

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

REVISED MONITORING AND REPORTING PROGRAM R5-99-087

MONITORING AND REPORTING PROGRAM
FOR
COUNTY OF FRESNO
BLUE HILLS DISPOSAL FACILITY
FRESNO COUNTY

Separately issued pursuant to Water Code section 13267, subdivision (b)(1), this Order establishes a Monitoring and Reporting Program (MRP) for the Blue Hills Disposal Facility regulated under Waste Discharge Requirements Order R5-99-087 (WDRs Order). Each of the Findings set forth in the WDRs Order, including those pertaining to the need for submission of reports, are hereby incorporated as part of this MRP Order.

This MRP Order may be separately revised by the Executive Officer, in accordance with their delegated authority under Water Code section 13223.

A. Monitoring Requirements

1. Groundwater Monitoring

- a. **Required Network**—The Facility’s groundwater monitoring network shall consist of the wells listed below in **Table 1**. As of the date of this Order, the Discharger’s groundwater monitoring network meets the requirements of title 23, California Codes of Regulations, Section 2510 et seq. (Title 23). (Ss₁ and Ss₂ = sandstone units)

Table 1—Groundwater Monitoring Network

Well	Program	Monitored Units
B-204B	Corrective Action	Ss ₁
B-207	Corrective Action	Ss ₁
E-2	Corrective Action /Background	Ss ₁
E-3	Corrective Action	Ss ₁
E-7	Corrective Action	Ss ₂
E-9	Corrective Action	Ss ₁
E-10	Corrective Action	Ss ₂

- b. **Sample Collection and Analysis**—Groundwater samples shall be collected from each well, and analyzed for the field parameters and monitoring parameters specified in **Table 2** (in accordance with the specified schedule).¹

**Table 2—Groundwater Detection Monitoring Program:
 Field Parameters and Monitoring Parameters**

Field Parameters	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
Temperature	TEMP	°F	Semiannually	Semiannually
Electrical Conductivity	SC	µmhos/cm	Semiannually	Semiannually
pH	PH	pH Units	Semiannually	Semiannually
Turbidity	TURB	NTUs	Semiannually	Semiannually
Oxidation Reduction Potential	ORP	mV	Semiannually	Semiannually
Dissolved Oxygen	DO	mg/L	Semiannually	Semiannually

Monitoring Parameters	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
Extended List VOCs (per Attachment A)	(various)	µg/L	Semiannually	Semiannually
Chlorophenoxy Herbicides (per Attachment A)	(various)	µg/L	Semiannually	Semiannually

¹ Monitoring wells established for the Detection Monitoring Program (DMP) constitute the monitoring points for the groundwater Water Quality Protection Standard (WQPS).

- c. **Analysis for Five-Year COCs**—Additionally, the Discharger shall analyze for groundwater samples from each well for the Five-Year COCs listed in **Table 3**.²

**Table 3—Groundwater Detection Monitoring Program,
 Five-Year COC Monitoring Parameters**

Parameter	GeoTracker Code	Units	Sampling & Reporting Freq.
Organophosphorus Compounds (per Attachment B)	(various)	µg/L	Every 5 Years Next Report Due: 2025
Polychlorinated biphenyls (per Attachment B)	(various)	µg/L	Every 5 Years Next Report Due: 2025
Organochlorine pesticides (per Attachment B)	(various)	µg/L	Every 5 Years Next Report Due: 2025
Cyanide	CN	µg/L	Every 5 Years Next Report Due: 2025
Dioxins and Furans	(various)	µg/L	Every 5 Years Next Report Due: 2025
Phenols	(various)	µg/L	Every 5 Years Next Report Due: 2025
Base Neutral and Acid Extractables (per Attachment B)	(various)	µg/L	Every 5 Years Next Report Due: 2025
1,4-dioxane	DIOXANE14	µg/L	Every 5 Years Next Report Due: 2025

- d. **Groundwater Conditions**—On a semiannual basis, the Discharger shall also monitor overall groundwater conditions specified per **Table 4**. The results of monitoring shall be reported in each Semiannual Monitoring Report (SMR).

