definitions of terms and abbreviations in table.

a. LFG Monitoring Network

The Facility's LFG monitoring well/piezometer listed in **Table 20** are already included as groundwater corrective action monitoring points, and do not require separate constituent monitoring under this Section. However, the Discharger shall monitor each LFG monitoring well/piezometer listed in **Table 22** for the parameters listed in **Table 23**.

Table 22—Landfill Gas Corrective Action Monitoring Network

Monitoring Device	Monitored Unit	Device Type
PZ-100	Landfill Unit 2	Piezometer
PZ-101	Landfill Unit 2	Piezometer
PZ-102	Landfill Unit 2	Piezometer
PZ-105	Landfill Unit 1, Landfill Unit 2	Piezometer
PZ-113	Landfill Unit 2	Piezometer
PZ-116	Landfill Unit 2	Piezometer

Table 23—Landfill Gas Corrective Action, Extraction Well Network Monitoring Parameters

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

See Glossary for definitions of terms and abbreviations in table.

b. Probe Network

The Facility's network of LFG probes, installed to address a release to the unsaturated zone and/or groundwater, is set forth in **Table 24**. These probes shall be monitored in accordance with the Monitoring Parameters in **Table 25**.

Table 24—Landfill Gas Corrective Action, Probe Network

Monitoring Point	Modules Addressed	Device Type
OP-1	Landfill Unit 2	Gas Well / Probe
OP-2	Landfill Unit 2	Gas Well / Probe
OP-3	Landfill Unit 2	Gas Well / Probe

Monitoring Point	Modules Addressed	Device Type
OP-4	Landfill Unit 1, Landfill Unit 2	Gas Well / Probe
OP-5	Landfill Unit 1	Gas Well / Probe
OP-6	Landfill Unit 1	Gas Well / Probe
OP-7	Landfill Unit 1	Gas Well / Probe
OP-8	Landfill Unit 1	Gas Well / Probe
OP-9	Landfill Unit 1	Gas Well / Probe
OP-10	Landfill Unit 1	Gas Well / Probe
OP-11	Landfill Unit 1	Gas Well / Probe
OP-12	Landfill Unit 1	Gas Well / Probe
P-1	Site Perimeter	Gas Well / Probe
P-2	Site Perimeter	Gas Well / Probe
P-3	Site Perimeter	Gas Well / Probe
P-4	Site Perimeter	Gas Well / Probe
P-5	Site Perimeter	Gas Well / Probe
P-6	Site Perimeter	Gas Well / Probe
P-7	Site Perimeter	Gas Well / Probe
P-8	Site Perimeter	Gas Well / Probe
P-9	Site Perimeter	Gas Well / Probe
P-10	Site Perimeter	Gas Well / Probe
P-11	Site Perimeter	Gas Well / Probe
P-12	Site Perimeter	Gas Well / Probe

**Table 25—Landfill Gas Corrective Action, Probe Network
Monitoring Parameters**

Parameter	Units	Sampling Freq.	Reporting Freq.
Atmospheric Temperature	°F	Semiannually	Semiannually
Atmospheric Pressure	Inches Hg	Semiannually	Semiannually
Methane	%	Semiannually	Semiannually
Carbon Dioxide	%	Semiannually	Semiannually
Oxygen	%	Semiannually	Semiannually
Remainder Gas	%	Semiannually	Semiannually
Probe Pressure / Vacuum	Inches Hg	Semiannually	Semiannually
Volatile Organic Compounds per USEPA Method TO-15 ¹	ug/m ³	Semiannually	Semiannually

See Glossary for definitions of terms and abbreviations in table.

¹ If organic vapors are detected by field analysis above 50 parts per million by volume (ppmv) using a photoionization detector, a sample is obtained and analyzed for speciated VOCs using EPA Method TO-15.

D. 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 LCRS Testing

All Leachate Collection and Removal Systems (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).) annual LCRS Testing is not required for surface impoundments SI-1 and SI-2.

b. Monthly Sump Inspection

All landfill WMU LCRS sumps shall be inspected monthly for the presence of leachate. As provided in **Table 26**, the total flow and flow rate for leachate in each sump shall be recorded after each inspection and reported semiannually per **Section E.1**.

