

# **California Regional Water Quality Control Board North Coast Region**

## **MONITORING AND REPORTING PROGRAM**

**ORDER NO. R1-2026-0013**

**For COUNTY OF SONOMA**

**GUERNEVILLE SOLID WASTE DISPOSAL SITE  
WDID No. 1B84003OSON, Sonoma County**

The Closed Guerneville Solid Waste Disposal Site (SWDS) is considered a closed, abandoned, or inactive (CAI) landfill pursuant to California Code of Regulations, title 27, Section 20080(d) because it was closed prior to November 27, 1984, in accordance with the closure requirements of the time as described within Monitoring and Reporting Program (MRP) No. 84-3. Pursuant to California Code of Regulations, title 27, Section 20080(g), the Regional Water Quality Control Board (Regional Water Board) can require Dischargers to monitor CAI landfills, and if groundwater impairment is observed, require the Discharger to implement a corrective action program.

The County of Sonoma (Discharger) shall maintain water quality monitoring systems that are appropriate for detection monitoring and corrective action, and that comply with California Code of Regulations, title 27, Subchapter 3, Chapter 3, Subdivision 1, Division 2, title 27, and any other applicable provisions therein.

This MRP is issued pursuant to California Water Code Section 13267(b) and requires monitoring of groundwater and submission of technical reports necessitated by the fact that the facility is a solid waste disposal site. The objective of monitoring conducted under this monitoring program is to provide the Discharger and the Regional Water Board with information concerning surface water and groundwater quality and whether the SWDS is responsible for any impacts to their quality; status of waste control measures; status of corrective action measures; and status of compliance with California Code of Regulations, title 27 at the SWDS. The burden, including costs, of these reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

The failure to furnish any of the required reports, or false information, is a misdemeanor, and may result in additional enforcement actions being taken against the County, including issuance of an Administrative Civil Liability (ACL) Complaint pursuant to Water

Code Section 13268. Liability may be imposed pursuant to Water Code Section 13268 in an amount not to exceed one thousand dollars (\$1,000) for each day which the violation occurs.

Under the authority of California Water Code Section 13267(b), the Discharger named above is required to comply with the requirements outlined in this MRP:

## **I. REPORTING REQUIREMENTS**

The Discharger shall report monitoring data and information as required in this MRP and as required in Waste Discharge Requirements (WDRs) Order No. R1-2026-0013. The Discharger shall submit a copy of the monitoring report in an electronic format, with transmittal letter, text, tables, figures, laboratory analytical data, and appendices in PDF format (one PDF for the entire report). The Discharger shall enter all monitoring data and monitoring reports into the online Geotracker database as required by California Code of Regulations, title 27, Division 3 and title 23, Division 3, Chapter 30. The Discharger shall notify the Regional Water Board staff assigned to the facility of the upload via email to [NorthCoast@waterboards.ca.gov](mailto:NorthCoast@waterboards.ca.gov).

All testing, other than field parameters, shall be performed at a laboratory certified by the State Water Resources Control Board Division of Drinking Water or approved by the Regional Water Board Executive Officer. Instruments used for field parameters shall be kept in good condition and calibrated according to the manufacturer's requirements. Reports that do not comply with the required format will be rejected, and the Discharger shall be deemed to be in noncompliance with the WDRs.

The results of any monitoring done more frequently than required at the locations specified herein shall be reported to the Regional Water Board in the monitoring report(s) for that period. Method detection limits and practical quantification limits shall be reported. All peaks shall be reported, including those that cannot be quantified and/or specifically identified.

Monitoring Reports (MRs) must include, but shall not be limited to the following:

### **A. LETTER OF TRANSMITTAL**

A letter transmitting the essential points shall accompany each report. The letter must include a discussion of violations since submittal of the last such report. If the Discharger has not observed any violations since the last submittal, the Discharger must state this in the transmittal letter.

Both the monitoring report and the transmittal letter must be signed by a principal executive officer, ranking elected official, or responsible corporate officer. Documents may be signed by a duly authorized representative provided the authorization is requested in writing by a principal executive officer, ranking elected official, or

responsible corporate officer prior to or with document submittal and the authorization specifies an individual or position having responsibility for the overall operation of the regulated facility. The transmittal letter must contain the following statement by the authorized official:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

#### B. COMPLIANCE SUMMARY

The summary shall contain a narrative discussion of the monitoring results, including a discussion of compliance with concentration limits, any water quality violations, or other monitoring results of potential significance to water quality and describe any corrective actions taken to correct the violations and to prevent future similar violations.

#### C. TABULAR PRESENTATION OF DATA

In reporting the monitoring data required by this program, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. The data shall be summarized in such a manner as to clearly illustrate the compliance with WDRs or the lack thereof.

#### D. GRAPHICAL PRESENTATION OF DATA (ANNUAL REPORT)

For each monitoring point in each medium, the Discharger shall submit, in graphical format, the complete history of laboratory analytical data. Graphs must effectively illustrate trends and/or variations in the laboratory analytical data. Each graph must plot a single constituent concentration over time at one or more points in a single medium. Where applicable, the monitoring report should include concentration limits along with graphs of constituent concentrations. When multiple samples are taken, graphs must plot each datum, rather than plotting mean values. Graphs are not required until a minimum of two samples of a given analyte have been taken at a given sampling point or when an analyte at a given sampling point has always been non-detect. The Discharger must also determine horizontal gradients, groundwater flow rate, and flow direction for each respective groundwater body. The Discharger must present these data on a figure that depicts groundwater contours, flow directions, and gradient. For each water level measuring period, the Discharger must include one figure.

#### E. CORRECTIVE ACTION SUMMARY

If applicable, the Discharger shall discuss significant aspects of any corrective action measures conducted during the monitoring period and the status of any ongoing corrective action efforts.