Table 4—Groundwater Conditions Monitoring

Parameter	GeoTracker Code	Monitoring Frequency	Reporting Frequency
Elevation (Well-Specific)	ELEV	Semiannually	Semiannually (SMRs)
Gradient	(none)	Semiannually	Semiannually (SMRs)
Flow Rate ³	(none)	Semiannually	Semiannually (SMRs)

² Five-Year COCs were last monitored in 2019, shall be analyzed again in 2024, and reported in 2025.

³ To the extent feasible, the Discharger shall determine ground water flow rate and direction in: (1) the uppermost aquifer; (2) any zones of perched water; and (3) in any additional portions of the zone of saturation monitored pursuant to Title 23, section 2550.7, subdivision (b)(1).

2. **Leachate Seep Monitoring**—Leachate that seeps to the surface from any landfill WMU shall, immediately upon detection, be sampled and analyzed for the field parameters and monitoring parameters in **Table 5**.

Table 5—Leachate Seep Monitoring: Field Parameters and Monitoring Parameters

Field Parameters	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
Electrical Conductivity	SC	µmhos/cm	Upon 1st discovery and monthly for the duration of the seep	Semiannually (SMRs) for the duration of the seep
pH	pH	pH Units	Upon 1st discovery and monthly for the duration of the seep	Semiannually (SMRs) for the duration of the seep
Total Flow	(none)	Gallons	Upon 1st discovery and monthly for the duration of the seep	Semiannually (SMRs) for the duration of the seep
Flow Rate	FLOW	Gallons/Day	Upon 1st discovery and monthly for the duration of the seep	Semiannually (SMRs) for the duration of the seep

Monitoring Parameters	GeoTracker Code	Units	Sampling Frequency	Reporting Frequency
Extended List VOCs (per Attachment A)	(various)	µg/L	Semiannually	Semiannually
Chlorophenoxy Herbicides (per Attachment A)	(various)	µg/L	Semiannually	Semiannually

3. General Monitoring Provisions

a. Detection Monitoring Systems

- i. All detection monitoring systems designed and constructed pursuant to this Order shall be certified by a California-licensed professional civil engineer or geologist (Qualified Professional) as meeting the requirements of Title 23.
- ii. The Discharger shall revise its DMP system; the groundwater detection monitoring system (after review and approval by Central Valley Water Board staff) as needed.
- iii. The Discharger shall comply with the detection monitoring program provisions of Title 23, Section 2550.7 et seq. for groundwater in accordance with the *Provisions for*

Monitoring section of the SPRRs and the Monitoring Specifications in Section D of the WDRs.

- b. Sample Collection and Analysis Plan
 - i. All samples shall be collected, preserved and transported in accordance with the most recently approved *Revised Updated Groundwater Monitoring Plan/Sampling and Analysis Plan for Corrective Action (GWMP/SAP)*, dated 18 March 2019, and the quality assurance/quality control (QA/QC) standards therein.
 - ii. 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 GWMP/SAP.

B. Additional Facility Monitoring

- 1. **Regular Visual Inspection**—The Discharger shall perform regular visual inspections at the Facility in accordance with **Table 6** and **Table 7**. Results of these regular visual inspections shall be included in Semiannual Monitoring Reports (SMRs).

Table 6—Regular Visual Inspections

Category	Observations
<i>Within Unit</i>	<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.
<i>Unit Perimeter</i>	<ul style="list-style-type: none"> Evidence of leachate seeps, estimated size of affected area and flow rate (record affected areas on map). Evidence of erosion and/or of day-lighted refuse.

Table 7—Regular Visual Inspection Schedule

Category	Wet Season (1 Oct. to 30 April)	Dry Season (1 May to 30 Sept.)
<i>Inactive or Closed Units</i>	Monthly	Quarterly

- 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 a 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 C.4 for reporting requirements.
- 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 C.5 for reporting requirements.