Table 26—LCRS Sump Monitoring, Monthly Inspection Parameters

Physical Parameter	Units	Sampling Freq.	Reporting Freq.
Total Flow	Gallons	Monthly	Semiannually
Flow Rate	Gallons/Day	Monthly	Semiannually

See Glossary for definitions of terms and abbreviations in table.

c. First Detection of Leachate in Sump

Upon detecting leachate in a previously dry sump, the Discharger shall notify Central Valley Water Board staff within seven days, and immediately sample and analyze leachate for the parameters in **Table 27**.⁸ Thereafter, whenever leachate is present in the same sump, the leachate shall be sampled and analyzed for the same parameters, and in accordance with the specified sampling and reporting schedule in **Table 27**.

⁸ The sampling and reporting schedules in **Table 27** are applicable for subsequent monitoring only. When notifying Central Valley Water Board staff of the first detection of leachate, the Discharger shall indicate when laboratory results are expected to be available.

**Table 27—LCRS Sump Monitoring, Parameters for
Subsequent Monitoring**

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Electrical Conductivity	SC	µmhos/cm	Semiannually	Semiannually
pH	PH	pH Units	Semiannually	Semiannually
TDS	TDS	mg/L	Semiannually	Semiannually
Chloride	CL	mg/L	Semiannually	Semiannually
Carbonate	CACO3	mg/L	Semiannually	Semiannually
Bicarbonate	BICACO3	mg/L	Semiannually	Semiannually
Nitrate (as Nitrogen)	NO3N	mg/L	Semiannually	Semiannually
Sulfate	SO4	mg/L	Semiannually	Semiannually
Calcium	CA	mg/L	Semiannually	Semiannually
Magnesium	MG	mg/L	Semiannually	Semiannually
Potassium	K	mg/L	Semiannually	Semiannually
Sodium	NA	mg/L	Semiannually	Semiannually
Short List VOCs (Attachment A)	(various)	µg/L	Semiannually	Semiannually
Dissolved Inorganics (Attachment B)	(various)	µg/L	Semiannually	Semiannually
1,2,3-Trichloropropane per Method SRL-524M-TCP	TCPR123	µg/L	Every 5 Years	Every 5 Years

See Glossary for definitions of terms and abbreviations in table.

d. Five-Year COCs

At least once every five years, the Discharger shall sample and analyze any leachate present in the sump for the Five-Year COCs listed in **Table 28**. Five-Year COCs were last monitored in 2021, and shall be analyzed again in 2026.

Table 28—LCRS Sump Monitoring, Five-Year COCs

Parameter	GeoTracker Code	Units	Sampling & Reporting Freq.
Total Organic Carbon	TOC	mg/L	Every 5 Years
Dissolved Inorganics (Attachment B)	(various)	µg/L	Every 5 Years
Extended List VOCs (Attachment C)	(various)	µg/L	Every 5 Years
Semi-Volatile Organic Compounds (Attachment D)	(various)	µg/L	Every 5 Years
Chlorophenoxy Herbicides (Attachment E)	(various)	µg/L	Every 5 Years
Organophosphorus Compounds (Attachment F)	(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 Monitoring Parameters in **Table 29** (Physical Parameters) and **Table 30** (Constituent Parameters). See **Section E.3** 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 29—Leachate Seep Monitoring, Physical Parameters

Physical Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Total Flow	(none)	Gallons	Upon Detection	See MRP, § E.3
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 30—Leachate Seep Monitoring, Constituent Parameters

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
TDS	TDS	mg/L	Upon Detection	See MRP, § E.3
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)
Calcium	CA	mg/L	(same)	(same)
Magnesium	MG	mg/L	(same)	(same)
Potassium	K	mg/L	(same)	(same)
Sodium	NA	mg/L	(same)	(same)
Short List VOCs (Attachment A)	(various)	µg/L	(same)	(same)

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
1,2,3-Trichloropropane per Method SRL-524M-TCP	TCPR123	µg/L	(same)	(same)

See Glossary for definitions of terms and abbreviations in table.