#### F. LABORATORY RESULTS

The Discharger shall summarize and report laboratory results and statements demonstrating compliance with this MRP. Monitoring reports must include results of analyses performed at the facility that are outside of the requirements of this MRP.

#### G. SAMPLING SUMMARY

1. For each monitoring point, the monitoring report shall include a description of: 1.) the method and time of water level measurement; 2) the method of purging and purge rate and well recovery time; and 3) field parameter readings.
2. For each monitoring point, the monitoring report shall include: 1) a description of the type of sampling device used; 2) its placement for sampling; and 3) a description of the sampling procedure (number of samples, field blanks, travel blanks, and duplicate samples taken; the date and time of sampling; the name and qualifications of the person collecting the samples and/or making the measurement; and description of any anomalies).

#### H. LEACHATE DETECTION AND COLLECTION

A summary of results from leachate detection monitoring and sampling shall be reported in the semi-annual monitoring reports. In addition, the volume of leachate generated and disposed monthly (in gallons) via outhaul since the last monitoring report shall be reported in the semi-annual monitoring reports.

#### I. STANDARD OBSERVATIONS

The Discharger shall document standard observations in the monitoring report and submit a written incident report, if necessary. The Discharger shall comply with the following when documenting and reporting standard observations:

1. Each monitoring report shall include a summary and certification of completion of all standard observations for the entire facility including the waste management unit (WMU); the perimeter of the WMU; and for the receiving waters.

2. The standard observations shall be performed quarterly throughout the year and following any significant rainfall event resulting in local flooding. Standard observation reports shall be included in each semi-annual monitoring report.
3. Daily rainfall shall be tracked at either an on-site weather gauge or at the nearest NOAA weather station and the daily rainfall data shall be included in each semi-annual monitoring report in tabular format.
4. The standard observations shall include: condition of WMU cover; whether stormwater drainage ditches contain liquids; condition of drainage facilities; condition of sedimentation ponds; whether there are any leachate seeps present, including estimates of seep size and flow; presence of odors; evidence of ponding; remaining capacity in leachate holding facilities; evidence of erosion or potential erosion; slope failures or potential slope failures; differential settlement, inspection of stormwater discharge locations for evidence of non-stormwater discharges; evidence of floating and suspended material or plastics, discoloration or turbidity in the receiving waters; presence of odors in the receiving waters; condition of access roads; other problems which could affect compliance with the WDRs; and weather conditions during the standard observations and the precipitation during the five days preceding the observations that were made during the monitoring period.

J. MAP(S)

The base map for the monitoring report shall consist of an aerial photograph or include relative topographical features (including receiving waters) along with all monitoring points and features of the SWDS.

K. REPORT PREPARATION

These reports shall be prepared by, or under the direction of, California Registered Civil Engineer, or Certified Engineering Geologist, or registered Professional Geologist; and shall be signed and stamped by this professional.

**II. REQUIRED REPORTS**

A. DETECTION AND CORRECTIVE ACTION MONITORING REPORT

Monitoring Reports shall be prepared and submitted to the Regional Water Board semi-annually, by the reporting dates listed below. Groundwater sampling shall occur in the 2nd quarter (April-June) and the 4th quarter (October-December) of each year. Leachate sampling shall occur between the months of December and March of each year. Surface water sampling shall be sampled as described and reported in the appropriate semi-annual report. The reports shall include the results of all monitoring programs listed herein. The established monitoring and reporting periods are as follows:

Table A: Monitoring and Reporting Periods

| SEMI-ANNUAL           | PERIOD NO. | REPORTING DATE |
|-----------------------|------------|----------------|
| January through June  | 1          | August 15      |
| July through December | 2          | February 15    |

**B. ANNUAL MONITORING AND CORRECTIVE ACTION SUMMARY REPORT**

An annual report, which summarizes the monitoring results for the prior two semi-annual periods, shall be submitted to the Regional Water Board by February 15. The annual report may be combined with the semi-annual report that is also due February 15. The annual report shall contain the following:

1. Tabular and graphical summaries of the detection and, if applicable, corrective action monitoring data, including a discussion of the progress toward re-establishment of compliance with WDRs and the Water Quality Protection Standard (WQPS), as applicable.

**C. SURFACE WATER AND STORMWATER SAMPLING REPORT**

Surface water and stormwater shall be sampled as described herein and reported in the appropriate semi-annual report.

The report shall include the following:

1. A narrative discussion of surface water and stormwater sampling, including notations of any water quality violations and tabular summaries of the water quality data for the sampling locations. The data shall be summarized in such a manner as to clearly illustrate compliance, or lack thereof, with the WDRs.
2. Tabular summaries that include notations to clearly identify specific results that indicate an exceedance of water quality standards for naturally occurring compounds; an exceedance of detection limits for all man-made compounds; or any other violation of the SWDS's WDR prohibition to discharge to surface water, surface water drainage systems, or groundwater; or both. To determine if the facility has contributed to the discharge of naturally occurring compounds, data shall be evaluated statistically. The analysis shall include consideration of variations that occur due to rainfall.
3. Available records from daily rainfall measurements in tabular form.

4. Copies of the field sampling log, chain of custody documentation, date and time of sample collection, the name of the person collecting the samples, the signed lab sheets including quality assurance/quality control (QA/QC), daily field logs, and leachate seep inspection logs.

#### D. WATER QUALITY PROTECTION STANDARD REPORT

As noted above, a discussion of compliance and any changes to the WQPS are to be included in the Annual Report.

