California Regional Water Quality Control Board North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2017-0001

FOR

HUMBOLDT BAY HARBOR, RECREATION, AND CONSERVATION DISTRICT, FRESHWATER TISSUE COMPANY LLC, AND LOUISIANA PACIFIC CORPORATION

SAMOA CLASS III SOLID WASTE DISPOSAL SITE WDID NO. 1B730610HUM

Humboldt County

The Discharger shall maintain water quality monitoring systems that are appropriate for detection monitoring, and that comply with California Code of Regulations, title 27, subchapter 3, chapter 3, subdivision 1, division 2, and any other applicable provisions therein.

Compliance with this Monitoring and Reporting Program (MRP) is ordered by Waste Discharge Requirements (WDRs) Order No. R1-2017-0001. California Water Code sections 13267 and 13383 authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement California law. Failure to comply with this MRP constitutes non-compliance with the WDRs and with Division 7 of the California Water Code, which can result in the imposition of civil monetary liability.

I. REPORTING

The Discharger shall report monitoring data and information as required in this MRP and as required in the WDRs. 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.

All testing, other than field parameters, shall be performed at a laboratory certified by the State Water Board Division of Drinking Water or approved by the Regional Water Board Executive Officer (EO). Instruments used for field parameters shall be kept in good condition and calibrated according to manufacturer's requirements. Reports which 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 must include, but shall not be limited to the following:

1. <u>Letter of Transmittal</u>:

A letter transmitting the essential points must 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.

2. <u>Compliance Summary</u>:

The summary shall contain at least 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.

3. <u>Tabular Presentation of Data</u>:

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 illustrate clearly the compliance with waste discharge requirements or the lack thereof.

4. <u>Graphical Presentation of Data (Annual Report)</u>:

For each monitoring point in each medium, 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 (for intra-well comparison) or more (for inter-well comparisons) monitoring points in a single medium. Where applicable, 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, and flow direction for each respective groundwater body. Present this data on a figure that depicts groundwater contours and flow directions as well as gradient. Include one figure for each water level measuring period in the monitoring report.

5. <u>Corrective Action Summary</u>:

If the facility enters corrective action, discuss significant aspects of any corrective action measures conducted during the monitoring period and the status of any ongoing corrective action efforts, including constituent trend analysis.

6. Laboratory Results:

Summarize and report laboratory results and statements demonstrating compliance with **Part II. Monitoring Programs**. Include results of analyses performed at the facility that are outside of the requirements of this MRP.

Analytical laboratory results shall be sent to Regional Water Board staff via email to <u>Gina.Morrison@waterboards.ca.gov</u>, within ten business days of when they are submitted to the Discharger. Since the results have not undergone quality assurance and approval by the licensed professional preparing the monitoring reports, these results may be marked preliminary at the licensed professional's discretion.

7. <u>Sampling Summary</u>:

- a. 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.
- b. For each monitoring point, the monitoring report shall include: a description of the type of sampling device used; its placement for sampling; 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 qualification of the person actually taking the samples; and description of any anomalies).

-4-

8. <u>Leachate Detection</u>:

A summary of results from any leachate detection monitoring and sampling shall be reported in the monitoring report.

9. <u>Standard Observations</u>:

Each monitoring report shall include a summary and certification of completion of all standard observations for the entire facility including the waste management units (WMUs); the perimeter of the WMU; and the receiving waters. The standard observations shall be performed monthly during the rainy season (October through May), every other month during the dry season (June through September), and after rainfall events of more than 1.5 inches in 24 hours. Daily rainfall shall be tracked at either an on-site weather gauge or at the nearest National Oceanic and Atmospheric Administration (NOAA) weather station and the daily rainfall data shall be included in each semi-annual monitoring report. The standard observations shall include: condition of WMU cover; whether storm water drainage ditches and sedimentation ponds contain liquids; condition of drainage facilities; whether there are any leachate seeps present, including estimates of seep size and flow; presence of odors; evidence of ponding; evidence of erosion or potential erosion; slope failures or potential slope failures; condition of vegetation on WMUs, including determining whether any deeprooted vegetation is present; inspection of storm water discharge locations for evidence of non-storm water discharges; evidence of floating and suspended material or 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, which were made during the monitoring period. The standard observation inspection reports shall also be submitted with any written incident report, if necessary.

10. <u>Map(s)</u>:

The base map for the monitoring report must consist of a current aerial photograph or include relative topographical features, along with monitoring points and features of the facility.