3. Leachate Tank Farm

The Discharger shall inspect the Leachate Tank Farm weekly in the wet season (**1 Oct. to 30 April**) and at least monthly during the dry season (**1 May to 30 Sept.**) for volume of liquid stored, remaining capacity, evidence of leaks, spills, damage, or other maintenance needs. The inspection shall include observation and documentation of the condition of each leachate tank, equipment, piping, pumps, secondary containment, basins, diked areas, valves, transfer areas, and spill response equipment.

Spills, or evidence of a spill, shall be considered and managed as leachate. Upon detection of a spill, the liquid shall be sampled and analyzed for the Monitoring Parameters in **Table 29** (Physical Parameters) and **Table 30** (Constituent Parameters). See **Section E.3** for Reporting Requirements. In the event of a spill from the Leachate Tank Farm, Central Valley Water Board staff may direct additional sampling and analysis pursuant to Water Code section 13267, subdivision (b)(1).

4. Regular Visual Inspection

The Discharger shall perform regular visual inspections at the Facility in accordance with **Table 31** (Criteria) and **Table 32** (Schedule). Results of these regular visual inspections shall be included in Semiannual Monitoring Reports per **Section E.1**.

Table 31—Criteria for Regular Visual Inspections

Category	Criteria
Within Unit	- Evidence of ponded water at any point on unit outside of any contact storm water/leachate diversions structures. - Evidence of erosion and/or of day-lighted refuse.

Category	Criteria
Unit Perimeter	• 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	• 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.

Table 32—Regular Visual Inspection Schedule

Category	Wet Season (1 Oct. to 30 April)	Dry Season (1 May to 30 Sept.)
Active Units	Weekly	Monthly
Inactive or Closed Units	Monthly	Quarterly

5. 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. See **Section E.4** for Reporting Requirements.

6. Major Storm Events

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

areas before and after repairs. See **Section E.5** for Reporting Requirements.

7. Five-Year Iso-Settlement Surveys (Closed Landfills)

Every five years, the Discharger shall conduct an iso-settlement survey of each closed landfill unit and produce an iso-settlement map accurately depicting the estimated total change in elevation of each portion of the final cover's low-hydraulic-conductivity layer. For each portion of the landfill, this map shall show the total lowering of the surface elevation of the final cover, relative to the baseline topographic map. (Title 27, § 21090, subd. (e)(1)-(2).) See **Section E.6** for Reporting Requirements.

E. Reporting Requirements

Table 33—Summary of Required Reports

Section	Report	Deadline
§ E.1	Semiannual Monitoring Reports (SMRs)	1 August (1 January to 30 June) 1 February (1 July to 31 December)
§ E.2	Annual Monitoring Reports (AMRs)	1 February
§ E.3	Leachate Seep Reporting	Immediately upon Discovery of Seepage (<i>staff notification</i>) Within 7 Days (<i>written report</i>)
§ E.4	Annual Facility Inspection Reports	15 November
§ E.5	Major Storm Reporting	Immediately after Damage Discovery (<i>staff notification</i>) Within 14 Days of Completing Repairs (<i>written report, photos</i>)

Section	Report	Deadline
§ E.6	Survey and Iso-Settlement Mapping	Every Five Years (Next Due in 2026)
§ E.7	Financial Assurances Reports	1 June
§ E.8	Water Quality Protection Standard Reports	Proposed Revisions (excluding Concentration Limits)

1. Semiannual Monitoring Reports (SMRs)

The Discharger shall submit Semiannual Monitoring Reports (SMRs) on 1 August (1 Jan. to 30 June) and 1 February (1 July to 31 Dec.). SMRs 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 a semiannual basis, including Groundwater Conditions and Monitoring Parameters. (See **Section E.9.b** for additional requirements.)
- d. For each groundwater monitoring point referenced in the SMR:
 - i. The date and time each water level measurement was taken;
 - ii. The type of pump or other device used to purge and the elevation of the pump intake level relative to screening interval;
 - iii. The purge method(s) utilized and pumping rate;