C. Reporting Requirements

Table 8—Summary of Reporting Schedule

Report	End of Reporting Period	Due Date
Semiannual Monitoring Report (§ C.1)	30 June, 31 December	31 August, 28 February
Annual Monitoring Report (§ C.2)	31 December	28 February
Leachate Seep Notification via Phone or Email (§ C.3)	(Continuous)	Immediately upon Discovery
Written Leachate Seep Report (§ C.3)	(Continuous)	7 Days After Discovery
Facility Inspection Report (§ C.4)	31 October	30 November
Major Storm Event Report (§ C.5)	(Continuous)	7 Days After Discovery
Financial Assurances Report (§ C.6)	31 December	30 April

- 1. Semiannual Monitoring Reports (SMRs)**—By **31 August** and **28 February**⁴ of each year, the Discharger shall submit Semiannual Monitoring Reports (SMRs) in accordance with the provisions below.

⁴ The 28 Feb. Semiannual Monitoring Report may be combined with the Annual Monitoring Report (due on the same date), provided that the combination is clearly indicated in the title of the report.

- a. For each groundwater monitoring point addressed by the report, the SMR shall contain a description of:
 - i. The time of water level measurement;
 - ii. The type of pump (or other device) used for purging and the elevation of the pump intake relative to the elevation of the screened interval;
 - iii. The method of purging used to stabilize water in the well bore before the sample is taken including the pumping rate; the equipment and methods used to monitor field pH, temperature, and conductivity during purging; results of pH, temperature, conductivity, and turbidity testing; and the method of disposing of the purge water;
 - iv. The type of pump (or other device) used for sampling, if different than the pump or device used for purging; and
 - v. A statement that the sampling procedure was conducted in accordance with the approved SCAP.
- b. The SMR shall include a map or aerial photograph showing the locations of observation stations, monitoring points, and background monitoring points.
- c. The SMR shall include an estimated semiannual groundwater flow rate and direction in: (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. (See Title 23, § 2550.7, subd. (e)(15).)
- d. The SMR shall include cumulative tabulated monitoring data for all monitoring points and constituents for groundwater, unsaturated zone, leachate, and surface water (if required under this Order). Concentrations below the laboratory reporting limit shall not be reported as "ND" unless the reporting limit is also given in the table. Otherwise they shall be reported "<" the reporting limit (e.g., <0.10). Absent specific justification for reporting in other units, all units shall be as required per Table 2, Table 3, and Table 5. (See SPRRs, *Provisions for Monitoring* [re: MDLs and PQLs].)
- e. The SMR shall include laboratory statements of results of all analyses evaluating compliance with the WDRs.

- f. The SMR shall include an evaluation of the concentration of each monitoring parameter, or Five-Year COC monitoring parameter, when such sampling is conducted, as compared to the current concentration limits, and the results of any required verification testing for constituents exceeding a concentration limit. In the event of verified exceedances of concentration limits for wells or constituents not already in corrective action monitoring, the Discharger shall report any actions taken under the *Response to a Release* section of the SPRRs.
 - g. The SMR shall include a summary of all Regular Visual Inspections (§ B.1) conducted during the reporting period.
 - h. The SMR shall include a summary of inspection, leak search, and repair of final covers on any closed landfill units in accordance with an approved final post-closure maintenance plan as required by the *Standard Conditions* section of the SPRRs (under the Post-Closure Maintenance subheading).
- 2. Annual Monitoring Reports (AMRs)**—On **28 February** of each year,⁵ the Dischargers shall submit Annual Monitoring Reports (AMRs) in accordance with the provisions below.
- a. The AMR shall include graphs showing historical trends for monitoring parameters at each background and compliance monitoring point.⁶ All monitoring parameters shall be graphed to show historical trends at each monitoring point and background monitoring point, for all samples taken within at least the previous five calendar years. All analyses for Five-Year COCs shall be graphically presented in the graph. Each graph shall plot the concentration of one or more constituents for the period of record for a given monitoring point or background monitoring point, at a scale appropriate to show trends or variations in water quality. The graphs shall plot each datum, rather than plotting mean values.⁷

⁵ See instructions in **Footnote 4** regarding combination of AMR with the 28 Feb. SMR.

⁶ If analyzed during the annual reporting period, the monitoring parameters for Five-Year COCs shall be included in the graphs as well.