A. REQUIRED REPORTS

1. Detection Monitoring Report

Detection Monitoring Reports (DMRs) shall be prepared and submitted to the Regional Water Board semi-annually by the reporting dates listed below. Groundwater sampling shall occur in August and February of each year or as close to those months as possible. If necessary, leachate sampling shall occur as soon as practical, but no longer than within seven days of finding a leachate seep. The reports shall include the results of all monitoring programs listed herein. The established monitoring and reporting period is as follows:

<u>Semi-Annual</u>	PERIOD NO.	<u>DUE DATE¹</u>	
October – March	1	April 15	
April – September	2	October 31	Annual Report

2. Annual Report

An annual report, which summarizes the monitoring results for the prior two semi-annual periods, shall be submitted to the Regional Water Board so that it is received no later than October 31 following the last semi-annual period being reported. The report shall contain both tabular and graphical summaries of the detection monitoring data and a discussion of compliance with WDRs and the Water Quality Protection Standard (WQPS). In lieu of submitting a separate report, the annual report information may be combined with the second semiannual DMR. Historical and current monitoring data obtained during the previous 36 months shall be graphed at least once annually and submitted within the annual report. Graphs for the same constituent shall be plotted at the same scale to facilitate visual comparison of monitoring data. The annual report shall include a map showing any areas of differential settlement, highlighting areas of repeat or severe differential settlement. This map shall be made by or under the direction of a California Registered Civil Engineer or Certified Engineering Geologist. The annual report shall also include the results of any additional monitoring, including soil gas monitoring.

3. Leachate Seep or Major Incident Reporting

In the event of the discovery of a leachate seep or major incident, such as storm damage to the facility, the Discharger shall immediately report the incident the Regional Water Board and diligently act to abate the effects of any discharge. Written confirmation of an event is required within two weeks of the discovery of the event.

4. Water Quality Protection Standard Report

Louisiana Pacific Corporation submitted a water quality protection standard report titled *Article 5 Water Quality Monitoring Program for the Louisiana Pacific Corporation's Samoa Landfill* dated May 1998. Any changes to the WQPS are to be included in the Annual Report.

5. Five Year Iso-Settlement Map

The Discharger produced iso-settlement maps in 2008 and 2013 which were compared to the 2003 post-closure settlement survey and have found no significant settlement. Accordingly, this requirement has been suspended. Annual settlement inspections per California Code of Regulations, title 27,

¹ The due date is the date by which the report must be received by the Regional Water Board.

section 21090(e)(4) shall continue and if any significant changes in settlement occur or if significant cover repairs occur, this requirement may be reinstated. If so, a new iso-settlement map shall be required no earlier than the summer of 2018.

6. Visual Settlement Survey

The Discharger shall perform a visual settlement survey per California Code of Regulations, title 27, section 21090(e)(4). The map with the survey results shall be submitted with the annual report.

7. Annual Erosion Control Report

By October 15, annually, the Discharger shall submit to the Executive Officer a narrative describing any measures taken to comply with erosion control requirements. This shall include a description of any erosion control measures implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities. The Executive Officer may delete the requirement for submitting annual erosion control reports upon finding that no erosion control work is necessary prior to the return of winter rains.

8. Emergency Response Plan

The Joint Technical Document included the most current emergency response plan for the facility, dated May 2016. The emergency response plan shall be updated and submitted in the annual report by October 2021, October, 2026, and at a minimum every five years thereafter; or sooner if there are key personnel changes or if during its implementation problems were found.

9. Constituents of Concern (COC)

The results of COC monitoring shall be submitted with, or reported in, the semiannual Report for the date matching the sampling event. COC sampling shall occur every five years, or more frequently if required. The groundwater monitoring COC sampling shall alternate between winter and summer seasons; Summer 2017, Winter 2022, and every five years thereafter.

10. Constituents of Concern Detection Report

If COCs that are not currently being analyzed for in the semi-annual monitoring well sampling are detected in groundwater or leachate, then it may be resampled for those constituents within 30 days of receiving the results from the initial sampling. If confirmed by re-test or not re-tested, then these constituents shall be added to the semi-annual monitoring well sampling. The Discharger shall report any changes to the monitoring well sampling program, made as a result of sampling data, to the Regional Water Board no later than 45 days after re-sampling. If no new constituents are detected, submittal of this report is not necessary and any results shall be reported with the corresponding semi-annual report.