- iv. The equipment and methods used for monitoring pH, temperature and electrical conductivity (EC) during purging, 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 Constituent Parameters and Five-Year COCs (when analyzed), comparison to current Concentration Limits, and results of any Retesting Procedures per **Section B.5.i**.
 - f. 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.
 - g. Evaluation as to effectiveness of existing leachate monitoring and control facilities, and runoff/run-on control facilities.
 - h. For lined landfill units, a summary of any instances where leachate on the landfill liner system exceeded a depth of 30 cm (excluding the leachate sump), and information about the required notification and corrective action in Section E.13 of the SPRRs (*Standard Facility Specifications*).
 - i. Summaries of all Regular Visual Inspections conducted per **Section D3** during the reporting period.
 - j. 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*).
 - k. Laboratory statements of results of all analyses.
 - l. Compliance evaluation of data and analyses indicating whether compliance with the WDRs and MRP was achieved.

2. Annual Monitoring Reports (AMRs)

On 1 February of each year,⁹ the Discharger shall submit an Annual Monitoring Report (AMR) containing following materials and information:

- a. In tabulated format, all monitoring data for which annual reporting is required under this MRP. (See **Section E.9.b** for additional requirements for monitoring reports.)
- b. 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.¹⁰
- c. An evaluation of Monitoring Parameters with regard to the cation/anion balance, and graphical presentation of same in a Stiff diagram, Piper graph or Schoeller plot.
- d. 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.
- e. For each groundwater well, quarterly hydrographs showing the elevation of groundwater with respect to the top and bottom of the screened interval, and the elevation of the pump intake,
- f. 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.
- g. For active landfill units, a map showing the areas and elevations of each unit where filling was completed during the previous calendar year; comparison to final closure design contours; and projected years in which each discrete module are expected to be filled.
- h. A summary of the monitoring results, indicating any changes made or observed since the previous AMR.

⁹ The Annual Monitoring Report may be combined with the Semiannual Monitoring Report for 1 July through 31 December of the same year, provided that the combination is clearly indicated in the title.

¹⁰ Each graph shall contain individual data points (not mean values) and be appropriately scaled to accurately depict statistically significant trends or variations in water quality.

- i. A discussion on the results of Annual LCRS Testing conducted in accordance with **Section D.1.a.**
- j. Annual updates to the Concentration Limits for all Monitoring Parameters and WQPS Monitoring Points, in accordance with **Section B.5.h** of this Order.
- k. When required per **Section B.5.h** of this Order, periodic updates to the Concentration Limits for all Monitoring Parameters and WQPS Monitoring Points.
- l. To assess the progress of ongoing Corrective Action at the Facility, the following: Evaluation of Landfill Unit 2 groundwater separation observations and subdrain condition (See **Table 19**); and Discussion and depiction of total VOCs removed annually, and total cumulative VOCs removed (See **Table 21**).

3. 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 Monitoring Parameters in **Table 29** (*Physical Parameters*) and **Table 30** (*Constituent Parameters*), 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.

4. Annual Facility Inspection Report

By 15 November, the Discharger shall submit a report with results of the Annual Facility Inspection per **Section D.5**. The report shall discuss any

repair measures implemented, any preparations for winter, and include photographs of any problem areas and repairs.

5. Major Storm Event Reports

Immediately following each post-storm inspection described in **Section D.6**, 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.

6. Survey and Iso-Settlement Map (Closed Landfill Units)

The Discharger shall submit all iso settlement maps prepared in accordance with **Section D.6**. (Title 27, § 21090, subd. (e).) The most recent map was completed in October 2021. The next maps are due in 2027.

7. Financial Assurances Report

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

8. Water Quality Protection Standard Report

Any proposed changes¹¹ to the Water Quality Protection Standard (WQPS) components (§ B.5), other than periodic update of the Concentration Limits (§ B.5.h), shall be submitted in a WQPS Report for review and approval. The report shall be certified by a “Qualified Professional” (§ B), and contain the following:

- a. *Potentially Affected Waterbodies*—An identification of all distinct bodies of surface water and groundwater potentially affected by a

¹¹ 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.