⁷ Graphical analysis of monitoring data may be used to provide significant evidence of a release.

- b. The AMR shall also include the following:
 - 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 file⁸;
 - ii. Semiannual hydrographs of each well showing the elevation of groundwater with respect to the elevations of the top and bottom of the screened interval and the elevation of the pump intake⁹;
 - iii. A comprehensive discussion of the compliance record, and the result of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the waste discharge requirements;
 - iv. A written summary of the monitoring results, indicating any changes made or observed since the previous AMR;
 - v. Updated concentration limits for each monitoring parameter at each monitoring well based on the new data set.
3. **Seep Reporting**—Upon discovery of seepage from any disposal area within the Facility, the Discharger shall **immediately** report such seepage to 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 Field Parameters and Monitoring Parameters listed in and analyzed for the field parameters and monitoring parameters in Table 5 of

⁸ For the purposes of this Order, the Central Valley Water Board regards submittal of data in hard copy and digital formats as necessary for statistical analysis and periodic review. (Title 23, § 2550.8)

⁹ Hydrographs shall be prepared semiannually, but submitted annually.

this MRP, 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 **30 November** of each year, the Discharger shall submit a report describing the results of the inspection and the repair measures implemented, preparations for winter, and include photographs of any problem areas and the repairs.
 5. **Major Storm Event Reports**—Immediately following each post-storm inspection described in Section B.3 of this MRP, 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. **Financial Assurances Report**—By **30 April** of each year, the Discharger shall submit a copy of the annual financial assurances report that updates the financial assurances for closure, post-closure maintenance, and corrective action.
 7. **Water Quality Protection Standard Reporting**—The Discharger shall submit Water Quality Protection Reports (WQPS Reports) as required by Section E.2 of this MRP.
 8. **General Reporting Provisions**
 - a. **Transmittal Letters**—Each report submitted under this MRP shall be accompanied by a Transmittal Letter providing a brief overview of the enclosed report, as well as the following:
 - i. Any violations found since the last report was submitted, a description of all actions undertaken to correct the violation (referencing any previously submitted time schedules for compliance), and whether the violations have been corrected¹⁰;
 - ii. A statement from the submitting discharger, or its authorized agent, signed under penalty of perjury, certifying that, to the

¹⁰ if no violations have occurred since submittal of the last report, the Transmittal Letter shall so state.

best of the signer's knowledge, the contents of the enclosed report are true, accurate and complete.

- b. **Monitoring Data and Reports**—All monitoring data and reports under this MRP shall be submitted via the State Water Board's Geotracker Database at <https://geotracker.waterboards.ca.gov>. (See Title 23, § 3890 et seq.)

After uploading each 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]
GeoTracker Upload ID:	L10006502456
Discharger Name:	County of Fresno
Facility Name:	Blue Hills Disposal Facility
County:	Fresno County
CIWQS Place ID:	209494

- c. **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, the submitted data shall be summarized in such a manner so as to illustrate clearly the compliance with waste discharge requirements or the lack thereof.
- d. **Compliance with SPRRs**—All reports submitted under this MRP shall comply with applicable provisions of the SPRRs, including the *Provisions for Monitoring* and the *Response to Release* sections except concerning statistical analysis of groundwater analytical data.
- e. **Additional Requirements for Monitoring Reports**—Each monitoring report submitted under this MRP (e.g., SMRs per § C.1) 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.

D. 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).

E. Water Quality Protection Standard (WQPS)

1. Components of WQPS

- a. For each WMU, the WQPS shall consist of: (i) all Constituents of Concern (COCs); (ii) the concentration limit applicable for each COC; (iii) the verification retesting procedure to confirm measurably significant evidence of a release using synthetic VOCs and non-natural pesticide constituents; the point of compliance; and (iv) all water quality monitoring points for each monitored medium.