#### E. ANNUAL EROSION CONTROL REPORT

By December 15, annually, the Discharger shall submit a report to the Regional Water Board Executive Officer describing any measures taken to comply with erosion control requirements. The report shall include a description of any erosion control measures implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities. Upon request, the Executive Officer may exempt the Discharger from the requirement for submitting annual erosion control reports if the Executive Officer determines that no erosion control work is necessary prior to the return of winter rains.

#### F. EMERGENCY RESPONSE PLAN

The facility shall maintain an emergency response plan which shall be updated, as necessary, in the event that it does not provide an adequate response to a failure or a release, changes occur in the post closure land use or onsite structures, or upon written notification by the Executive Officer that the emergency plan is inadequate, or if during its implementation, problems were found or after key emergency response personnel changes are needed to the plan.

#### G. CONSTITUENTS OF CONCERN (COCS)

The Discharger shall submit reports of the results of groundwater, surface water, and leachate sample test results for the COCs every 5 years, or more frequently if required. The monitoring for the COC report shall alternate between fall and spring seasons in conjunction with the regular semi-annual sampling; fall 2026, spring 2031, and every five years thereafter. The COC monitoring results shall be submitted with, or reported in, the MR for the period the sampling took place.

#### H. NOTIFICATION OF RELEASE AND RE-TEST

For any WMU, if the results of a detection monitoring program show that there is a measurably significant increase in an indicator parameter or waste constituents over the

WQPS t or beyond the points of compliance (i.e., measurably and/or statistically significant evidence of an exceedance or release), the Discharger shall:

1. Immediately notify the Regional Water Board staff by telephone of exceedance,
2. Within seven days of the initial findings, follow up with written notification (or acknowledgment of the Regional Water Board's finding) to [NorthCoast@waterboards.ca.gov](mailto:NorthCoast@waterboards.ca.gov),
3. Within 30 days of the initial finding, re-sample for the constituent(s) or parameter(s) at the point where the standard was exceeded, and
4. Within 60 days of the initial finding, submit the results of the re-sampling and statistical analysis, indicating whether or not an exceedance or release was confirmed by the re-test.

#### I. DETECTION OF A RELEASE

Immediately following detection of a release, or after completion of the retest, the Discharger:

1. Shall immediately sample all monitoring points in the affected medium at the WMU and determine the concentration of all COCs. Because this COC scan does not involve statistical testing, the Discharger need collect and analyze only a single water sample from each monitoring point in the affected medium. The Executive Officer can approve an appropriate subset of monitoring points to be sampled for all COCs, based upon the hydrogeologic conditions at the WMU. [California Code of Regulations, title 27, Section 20420(k)(1)]
2. Within 90 days of determining measurably significant evidence of release, submit an amended Report of Waste Discharge (ROWD) to establish an evaluation monitoring program, in accordance with California Code of Regulations, title 27, Section 20420(k)(5).
3. Within 180 days of verifying measurably significant evidence of a release from a WMU, submit an engineering feasibility study for a corrective action program [California Code of Regulations, title 27, Section 20420(k)(6)]. The corrective action program shall, at a minimum, meet the requirements of the California Code of Regulations, title 27, Section 20430.

#### J. RESPONDING TO A RELEASE DISCOVERY

Upon verifying measurably significant evidence of a release from a WMU according to California Code of Regulations title 27, Section 20420(j), the Discharger shall follow the

procedures and timeline described in California Code of Regulations, title 27, Section 20420(k).

#### K. POST CLOSURE REPORTS

Post closure maintenance activities that entail repair of the constructed cap's low-hydraulic conductivity layer shall be reported and certified by the Construction Quality Assurance (CQA) Officer and submitted, under penalty of perjury, to the Regional Water Board and other appropriate agencies in accordance with California Code of Regulations, title 27, Sections 20324(c) and 20324(d). The CQA Officer must be a Registered Civil Engineer or a Certified Engineering Geologist licensed in the State of California. The reports, at a minimum, shall include daily summary reports; material acceptance reports; photo logs of repair activities; final CQA documentation; laboratory testing results; and field testing results. If the repair area is equal to or greater than two acres in size, an as-built topographic map of the repaired area shall be prepared at a scale of one-inch to 100 feet, with a contour interval of two feet.

During times of active construction or any periods of repair to the waste containment, drainage, or monitoring facilities, legible copies of the daily CQA field notes and summary reports shall be submitted to the Regional Water Board at: [NorthCoast@waterboards.ca.gov](mailto:NorthCoast@waterboards.ca.gov). The guidelines for electronic submittal of documents can be found on the [Regional Water Board website](https://www.waterboards.ca.gov/northcoast/publications_and_forms/available_documents/pdf/2014/ECM_Letter-Guidelines.pdf) ([https://www.waterboards.ca.gov/northcoast/publications\\_and\\_forms/available\\_documents/pdf/2014/ECM\\_Letter-Guidelines.pdf](https://www.waterboards.ca.gov/northcoast/publications_and_forms/available_documents/pdf/2014/ECM_Letter-Guidelines.pdf)) Email shall be addressed to the Regional Water Board, Land Disposal Program.

### III. GENERAL MONITORING PROGRAM REQUIREMENTS

#### A. ROUTINE MAINTENANCE

The SWDS shall be inspected quarterly and following any significant rainfall event that results in local flooding. Standard observation inspection logs, problem areas, special occurrences, and corrective actions taken shall be included in the corresponding semi-annual monitoring reports.

#### B. CONSTITUENTS OF CONCERN

Except as otherwise indicated in this Order, the Discharger shall monitor each medium of the SWDS for applicable COC (per State Water Resources Control Board Resolution 93-62). The monitoring locations, analytical methods, and frequencies of analysis are as follows:

##### 1. Monitoring Locations

- a) Leachate – Leachate Tank Farm and any new leachate lysimeter/monitoring well/extraction well(s), if installed.
- b) Groundwater – Monitoring wells G-1, G-2, G-3, G-4, G-5, G-6, G-7, MP-1, and any new monitoring well(s), if installed.
- c) Surface Water/Stormwater – SW-1, SW-2, SW-3, SW-4 (Tunstall Creek Watershed), SW-5 (Land of Woo Watershed), and any new monitoring location(s), if established.