11. 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 any indicator parameter or waste constituent over the WQPS at or beyond the points of compliance (i.e., measurably significant evidence of an exceedence or release), the Discharger shall:

- a. immediately notify the Regional Water Board by telephone, email, or fax of the exceedence,
- b. within seven days of the initial findings, follow up with written notification (or acknowledgment of the Board's finding),
- c. 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
- d. within 60 days of the initial finding, submit the results of the re-sampling and statistical analysis, indicating whether or not an exceedence or release was confirmed by the re-test.

12. Detection of a Release

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

- a. Shall immediately sample all monitoring points in the affected medium at the WMUs 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 Regional Water Board or 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. [Cal. Code Regs., title 27, § 20420(k)(1)]
- b. 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).
- c. Within 180 days of verifying measurably significant evidence of a release from a WMU, submit an engineering feasibility study for a corrective action program. The corrective action program shall, at a minimum, meet the requirements of California Code of Regulations, title 27, section 20430. [Cal. Code Regs., title 27, § 20420(k)(6)]

13. Responding to a Release Discovery

Upon verifying a measurably significant evidence of a release from a WMU according to California Code of Regulations, title 27, section 20420(j) and Section I.A.7 and I.A.8 of this MRP, the Discharger shall follow the procedures and timeline described in California Code of Regulations, title 27, section 20420(k).

14. Financial Assurance Reporting

By April 15th proof of adequate assurances of financial responsibility for postclosure maintenance and corrective action for all known or reasonably foreseeable releases from a WMU at the facility in accordance California Code of Regulations, title 27, sections 20380(b), 20950(f), 22210, 22211, 22212, 22220, 22221, and 22222 and include annual accounting for inflation.

By October 31, 2021, 2026, and every five years thereafter, for the term of this MRP, the Discharger shall provide as part of the annual monitoring report an updated post-closure costs and corrective action cost estimate to the Regional Water Board for review. The Discharger shall demonstrate to CalRecycle and report to the Regional Water Board that it has established an acceptable financial assurance mechanism described in California Code of Regulations, title 27, section 22228 in at least the amount of the cost estimate approved by the EO. The EO may delete the requirement of submitting updated cost estimates, with the exception of inflation adjustments, upon finding that the need for further corrective action is unlikely and that post-closure costs are likely to remain constant.

II. MONITORING PROGRAMS

A. ROUTINE MAINTENANCE

The facility shall be inspected monthly during the rainy season (October through May), every other month during the dry season (June through September), and after rainfall events of more than 1.5 inches in 24 hours per Section I 9. Standard Observations. 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 existing landfill unit for applicable COCs. For this facility groundwater and leachate, if present, are the mediums monitored for applicable COCs. Because the previous COC results in the upgradient wells have not detected any of the additional

analytes, only the downgradient wells will be sampled for the 5-year COC sampling. If results from a 5-year COC sampling trigger a re-test, all wells will be sampled and tested for those constituents. Analytes requiring semi-annual sampling will be required at all well locations. The monitoring locations, analytical methods, and frequency of analyses are as follows:

1. Monitoring Locations

- a. <u>Groundwater Monitoring Wells</u> Wells MW-1 and MW-2. Unless detection requires re-testing, which shall also include MW-3 and MW-4 for the same parameters being re-tested.
- b. <u>Leachate Wells or Sumps</u> if established.

2. Monitoring Schedule

TABLE II. BCONSTITUENTS OF CONCERN MONITORING

<u>Constituents of Concern</u>	<u>Units</u>	<u>Frequency</u>
Field Parameters		
pH	pH units	Semi-annually
Specific Lonductance	Mhos/cm	Semi-annually
Chioride	mg/1	Semi-annually
Nitrate-Nitrogen	mg/l	Semi-annually
Total Dissolved Solids (TDS)	mg/l	Semi-annually
Chemical Oxygen Demand (COD)	mg/l	Semi-annually
Hardness	mg/l	Semi-annually
Volatile Organic Compounds (EPA Method 8260 –	ug/l	Every 5 years
low level detection)	0,	
Semi-Volatile Organic Compounds (EPA Method	ug/l	Every 5 years
8270)	0/	5 5
Dioxins and Furans (EPA Method 1613-A)	pg/l	Every 5 years
Polynuclear Aromatic Compounds (EPA Method	ug/l	Every 5 years
8310)		
Pentachlorophenol/Tetrachlorphenol (Canadian	ug/l	Every 5 years
Pulp Method)	0,	
<u>Constituents of Concern</u>	<u>Units</u>	<u>Frequency</u>
ICAP Metals:		
Aluminum	mg/l	Semi-annually
Antimony	mg/l	Every 5 years
Arsenic	mg/l	Semi-annually
Barium	mg/l	Semi-annually
Bervllium	mg/l	Every 5 years
Boron	mg/l	Every 5 vears
Cadmium	mg/l	Every 5 vears
Calcium	mg/l	Semi-annually
Chromium	mg/l	Semi-annually
Gin Ollitulli	6/ -	senn annually