- 2. WQPS Report**—Any proposed changes to the WQPS, other than annual update of the concentration limits, shall be submitted in a WQPS Report for review and approval.
- a. The WQPS report shall be certified by a Qualified Professional (per MRP, § A.3.a.i), and contain each of the following components
 - i. An identification of all distinct bodies of surface water and groundwater¹¹ that could be affected in the event of a release from a WMU or portion thereof;
 - ii. A map of monitoring points and background monitoring points for the detection monitoring programs for groundwater, surface water (if required) and the unsaturated zone, as well as the point of compliance in accordance with Title 23, section 2550.5;
 - iii. An evaluation the perennial direction(s) of groundwater movement within the uppermost zone(s);
 - b. As discussed in the GWMP/SAP, a proper baseline for prediction limits or concentration limits for intrawell data analysis cannot be developed. In addition, natural variation in groundwater and the lack of a true background well is problematic for interwell data analysis. Therefore, the recommended WQPS consists of tabulation of any detection of synthetic VOCs and pesticides for each monitoring well.
 - c. The WQPS shall be updated annually for each monitoring well using new and historical monitoring data.
- 3. Monitoring Parameters**—A select group of constituents monitored during each sampling event, monitoring parameters are the waste constituents, reaction products, hazardous constituents and physical parameters that provide a reliable indication of a release from a given WMU.
- For the purposes of this MRP, the monitoring parameters are set forth in: Table 2 and Table 3 (groundwater); and Table 5 (leachate).
- 4. Constituents of Concern (COCs)**—COCs include a larger group of waste constituents, their reaction products, and hazardous constituents

¹¹ This list shall include at least the uppermost aquifer and any permanent or ephemeral zones of perched groundwater underlying the facility.

that are reasonably expected to be in or derived from waste contained in the WMU, and are required to be monitored every five years. The COCs under this Order are as follows:

For the purposes of this MRP, the COCs are set forth in: Table 2 and Table 3 (Groundwater).

Additionally, Table 2 and Table 5 incorporate additional COCs set forth in MRP Attachment A (Volatile Organic Compounds, Extended List).

Further, Table 3 incorporates the Five-Year COCs listed in MRP Attachment B. The last Five-Year COC Report was conducted in 2019 and submitted in the 2019 Second Half Semi-Annual MR. Five-Year COCs are to be monitored again in 2024.

5. **Point of Compliance (POC)**—For purposes of the WQPS, point of compliance (POC) of each WMU shall be the vertical surface located at the hydraulically down-gradient limit extending through the uppermost underlying aquifer.
6. **Monitoring Points**—A monitoring point is a well, device, or location, which monitoring is conducted and at which the WQPS applies. The monitoring points are listed in Section A of this MRP.
7. **Compliance Period**—The Compliance Period for the WMU shall be the number of years equal to its active life plus the closure period. The compliance period is the minimum period during which the Discharger shall conduct a water quality monitoring program subsequent to a release from the WMU. The compliance period shall begin anew each time the Dischargers initiates an Evaluation Monitoring Program. (See Title 23, § 2550.6.)

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.

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. The State Water Board must receive the petition by 5:00 p.m. 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 p.m. on the next business day. [Copies of the law and regulations applicable to filing petitions are available on the Internet](http://www.waterboards.ca.gov/public_notices/petitions/water_quality), and will be provided upon request. (http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

This Order is effective as of the date below.

Ordered by:

Original Signed by Clay L. Rodgers for:
PATRICK PULUPA
Executive Officer
Central Valley Water Board

12/11/20
DATE

MRP Glossary

MRP Attachments

Attachment A—Volatile Organic Compounds (Extended List) and Chlorophenoxy
Herbicides
Attachment B—Five-Year COCs

MRP GLOSSARY

AMR	Annual Monitoring Report
COCs	Constituents of Concern
DMP	Detection Monitoring Program
Five-Year COCs	COCs Monitored Every Five Years
GP	Gas Probe
GWMP/SAP	Groundwater Monitoring Plan/Sampling and Analysis Plan
LCRS	Leachate Collection and Removal System
MDL	Method Detection Limit
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter
MRP	Monitoring and Reporting Program
MSW	Municipal Solid Waste
MW	Monitoring Well
ND	Non-Detect (i.e., < RL)
POC	Point of Compliance
QA/QC	Quality Assurance / Quality Control
RL	Laboratory Reporting Limit
SCAP	Sample Collection and Analysis Plan (see GWMP/SAP)
SMR	Semiannual Monitoring Report
SPRRs	Standard Provisions and Reporting Requirements, September 1993 Edition
Title 23	California Code of Regulations, Title 23