#### C. LEACHATE MONITORING

Samples shall be taken from the Leachate Tank Farm and any new leachate lysimeter/monitoring well/extraction well(s), if installed. Leachate pumped from the Leachate Tank Farm aboveground storage tanks (ASTs) for disposal shall be transported to an approved wastewater treatment facility and/or other legal place of disposal. Any results from leachate sampling required by the wastewater treatment facility shall be reported to the Regional Water Board.

There are not any leachate seep monitoring locations currently established. Any seeps located during inspections shall be sampled as soon as possible, but no more than 7 days after the discovery. The seep(s) shall be reported to Regional Water Board staff within 24 hours via telephone or by email.

The monthly volume of leachate generated and disposed of since the previous monitoring report shall be reported in the semi-annual monitoring reports. Leachate sampling results, results from any additional sampling required by the wastewater treatment facility, and documentation of any identified leachate seeps shall be reported in the associated semi-annual monitoring reports.

#### D. DETECTION AND CORRECTIVE ACTION MONITORING

For each monitoring medium, samples from all monitoring points assigned to detection monitoring or corrective action monitoring shall be collected and tested per Tables B, C, and E for the monitoring parameters listed in this program.

For any given monitored medium, a sufficient number of samples shall be taken from all monitoring points to satisfy the data analysis requirements for a given Reporting Period and shall be taken in a manner that ensures sample independence to the greatest extent feasible.

Statistical analyses shall be performed for groundwater and surface water as soon as the monitoring data are available. Intra-well statistical analyses shall be used to calculate concentration limits for naturally occurring compounds using an approved statistical method pursuant to California Code of Regulations title 27, Section 20415(e)(8) or other

appropriate statistical method(s) as approved by the Executive Officer. Concentration limits for man-made chemicals shall be set at method detection limits (MDLs) for individual analytes.

#### E. GROUNDWATER ELEVATION MONITORING

The groundwater surface elevation (in feet and hundredths) as compared to mean sea level (MSL) in all wells and piezometers (if installed) shall be measured on a semi-annual basis for each monitored groundwater body and used to determine the velocity and direction of groundwater flow. Monitoring shall include the times of expected highest and lowest elevations of the water level for the respective groundwater body. Groundwater elevations for all upgradient and downgradient wells for a given groundwater body shall be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater gradient and direction. This information shall be included in the semi-annual monitoring reports.

### IV. MONITORING REQUIREMENTS

#### A. GENERAL

The Discharger shall perform detection monitoring and corrective action monitoring (per California Code Regulations, title 27, Section 20420 and 20430) on all media potentially affected by a release, including surface water and groundwater. For any given monitored medium, a sufficient number of samples shall be taken from all monitoring points and background monitoring points to satisfy the data analysis requirements for a given reporting period, and samples shall be collected in a manner that ensures sample independence to the greatest extent feasible.

As set forth in California Code of Regulations, title 27, Section 20415(e)(8), the Discharger shall use an approved statistical (or non-statistical) procedure to determine whether there has been a measurably significant increase in a constituent over the WQPS.

Method detection limits and practical quantitation limits shall be reported. All peaks shall be reported, including those that cannot be quantified and/or specifically identified.

The Discharger may, with approval of the Executive Officer, use alternative analytical test methods, including new U.S. EPA approved methods, provided the methods have method detection limits equal to or lower than those for the analytical methods specified in this MRP (Attachment 1).

#### B. LEACHATE

##### 1. Monitoring Locations

Leachate samples shall be collected annually using the sample port associated with the ASTs located at the Leachate Tank Farm. If any additional leachate samples are taken at the request of the approved wastewater treatment plant, the corresponding results shall also be reported to the Regional Water Board.

If leachate seeps are detected, the Discharger shall immediately sample the seepage and test for field and monitoring parameters listed in Table B and continue to sample seepage and report test results at frequencies listed in Table B. If the seep has been determined to contain leachate, the Discharger shall abate the discharge.

## 2. Monitoring Schedule

The parameters and frequency of leachate and seep monitoring are as follows:

Table B: LEACHATE MONITORING PROGRAM

| Parameter                          | Units    | Frequency <sup>1</sup> |
|------------------------------------|----------|------------------------|
| pH*                                | pH units | Annually <sup>2</sup>  |
| Specific Conductance*              | Mhos/cm  | Annually <sup>2</sup>  |
| Temperature*                       | °C       | Annually <sup>2</sup>  |
| Disposal Volume*                   | Gallons  | Semi-Annually          |
| Bicarbonate/Carbonate Alkalinity** | ug/l     | Annually               |
| Chloride**                         | ug/l     | Annually               |
| Calcium (dissolved)**              | ug/l     | Annually               |
| Iron (dissolved)**                 | ug/l     | Annually               |
| Magnesium (dissolved)**            | ug/l     | Annually               |
| Potassium (dissolved)**            | ug/l     | Annually               |
| Sodium (dissolved)**               | ug/l     | Annually               |
| Parameter                          | Units    | Frequency <sup>1</sup> |
| Sulfate**                          | ug/l     | Annually               |

| Parameter                      | Units | Frequency <sup>1</sup> |
|--------------------------------|-------|------------------------|
| Nitrate as Nitrogen**          | mg/l  | Annually               |
| Manganese** (dissolved)        | mg/l  | Annually               |
| Total Dissolved Solids** (TDS) | mg/l  | Annually               |
| Chemical Oxygen Demand**       | mg/l  | Annually               |
| VOCs**                         | ug/l  | Annually               |
| Inorganics*** (dissolved)      | mg/l  | Five years             |
| Semi-VOCs***                   | ug/l  | Five years             |
| Chlorophenoxy Herbicides***    | ug/l  | Five years             |
| Organophosphorus Pesticides*** | ug/l  | Five years             |
| Polychlorinated Biphenyls***   | ug/l  | Five years             |

Table Notes:

1. Frequency shown is for the Leachate Tank Farm sampling. Leachate seep samples shall be taken for the annual leachate constituents whenever seeps are present both at first occurrence and weekly thereafter until the seep is corrected and ceases to discharge.
2. Field measurement.