<u>Constituents of Concern</u>	<u>Units</u>	<u>Frequency</u>
Cobalt	mg/l	Semi-annually
Copper	mg/l	Every 5 years
Iron	mg/l	Semi-annually
Lead	mg/l	Every 5 years
Manganese	mg/l	Semi-annually
Magnesium	mg/l	Every 5 years
Molybdenum	mg/l	Every 5 years
Nickel	mg/l	Every 5 years
Potassium	mg/l	Semi-annually
Selenium	mg/l	Every 5 years
Silver	mg/l	Every 5 years
Sodium	mg/l	Semi-annually
Strontium	mg/l	Semi-annually
Thallium	mg/l	Every 5 years
Tin	mg/l	Every 5 years
Vanadium	mg/l	Semi-annually
Zinc	mg/l	Every 5 years

C. LEACHATE SEEP MONITORING

1. Monitoring Locations

There are not any established leachate seep monitoring locations. Any seeps located during inspections shall be sampled as soon as possible, but no more than 7 days after the discovery.

2. Monitoring Schedule

Leachate monitoring shall be conducted as specified in Table II.C when leachate seeps are present. Samples shall be collected upon discovery of any given seep and tested for all analytes in Table II. C. Subsequently, samples shall be collected monthly while flowing and tested for any analytes that were detected in the initial sampling. See Section I. A.7. for reporting requirements when constituents that are not part of the semi-annual groundwater monitoring are detected. The discovery of the seep shall be immediately reported with a written follow-up notification within two weeks. Leachate results shall be reported within two weeks of receipt from the laboratory and with the corresponding semi-annual report.

TABLE II.C LEACHATE MONITORING PROGRAM

Parameter <u>Units</u> Field Parameters Volume outhauled gallons per day **Specific Conductance** mhos/cm pH units pН Monitoring Parameters Chloride mg/l mg/l Nitrate-Nitrogen Total Dissolved Solids (TDS) mg/l Chemical Oxygen Demand (COD) mg/l Hardness mg/l Volatile Organic Compounds (EPA Method 8260 – low level ug/l detection) Semi-Volatile Organic Compounds (EPA Method 8270) ug/l Dioxins and Furans (EPA Method 1613-A) pg/l Polynuclear Aromatic Compounds (EPA Method 8310) ug/l Pentachlorophenol/Tetrachlorphenol (Canadian Pulp Method) ug/l **ICAP Metals:** Aluminum mg/l Antimony mg/l Arsenic mg/l Barium mg/l Beryllium mg/l Boron mg/l Cadmium mg/l Calcium mg/l Chromium mg/l Cobalt mg/l Copper mg/l Iron mg/l Lead mg/l Manganese mg/l Magnesium mg/l Molybdenum mg/l Nickel mg/l Potassium mg/l Selenium mg/l Silver mg/l

mg/l

mg/l

mg/l

mg/l

mg/l

mg/l

Sodium

Strontium

Vanadium

Thallium

Tin

Zinc

D. DETECTION MONITORING

For each monitoring medium, samples from all monitoring points assigned to detection monitoring shall be collected and tested per Table III.C. 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 as soon as the monitoring data are available. 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 EO.

E. GROUNDWATER ELEVATION MONITORING

Groundwater elevations measured prior to purging the well and sampling for monitoring parameters shall be used to fulfill the groundwater gradient/direction analyses required. For each monitored groundwater body, the Discharger shall measure the water level in each well and shall determine groundwater gradient and direction at least semi-annually, including 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.

III. DETECTION MONITORING

A. GENERAL

The Discharger shall perform detection monitoring on all media potentially affected by a release, including surface water, groundwater, and the unsaturated zone. 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 shall be taken 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 a Board-approved statistical (or non-statistical) procedure to

determine whether there has been a measurably significant increase in a constituent over the WOPS.