GLOSSARY CONTINUED

USEPA.....United States Environmental Protection Agency

WDRs Order.....Waste Discharge Requirements Order

WMUWaste Management Unit

WQPSWater Quality Protection Standard

**MRP ATTACHMENT A—VOLATILE ORGANIC COMPOUNDS (EXTENDED LIST)
 AND CHLOROPHENOXY HERBICIDES**

Volatile Organic Compounds USEPA Method 8260, Extended List	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
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

Volatile Organic Compounds USEPA Method 8260, Extended List	GeoTracker Code
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
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

Volatile Organic Compounds USEPA Method 8260, Extended List	GeoTracker Code
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
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

Chlorophenoxy Herbicides USEPA Method 8151A	GeoTracker Code
Dalapon	DALAPN
Dicamba	DICAMBA
Dichloroprop	
2,4-D (2,4 Dichlorophenoxyacetic acid)	24D

Chlorophenoxy Herbicides USEPA Method 8151A	GeoTracker Code
2,4-DB (2,4-Dichlorophenoxy)butyric acid)	
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
MCPA	MCPA
MCPP	MCPP

MRP ATTACHMENT B—FIVE-YEAR COCs

Semi-Volatile Organic Compounds USEPA Methods 8270C or 8270D (Base, Neutral & Acid Extractables)	GeoTracker Code
Acenaphthene	ACNP
Acenaphthylene	ACNPY
Acetophenone	ACPHN
2-Acetylaminofluorene (2-AAF)	ACAMFL2
4-Aminobiphenyl	AMINOBP4
Aniline	
Anthracene	ANTH
Benzo[a]anthracene (Benzanthracene)	BZAA
Benzo[a]pyrene	BZAP
Benzo[b]fluoranthene	BZBF
Benzo[g,h,i]perylene	BZGHIP
Benzo[k]fluoranthene	BZKF
Benzyl alcohol	BZLAL
Bis(2-chloroethoxy) methane	BECEM
Bis(2-chloroethyl) ether (Dichloroethyl ether)	BIS2CEE
Bis(2-chloro-1-methylethyl) ether (Bis(2-chloroisopropyl) ether; DCIP)	BIS2CIE
Bis(2-ethylhexyl) phthalate	BIS2EHP
4-Bromophenyl phenyl ether	BPPE4
Butyl benzyl phthalate (Benzyl butyl phthalate)	BBP
Cis-Chlordane	
p-Chloroaniline	CLANIL4
Chlorobenzilate	CLBZLATE
p-Chloro-m-cresol (4-Chloro-3-methylphenol)	C4M3PH
2-Chloronaphthalene	CNP2
2-Chlorophenol	CLPH2
4-Chlorophenyl phenyl ether	CPPE4

Semi-Volatile Organic Compounds USEPA Methods 8270C or 8270D (Base, Neutral & Acid Extractables)	GeoTracker Code
Chrysene	CHRYSENE
o-Cresol (2-methylphenol)	MEPH2
m-Cresol (3-methylphenol)	MEPH3
p-Cresol (4-methylphenol)	MEPH4
Diallate	DIALLATE
Dibenz[a,h]anthracene	DBAHA
Dibenzofuran	DBF
Di-n-butyl phthalate	DNBP
3,3'-Dichlorobenzidine	DBZD33
2,4-Dichlorophenol	DCP24
2,6-Dichlorophenol	DCP26
Diethyl phthalate	DEPH
p-(Dimethylamino) azobenzene	PDMAABZ
7,12-Dimethylbenz[a]anthracene	DMBZA712
3,3'-Dimethylbenzidine	DMBZD33
2,4-Dimethylphenol (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
Ethyl methanesulfonate	EMSULFN
Famphur	FAMPUR
Fluoranthene	FLA