\* Field Parameters

\*\* Monitoring Parameters (See Attachment 1)

\*\*\* Constituents of Concern (See Attachment 1)

## C. SURFACE WATER AND STORMWATER

### 1. Monitoring Locations

Monitoring locations SW-1, SW-2, SW-3, SW-4, SW-5, and SW-6 are located as shown in Attachment B. SW-1 is a stormwater monitoring location sampled at a discharge location from sedimentation tanks located west of the transfer station. SW-2 and SW-3 are stormwater monitoring locations sampled below culvert outfalls within drainages which lead to an unnamed tributary of the Russian River, locally referred to as the Land of Woo Creek. SW-4 is an offsite surface water monitoring location downstream of the facility within an unnamed tributary to the Russian River which is locally referred to as Tunstall Creek. SW-5 is an

offsite surface water sampling location approximately ¾-mile south and downstream of the facility within the Land of Woo Creek. Rainfall shall be measured onsite or at the closest weather station to the SWDS.

## 2. Monitoring Schedule

Samples shall be collected at surface water and stormwater monitoring points and analyzed in accordance with the schedule presented in the following table:

Table C: SURFACE WATER AND STORMWATER MONITORING PROGRAM

| Parameter                             | Units           | Frequency               |
|---------------------------------------|-----------------|-------------------------|
| pH*                                   | pH units        | Annually <sup>1</sup>   |
| Specific Conductance*                 | Mhos/cm         | Annually <sub>1</sub>   |
| Turbidity*                            | turbidity units | Annually <sup>1,2</sup> |
| Temperature*                          | °C              | Annually <sup>1</sup>   |
| Rainfall*                             | inches          | Daily                   |
| Erosion*                              | visual scour    | Annually                |
| Chloride**                            | ug/l            | Annually                |
| Total Suspended Solids**<br>(TSS)     | mg/l            | Annually <sup>2</sup>   |
| Total Dissolved Solids**<br>(TDS)     | mg/l            | Annually                |
| Bicarbonate/Carbonate<br>Alkalinity** | mg/l            | Annually                |
| Calcium** (dissolved)                 | mg/l            | Annually                |
| Iron** (dissolved)                    | mg/l            | Annually                |
| Magnesium** (dissolved)               | mg/l            | Annually                |
| Potassium** (dissolved)               | mg/l            | Annually                |
| Sodium** (dissolved)                  | mg/l            | Annually                |

| Parameter                      | Units | Frequency                    |
|--------------------------------|-------|------------------------------|
| VOCs**                         | ug/l  | Annually                     |
| Manganese** (dissolved)        | mg/l  | Annually                     |
| Nitrate as Nitrogen**          | ug/l  | Annually                     |
| Sulfate**                      | ug/l  | Annually                     |
| Oil and Grease**               | mg/l  | Annually                     |
| Total Petroleum as Gasoline**  | ug/l  | Annually                     |
| Total Petroleum as Diesel**    | ug/l  | Annually                     |
| Total Petroleum as Motor Oil** | ug/l  | Annually                     |
| Inorganics*** (dissolved)      | mg/l  | After a release <sup>3</sup> |
| Semi-VOCs***                   | ug/l  | After a release <sup>3</sup> |
| Chlorophenoxy Herbicides***    | ug/l  | After a release <sup>3</sup> |
| Organophosphorus Pesticides*** | ug/l  | After a release <sup>3</sup> |
| Polychlorinated Biphenyls***   | ug/l  | After a release <sup>3</sup> |
| Organochlorine Pesticides***   | ug/l  | After a release <sup>3</sup> |

Table Notes:

1. Field measurement.
2. Turbidity and Total Suspended Solids may be substituted for each other depending on which sampling method is more readily available.
3. Sampling shall take place during the next flow event after a verified measurably significant release in surface water/stormwater. Verification shall be determined according to California Code of Regulations, title 27, Section 20420(j).

\* Field Parameters

\*\* Monitoring Parameters (See Attachment 1)

\*\*\* Constituents of Concern (See Attachment 1)

#### D. GROUNDWATER

The groundwater surface elevation (in feet and hundredths) as compared to MSL in all wells shall be measured on a semi-annual basis and used to determine the velocity and direction of groundwater flow. The Discharger has submitted documentation demonstrating that semi-annual monitoring will cover the times of expected highest and lowest elevations of the water level for the respective groundwater body in compliance with California Code of Regulations, title 27, Section 20415(e)(15).

The amount of siltation in all wells shall be measured as needed during pump maintenance. Siltation information shall be used to make recommendations for well maintenance or replacement. In the event a monitoring well is no longer operational or damaged, the wells shall be replaced and any additional monitoring wells shall be added to the program as needed. Samples shall be collected from wells at the frequency and for the parameters specified in Table E below.

##### 1. Monitoring Locations

Monitoring points included in the current groundwater monitoring network consist of a background well, detection monitoring wells (i.e., point of compliance), and corrective action wells. The locations of these monitoring points are shown in Attachment B. The designations for the respective monitoring wells are summarized below in Table D and the corresponding rationale for these designations is summarized in Section V(E) of this MRP.