B. UNSATURATED ZONE

Any landfill gas monitoring results shall be included with the semi-annual monitoring program reports.

C. **GROUNDWATER**

The groundwater surface elevation (in feet and hundredths, M.S.L.) in all wells shall be measured on a semi-annual basis and used to determine the gradient and direction of groundwater flow. The frequency of groundwater elevation measurement was reduced from the quarterly required in California Code of Regulations, title 27, based on historical data only showing semi-annual variation. Additional monitoring wells shall be added to the program as needed.

1. Monitoring Locations

The groundwater detection monitoring points for the facility, shown in Attachment B, are as follows:

Background Monitoring Wells:	MW-3 and MW-4
Downgradient Monitoring Wells:	MW-1 (during wet season) and MW-2
Point of Compliance Wells:	MW-1 and MW-2

Water levels shall be monitored semi-annually. Any additional monitoring wells constructed at the facility shall be added to the monitoring network. Samples shall be collected from all installed wells at the frequency and for the parameters specified in Table III.C below.

2. Monitoring Schedule

The analytes and frequency of groundwater monitoring is as follows:

TABLE III.C. GROUNDWATER DETECTION MONITORING PROGRAM

Parameter	<u>Units</u>	<u>Frequency</u>
Field Parameters	nH units	Comi oppuallu
Specific Conductance	Mhos/cm	Semi-annually
Temperature	⁰ C	Semi-annually
Groundwater Elevations	feet/tenths TOC	Semi-annually
Monitoring Parameters Chloride	mg/l	Semi-annually

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
Nitrate-Nitrogen	mg/l	Semi-annually
Total Dissolved Solids (TDS)	mg/l	Semi-annually
Chemical Oxygen Demand (COD)	mg/l	Semi-annually
Hardness	mg/l	Semi-annually
ICAP Metals:		-
Aluminum	mg/l	Semi-annually
Arsenic	mg/l	Semi-annually
Barium	mg/l	Semi-annually
Calcium	mg/l	Semi-annually
Chromium	mg/l	Semi-annually
Cobalt	mg/l	Semi-annually
Iron	mg/l	Semi-annually
Manganese	mg/l	Semi-annually
Potassium	mg/l	Semi-annually
Sodium	mg/l	Semi-annually
Strontium	mg/l	Semi-annually
Vanadium	mg/l	Semi-annually

IV. WATER QUALITY PROTECTION STANDARD

The WQPS consists of the following elements:

- A. Constituents of Concern;
- B. Concentration Limits;
- C. Monitoring Points;
- D. Points of Compliance; and
- E. Compliance Period.

Each of these is described as follows:

A. Constituents of Concern

The COCs required under California Code of Regulations, title 27, section 20395 shall include all constituent groups identified in Table II.B. The Discharger shall monitor all COCs every five years or more frequently as required under the detection monitoring program.

B. Concentration Limits

The Concentration Limit for any given COC or monitoring parameter in a given monitored medium (i.e., the uppermost aquifer) at a landfill shall be as follows, and shall be used as the basis of comparison for data from the monitoring points in that monitored medium:

a. Concentration limits for man-made chemicals shall be set at method detection limits.

- b. Concentration limits for naturally occurring compounds are determined by intrawell comparison using the tolerance limit statistical method.
- c. A concentration limit greater than background, as approved by the Regional Water Board for use during or after corrective action.

C. Monitoring Points

- 1. Unsaturated Zone The Discharger shall submit copies of any gas monitoring that is conducted at the facility.
- 2. Groundwater The groundwater monitoring points for leak detection are MW-1, MW-2, MW-3, and MW-4.

D. Point of Compliance

The point of compliance is the downgradient (western) boundary of the WMUs (see Attachment B). The groundwater wells at or nearest the point of compliance are MW-1 and MW-2. These wells shall be used to measure compliance with the WQPS.

E. Compliance Period

The compliance period is the number of years equal to the active life of the landfill plus the closure period. The compliance period for this landfill is 30 years. Each time the WQPS is exceeded (i.e., a release is discovered), the landfill begins a compliance period on the date the 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 landfill has been in continuous compliance for at least three consecutive years.

The Discharger shall implement the above monitoring program on the effective date of this Order.

Ordered by: _____

Matthias St. John Executive Officer

February 2, 2017

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