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, surface water¹² and unsaturated zone monitoring points (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 § g) 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, section 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)).

9. 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

¹² To the extent that surface water monitoring is included in the Detection Monitoring Program.

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 CentralVallySacramento@WaterBoards.ca.gov. The following information shall be included in the body of the email:

Attention:	Title 27 Compliance & Enforcement Unit
Report Title:	[Title of Report]
GeoTracker® Upload ID:	L10004835054
Facility Name:	McCourtney Road Landfill
County:	Nevada County
CIWQS Place ID:	240019

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.

F. Record Retention Requirements

The Discharger shall maintain permanent records of all monitoring information, including without limitation: calibration and maintenance records; original strip chart recordings of continuous monitoring instrumentation; copies of all reports required by this MRP; and records of all data used to complete 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—Volatile Organic Compounds, Short List

Attachment B—Dissolved Inorganics (Five-Year COCs)

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

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

Attachment E—Chlorophenoxy Herbicides (Five-Year COCs)

Attachment F—Organophosphorous Compounds (Five Year COCs)

ENFORCEMENT

If, in the opinion of the Executive Officer, the Discharger fail to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The 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—VOLATILE ORGANIC COMPOUNDS, SHORT LIST
USEPA Method 8260B,
Short List

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

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

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

ATTACHMENT B—DISSOLVED INORGANICS (FIVE-YEAR COCS)

Dissolved Inorganics List

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

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

ATTACHMENT C—VOLATILE ORGANIC COMPOUNDS, EXTENDED LIST (FIVE-YEAR COCS)

USEPA Method 8260, Extended List

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

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

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

NEVADA COUNTY DEPARTMENT OF PUBLIC WORKS

MCCOURTNEY ROAD LANDFILL

NEVADA COUNTY

ATTACHMENT C—VOLATILE ORGANIC COMPOUNDS, EXTENDED LIST, (FIVE-YEAR COCS)

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

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

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

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

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

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

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

Constituent	Geotracker Code
Methyl methanesulfonate	MMSULFN
2 Methyl naphthalene	MTNPH2
1,4 Naphthoquinone	NAPHQ14
1 Naphthylamine	AMINONAPH1
2 Naphthylamine	AMINONAPH2
o Nitroaniline (2 Nitroaniline)	NO2ANIL2
m Nitroaniline (3 Nitroaniline)	NO2ANIL3
p Nitroaniline (4 Nitroaniline)	NO2ANIL4
Nitrobenzene	NO2BZ
o Nitrophenol (2 Nitrophenol)	NTPH2
p Nitrophenol (4 Nitrophenol)	NTPH4
N Nitrosodi n butylamine (Di n butyl nitrosamine)	NNSBU
N Nitrosodiethylamine (Diethyl nitrosamine)	NNSE
N Nitrosodimethylamine (Dimethyl nitrosamine)	NNSM
N Nitrosodiphenylamine (Diphenyl nitrosamine)	NNSPH
N Nitrosodipropylamine (N Nitroso N dipropylamine; Di n propyl nitrosamine)	NNSPR
N Nitrosomethylethylamine (Methylethyl nitrosamine)	NNSME
N Nitrosopiperidine	NNSPPRD
N Nitrosospyrrolidine	NNSPYRL
5 Nitro o toluidine	TLDNONT5
Pentachlorobenzene	PECLBZ

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

ATTACHMENT E—CHLOROPHENOXY HERBICIDES (FIVE-YEAR COCS)

USPEA Method 8151A List

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

**ATTACHMENT F—ORGANOPHOSPHOROUS COMPOUNDS
(FIVE YEAR COCS)**

USEPA Method 8141B List

Constituent	GeoTracker Code
Atrazine	ATRAZINE
Chlorpyrifos	CLPYRIFOS
0,0-Diethyl 0-2-pyrazinyl phosphorothioate (Thionazin)	ZINOPHOS
Diazinon	DIAZ
Dimethoate	DIMETHAT
Disulfoton	DISUL
Methyl parathion (Parathion methyl)	PARAM
Parathion	PARAE
Phorate	PHORATE
Simazine	SIMAZINE