Table D: Groundwater Monitoring Network Designations

|                       |                          |
|-----------------------|--------------------------|
| Background:           | G-3                      |
| Detection Monitoring: | G-1, G-2, G-4, G-5, MP-1 |
| Corrective Action     | G-6, G-7                 |

##### 2. Monitoring Schedule

Samples shall be collected at the groundwater monitoring points and analyzed in accordance with the schedule presented in the following table:

Table E: GROUNDWATER MONITORING PROGRAM

| Parameter               | Units                       | Frequency   |
|-------------------------|-----------------------------|-------------|
| Groundwater Elevations* | Ft./tenths TOC <sup>1</sup> | Semi-Annual |

| Parameter                          | Units           | Frequency                             |
|------------------------------------|-----------------|---------------------------------------|
| pH*                                | pH units        | Semi-Annual <sup>2</sup>              |
| Specific Conductance*              | Mhos/cm         | Semi-Annual <sup>2</sup>              |
| Temperature*                       | °C              | Semi-Annual <sup>2</sup>              |
| Turbidity*                         | Turbidity units | Semi-Annual <sup>2</sup>              |
| Siltation in Well Casing*          | Ft./tenths      | As needed and during pump maintenance |
| Chloride**                         | ug/l            | Semi-Annual                           |
| Sodium** (dissolved)               | ug/l            | Semi-Annual                           |
| Calcium** (dissolved)              | ug/l            | Semi-Annual                           |
| Sulfate**                          | ug/l            | Semi-Annual                           |
| Magnesium** (dissolved)            | ug/l            | Semi-Annual                           |
| Iron** (dissolved)                 | ug/l            | Semi-Annual                           |
| Potassium** (dissolved)            | ug/l            | Semi-Annual                           |
| Manganese** (dissolved)            | ug/l            | Semi-Annual                           |
| Nitrate as Nitrogen**              | ug/l            | Semi-Annual                           |
| Bicarbonate/Carbonate Alkalinity** | ug/l            | Semi-Annual                           |
| Fluoride**                         | ug/l            | Annually                              |
| Total Dissolved Solids** (TDS)     | mg/l            | Semi-Annual                           |
| VOCs**                             | ug/l            | Semi-Annual                           |
| Chemical Oxygen Demand**           | mg/l            | Semi-Annual                           |
| Inorganics*** (dissolved)          | ug/l            | Five years                            |
| Semi-VOCs***                       | ug/l            | Five years                            |

| Parameter                      | Units | Frequency  |
|--------------------------------|-------|------------|
| Chlorophenoxy Herbicides***    | ug/l  | Five years |
| Organophosphorus Pesticides*** | mg/l  | Five years |
| Polychlorinated Biphenyls***   | ug/l  | Five years |
| Organochlorine Pesticides***   | ug/l  | Five years |

Table Notes:

1. TOC: top of casing.

\* Field Parameters

\*\* Monitoring Parameters (See Attachment 1)

\*\*\* Constituents of Concern (See Attachment 1)

## **V. WATER QUALITY PROTECTION STANDARD**

### **A. COMPONENTS**

The WQPS consists of the following elements: Constituents of Concern, Concentrations Limits, Monitoring Points, Points of Compliance, and Compliance Period.

Each of these is described as follows:

### **B. CONSTITUENTS OF CONCERN**

The COCs, as required under California Code of Regulations, title 27, Section 20395, shall include all constituent groups identified in Attachment 1. The Discharger shall test samples for all COCs every five years or more frequently, as required under this MRP.

### **C. CONCENTRATION LIMITS**

The concentration limit for any given COC or monitoring parameter in a given monitored medium (i.e., surface water, groundwater [the uppermost aquifer]) at the SWDS shall be as follows, and shall be used as the basis of comparison with data from the monitoring points in that monitored medium:

1. Concentration limits for man-made chemicals shall be set at method detection limits (MDLs) for individual analytes. Concentration limits for naturally occurring compounds are determined statistically for groundwater and surface water monitoring programs using the tolerance interval method or other appropriate statistical method as approved by the Executive Officer.

#### D. MONITORING POINTS

1. Surface Water - As listed in Section IV(C)(1)
2. Groundwater - As listed in Section IV(D)(1)

#### E. POINTS OF COMPLIANCE

The point of compliance for the WMU is the vertical surface located at the downgradient limit of the WMU that extends through the uppermost aquifer underlying the WMU.

Groundwater at the SWDS is present in Franciscan Complex bedrock and the hydraulic gradient is understood to be primarily controlled by the orientation and connection of bedrock joints, fractures, or shear zones. Groundwater monitoring data suggests that the landfill overlies a groundwater divide. The wells currently located closest to the point of compliance at the SWDS are: MP-1 and G-5 (located in the canyon to the north); G-1 and G-2 (located in the canyon to the south); and G-4 (located adjacent to the WMU's northeast boundary). Well G-3 is upgradient of the WMU. Wells G-6 and G-7, located downgradient of the WMU and south to southwest of G-1 and G-2, are corrective action monitoring wells installed to monitor the effectiveness of burn dump removal corrective action activities performed in 2008 and 2009.

#### F. COMPLIANCE PERIOD

The compliance period is the number of years equal to the active life of the SWDS plus the closure period. Each time the WQPS is exceeded (i.e., a release is discovered), the SWDS begins a compliance period on the date the Regional Water Board directs the Discharger to begin an evaluation monitoring program. If the Discharger's corrective action program has not achieved compliance with the WQPS by the scheduled end of the compliance period, the compliance period is automatically extended until the SWDS has been in continuous compliance for at least three consecutive years.