Semi-Volatile Organic Compounds USEPA Methods 8270C or 8270D (Base, Neutral & Acid Extractables)	GeoTracker Code
Fluorene	FL
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
3-Methylcholanthrene	MECHLAN3
Methyl methanesulfonate	MMSULFN
2-Methylnaphthalene	MTNPH2
1,4-Naphthoquinone	NAPHQ14
1-Naphthylamine	AMINONAPH1
2-Naphthylamine	AMINONAPH2
o-Nitroaniline (2-Nitroaniline)	NO2ANIL2
m-Nitroaniline (3-Nitroaniline)	NO2ANIL3
p-Nitroaniline (4-Nitroaniline)	NO2ANIL4
Nitrobenzene	NO2BZ
o-Nitrophenol (2-Nitrophenol)	NTPH2
p-Nitrophenol (4-Nitrophenol)	NTPH4
N-Nitrosodi-n-butylamine (Di-n-butylnitrosamine)	NNSBU
N-Nitrosodiethylamine (Diethylnitrosamine)	NNSE
N-Nitrosodimethylamine (Dimethylnitrosamine)	NNSM
N-Nitrosodiphenylamine (Diphenylnitrosamine)	NNSPH

Semi-Volatile Organic Compounds USEPA Methods 8270C or 8270D (Base, Neutral & Acid Extractables)	GeoTracker Code
N-Nitrosodipropylamine (N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine)	NNSPR
N-Nitrosomethylethylamine (Methylethylnitrosamine)	NNSME
N-Nitrosopiperidine	NNSPPRD
N-Nitrosopyrrolidine	NNSPYRL
5-Nitro-o-toluidine	TLDNONT5
Pentachlorobenzene	PECLBZ
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
2,4,5-Trichlorophenol	TCP245
0,0,0-Triethyl phosphorothioate	TEPTH
sym-Trinitrobenzene	TNB135

Organo-Chlorine Pesticides USEPA Method 8081/8080	GeoTracker Code
alpha-BHC	BHCALPHA
beta-BHC	BHCBETA
delta-BHC	BHCDELTA
gamma-BHC (Lindane)	BHCGAMMA
Aldrin	ALDRIN
Chlordane	CHLORDANE
4,4'-DDD	DDD44
4,4'-DDE	DDE44
4,4'-DDT	DDT44
Dieldrin	DIELDRIN
Endosulfan I	ENDOSULFANA
Endosulfan II	ENDOSULFANB
Endosulfan sulfate	ENDOSULFANS
Endrin	ENDRIN
Endrin aldehyde	ENDRINALD
Heptachlor	HEPTACHLOR
Heptachlor epoxide	HEPT-EPOX
Methoxychlor	MTXYCL
Toxaphene	TOXAP

Polychlorinated Biphenyls USEPA Method 8082/8080	GeoTracker Code
Aroclor 1016	PCB1016
Aroclor 1221	PCB1221
Aroclor 1232	PCB1232
Aroclor 1242	PCB1242
Aroclor 1248	PCB1248
Aroclor 1254	PCB1254
Aroclor 1260	PCB1260

Organophosphorus Compounds USEPA Method 8141B	GeoTracker Code
0,0-Diethyl 0-2-pyrazinyl phosphorothioate (Thionazin)	ZINOPHOS
Azinphos methyl	AZIPM
Bolstar	SULPROFOS
Chlorpyrifos	CLPYRIFOS
Coumaphos	COUMAPHOS
Demeton-O,S	DEMETON
Diazinon	DIAZ
Dichlorvos	DICHLORVOS
Dimethoate	DIMETHAT
Disulfoton	DISUL
Ethoprop	ETHOPROP

Organophosphorus Compounds USEPA Method 8141B	GeoTracker Code
Fensulfothion	FENSTHION
Fenthion	FENTHION
Malathion	MALA
Merphos	MERPHOS
Methyl parathion (Parathion methyl)	PARAM
Mevinphos	MEVINPHOS
Naled	NALED
Parathion	PARAE
Phorate	PHORATE
Ronnel	RONNEL
Stirophos	STIROFOS
Tokuthion	TOKUTHION
Trichloronate	CL3NATE