#### G. PETITION PROCESS

Any person aggrieved by this action of the North Coast Water Board may petition the State Water Board to review the action in accordance with Water Code Section 13320 and California Code of Regulations, title 23, Sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final falls on a Saturday, Sunday, or state holiday (including mandatory furlough days), 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 may be found on the Internet at [Petitions](https://www.waterboards.ca.gov/public_notices/petitions/water_quality/) (https://www.waterboards.ca.gov/public\_notices/petitions/water\_quality/ or will be provided upon request).

The Discharger shall implement the above monitoring program beginning on the effective date of this Order, June 16-17, 2026

Ordered by: \_\_\_\_\_  
Valerie Quinto  
Executive Officer

Attachment 1 – Monitoring Parameters and Constituents of Concern, Approved EPA Analytical Methods

(26\_0013\_Guerneville SWDS\_MRP)

**ATTACHMENT 1**

**MONITORING PARAMETERS AND CONSTITUENTS OF  
CONCERN APPROVED US EPA ANALYTICAL METHODS**

| Inorganics (dissolved): | USEPA Method     |
|-------------------------|------------------|
| Aluminum                | 6000/7000 Series |
| Antimony                | 7041             |
| Arsenic                 | 7062             |
| Barium                  | 6010             |
| Beryllium               | 6010             |
| Cadmium                 | 7131A            |
| Chromium                | 6010             |
| Cobalt                  | 6000/7000 Series |
| Copper                  | 6000/7000 Series |
| Silver                  | 6000/7000 Series |
| Tin                     | 6000/7000 Series |
| Vanadium                | 6000/7000 Series |
| Zinc                    | 6000/7000 Series |
| Iron                    | 6000/7000 Series |
| Manganese               | 6000/7000 Series |
| Lead                    | 7421             |
| Mercury                 | 7470A            |
| Nickel                  | 7521             |
| Selenium                | 7742             |
| Thallium                | 7841             |

|                                  |                     |
|----------------------------------|---------------------|
| Inorganics (dissolved):          | USEPA Method        |
| Cyanide                          | 9010B or 335.2      |
| Sulfide                          | 9030B or SM 4500-2F |
| Calcium                          | 6000/7000 Series    |
| Magnesium                        | 6000/7000 Series    |
| Sodium                           | 6000/7000 Series    |
| Potassium                        | 6000/7000 Series    |
| Chloride                         | 300.0               |
| Sulfate                          | 300.0               |
| Bicarbonate/Carbonate Alkalinity | SM 2320B            |

Volatile Organic Compounds USEPA Method 8260:

- Acetone
- Acetonitrile (Methyl cyanide)
- Acrolein
- Acrylonitrile
- Allyl chloride (3-Chloropropene)
- Benzene
- Bromochloromethane (Chlorobromomethane)
- Bromodichloromethane (Dibromochloromethane)
- Bromoform (Tribromomethane)
- Carbon disulfide
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane (Ethyl chloride)
- Chloroform (Trichloromethane)
- Chloroprene
- Dibromochloromethane (Chlorodibromomethane)
- 1,2-Dibromo-3-chloropropane (DBCP)
- 1,2-Dibromoethane (Ethylene dibromide; EDB)
- o-Dichlorobenzene (1,2-Dichlorobenzene)
- m-Dichlorobenzene (1,3-Dichlorobenzene)
- p-Dichlorobenzene (1,4-Dichlorobenzene)
- trans- 1,4-Dichloro-2-butene
- Dichlorodifluoromethane (CFC 12)
- 1,1 -Dichloroethane (Ethylidene chloride)
- 1,2-Dichloroethane (Ethylene dichloride)
- 1,1 -Dichloroethylene (1, 1-Dichloroethene; Vinylidene chloride)
- cis- 1,2-Dichloroethylene (cis- 1,2-Dichloroethene)
- trans- 1,2-Dichloroethylene (trans- 1,2-Dichloroethene)
- 1,2-Dichloropropane (Propylene dichloride)
- 1,3-Dichloropropane (Trimethylene dichloride)
- 2,2-Dichloropropane (Isopropylidene chloride)
- 1,1 -Dichloropropene
- cis- 1,3-Dichloropropene
- trans- 1,3-Dichloropropene
- Di-isopropylether (DIPE)
- Ethanol
- Ethyltertiary butyl ether
- Ethylbenzene
- Ethyl methacrylate
- Hexachlorobutadiene
- Hexachloroethane
- 2-Hexanone (Methyl butyl ketone)
- Isobutyl alcohol
- Methacrylonitrile
- Methyl bromide (Bromomethane)

- Methyl chloride (Chloromethane)
- Methyl ethyl ketone (MEK; 2-Butanone)
- Methyl iodide (Iodomethane)
- Methyl t-butyl ether
- Methyl methacrylate
- 4-Methyl-2-pentanone (Methyl isobutyl ketone)
- Methylene bromide (Dibromomethane)
- Methylene chloride (Dichloromethane)
- Naphthalene
- Propionitrile (Ethyl cyanide)
- Styrene
- Tertiary amyl methyl ether
- Tertiary butyl alcohol
- 1,1,1,2-Tetrachloroethane
- 1,1,2,2-Tetrachloroethane
- Tetrachloroethylene (Tetrachloroethene; Perchloroethylene; PCE)
- Toluene
- 1,2,4-Trichlorobenzene
- 1,1,1 -Trichloroethane, Methylchloroform
- 1,1,2-Trichloroethane
- Trichloroethylene (Trichloroethene; TCE)
- Trichlorofluoromethane (CFC- 11)
- 1,2,3-Trichloropropane
- Vinyl acetate
- Vinyl chloride (Chloroethene)
- Xylene (total)
- Semi-Volatile Organic Compounds:

Semi-Volatile Organic Compounds USEPA Method 8270 - base, neutral, & acid extractables

- Acenaphthene
- Acenaphthylene
- Acetophenone
- 2-Acetylaminofluorene (2-AAF)
- 4-Aminobiphenyl
- Anthracene
- Benzo[a]anthracene (Benzanthracene)
- Benzo[b]fluoranthene
- Benzo[k]fluoranthene
- Benzo[g,h,i]perylene
- Benzo[a]pyrene
- Benzyl alcohol
- Bis(2-ethylhexyl) phthalate
- Bis(2-chloroethoxy)methane
- Bis(2-chloroethyl) ether (Dichloroethyl ether)
- Bis(2-chloro-1-methylethyl) ether (Bis(2-chloroisopropyl) ether; DCIP)

- 4-Bromophenyl phenyl ether
- Butyl benzyl phthalate (Benzyl butyl phthalate)
- p-Chloroaniline
- Chlorobenzilate
- p-Chloro-m-cresol (4-Chloro-3-methylphenol)
- 2-Chloronaphthalene
- 2-Chlorophenol
- 4-Chlorophenyl phenyl ether
- Chrysene
- o-Cresol (2-methylphenol)
- m-Cresol (3-methylphenol)
- p-Cresol (4-methylphenol)
- Diallate
- Dibenz[a,h]anthracene
- Dibenzofuran
- 1,2-Dibromo-3-chloropropane
- Di-n-butyl phthalate
- 3,3'-Dichlorobenzidine
- 2,4-Dichlorophenol
- 2,6-Dichlorophenol
- Diethyl phthalate
- p-(Dimethylamino)azobenzene
- 7,12-Dimethylbenz[a]anthracene
- 3,3'-Dimethylbenzidine
- 2,4-Dimethylphenol (m-Xylenol)
- Dimethyl phthalate
- m-Dinitrobenzene
- 4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)
- 2,4-Dinitrophenol
- 2,4-Dinitrotoluene
- 2,6-Dinitrotoluene
- Di-n-octyl phthalate
- Diphenylamine
- Ethyl methanesulfonate
- Famphur
- Fluoranthene
- Fluorene
- Hexachlorobenzene
- Hexachlorocyclopentadiene
- Hexachloroethane
- Hexachloropropene
- Indeno(1,2,3-c,d)pyrene
- Isodrin
- Isophorone
- Isosafrole
- Kepone

- Methapyrilene
- 3-Methylcholanthrene
- Methyl methanesulfonate
- 2-Methylnaphthalene
- 1,4-Naphthoquinone
- 1-Naphthylamine
- 2-Naphthylamine
- o-Nitroaniline (2-Nitroaniline)
- m-Nitroaniline (3-Nitroaniline)
- p-Nitroaniline (4-Nitroaniline)
- Nitrobenzene
- o-Nitrophenol (2-Nitrophenol)
- p-Nitrophenol (4-Nitrophenol)
- N-Nitrosodi-n-butylamine (Di-n-butylNitrosamine)
- N-Nitrosodiethylamine (DiethylNitrosamine)
- N-Nitrosodimethylamine (DimethylNitrosamine)
- N-Nitrosodiphenylamine (DiphenylNitrosamine)
- N-Nitrosodipropylamine (N-Nitroso-N-dipropylamine; Di-n-propylNitrosamine)
- N-Nitrosomethylethylamine (MethylethylNitrosamine)
- N-Nitrosopiperidine
- N-Nitrosospyrrolidine
- 5-Nitro-o-toluidine
- Pentachlorobenzene
- Pentachloronitrobenzene (PCNB)
- Pentachlorophenol
- Phenacetin
- Phenanthrene
- Phenol
- p-Phenylenediamine
- Pronamide
- Pyrene
- Safrole
- 1,2,4,5-Tetrachlorobenzene
- 2,3,4,6-Tetrachlorophenol
- o-Toluidine
- 2,4,5-Trichlorophenol
- 0,0,0-Triethyl phosphorothioate
- sym-Trinitrobenzene

Chlorophenoxy Herbicides: USEPA Method 8151A:

- 2,4-D (2,4-Dichlorophenoxyacetic acid)
- Dinoseb (DNBP; 2-sec-Butyl-4,6-dinitrophenol)
- Silvex (2,4,5-Trichlorophenoxypropionic acid; 2,4,5-TP)
- 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)

Organophosphorus Pesticides USEPA Method 8141A:

- Atrazine (Method 507 or alternate method)
- Chlorpyrifos
- 0,0-Diethyl 0-2-pyrazinyl phosphorothioate (Thionazin)
- Diazinon
- Dimethoate
- Disulfoton
- Ethion
- Methyl parathion (Parathion methyl)
- Parathion
- Phorate
- Simazine (Method 507 or alternate method)

Organochlorinated Pesticides USEPA Method 8081/8082:

- Aldrin
- alpha-BHC
- beta-BHC
- delta-BHC
- gamma-BHC (Lindane)
- Chlordane (Chlordane-alpha and Chlordane-gamma)
- 4,4'-DDD
- 4,4'-DDE
- 4,4'-DDT
- Dieldrin
- Endosulfan I
- Endosulfan II
- Endosulfan sulfate
- Endrin
- Endrin ketone
- Endrin aldehyde
- Heptachlor
- Heptachlor epoxide
- Methoxychlor
- Mirex
- Toxaphene

Polychlorinated Biphenyls USEPA Method 8081/8082:

- Aroclor 1016
- Aroclor 1221
- Aroclor 1232
- Aroclor 1242

- Aroclor 1248
- Aroclor 1254
- Aroclor 1260