CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. R7-2013-0048

FOR

COUNTY OF IMPERIAL, OWNERBURRTEC WASTE INDUSTRIES, OPERATOR SALTON CITY CLASS III MUNICIPAL SOLID WASTE MANAGEMENT FACILITY

Southwest of Salton City-Imperial County

CONSISTS OF

PART I, PART II, AND PART III

PART I

A. GENERAL

A Discharger who owns or operates a Waste Management Facility is required to comply with the provisions of Chapter 3, Subchapter 3, Article 1,Title 27, California Code of Regulations for the purpose of detecting, characterizing, and responding to releases to the ground water. Section 13267, California Water Code gives the Regional Water Board authority to require monitoring program reports for discharges that could affect the quality of waters within its region. State Water Resources Control Board Resolution No. 93-062 requires the Regional Water Board to implement federal Municipal Solid Waste Regulations (Title 40 Code of Federal Regulations, Parts 257 and 258).

This self-monitoring program is issued pursuant to Provision No. 8 of Regional Water Board Order No. R7-2013-0048. The principal purposes of a self-monitoring program by a waste discharger are:

- 1. To document compliance with WDRs and prohibitions established by the Regional Board;
- 2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge;
- 3. To prepare water quality analyses.

B. DEFINITION OF TERMS

- The "Monitored Media" are those water- or gas-bearing media that are monitored pursuant to this Monitoring and Reporting Program. The monitored Media may include:

 ground water in the uppermost aquifer, in any other portion of the zone of saturation (Section 20164, Title 27) in which it would be reasonable to anticipate that waste constituents migrating from the WMF could be detected, and in any perched zones underlying the WMF, (2) any bodies of surface water that could be measurably affected by a release, (3) soil-pore liquid beneath and/or adjacent to the WMF, and (4) soil-pore gas beneath and/or adjacent to the WMF.
- 2. The "Constituents of Concern (COC)" are those constituents which are likely to be in the waste in the landfill or which are likely to be derived from waste constituents, in the event of a release. The list of Constituents of Concern for this WMF is found in Part III, Summary of Monitoring and Reporting Programs, C.2. of this program.
- 3. The "Monitoring Parameters" consists of a short list of constituents and parameters used for the majority of the monitoring activity. The list of Monitoring Parameters for this WMF is found in Part III. Summary of Monitoring and Reporting Programs, C.1. of this program. Monitoring for the short list of Monitoring Parameters constitutes "indirect monitoring", in that the results are used to indirectly indicate the success or failure of adequate containment for the longer list of Constituents of Concern.
- 4. The "Volatile Organics Composite Monitoring Parameter for Water (VOCwater)" and the "Volatile Organics Composite Monitoring Parameter for Soil-Pore Gas

(VOCgas)" are composite Monitoring Parameters addressing all volatile organic constituents detectable in a sample of water- or soil-pore gas, respectively

5. "Standard Observations" refers to:

- a. For Adjacent Surface Waters or Receiving Waters:
 - 1) Floating and suspended materials of waste origin: presence or absence, source, and size of affected area;
 - 2) Discoloration and turbidity: description of color, source, and size of affected area;
 - 3) Evidence of odors: presence or absence, characterization, source, and distance of travel from source;
 - 4) Evidence of beneficial use: presence of water-associated wildlife;
 - 5) Flow Rate; and
 - 6) Weather conditions: wind direction and estimated velocity, total precipitation during the previous five (5) days and on the day of observation.
- b. Along the perimeter of the Landfill:
 - 1) Evidence of liquid leaving or entering the WMF, estimated size of affected area, and flow rate (show affected area on map);
 - 2) Evidence of odors: presence or absence, characterization, source, and distance of travel from source; and
 - 3) Evidence of erosion and/or of exposed refuse.

c. For the Landfill:

- 1) Evidence of ponded water at any point on the WMF (show affected area on map);
- 2) Evidence of odor: presence, characterization, source, and distance of travel from source;
- 3) Evidence of erosion and/or of day-lighted refuse; and
- 4) "Standard Analysis and Measurements", which refers to:
 - (a) Turbidity (only for water samples) in NTU;

- (b) Water elevation to the nearest 1/100th foot above mean sea level (only for ground water monitoring); and
- (c) Sampling and statistical/non-statistical analysis of the Monitoring Parameters.
- 6. "Matrix Effect" refers to any increase in the Method Detection Limit or Practical Quantitation Limit for a given constituent as a result of the presence of other constituents either of natural origin or introduced though a release that are present in the sample of water or soil-pore gas being analyzed.
- 7. "Facility-Specific Method Detection Limit (MDL)", for a given analytical laboratory using a given analytical method to detect a given constituent (in spite of any Matrix Effect) means the lowest concentration at which the laboratory can regularly differentiate with 99 percent reliability between a sample which contains the constituent and a sample which does not.
- 8. "Facility-Specific Practical Quantitation Limit (PQL)", for a given analytical laboratory using a given analytical method to determine the concentration of a given constituent (in spite of any Matrix Effect) means the lowest constituent concentration the laboratory can regularly quantify within specified limits of precision that are acceptable to the Regional Board's Executive Officer.
- 9. "Reporting Period" means the duration separating the submittal of a given type of monitoring report from the time the next iteration of that report is scheduled for submittal. Therefore, the reporting period for Monitoring Parameters is semi-annually. The reporting period for Constituents of Concern is every five years. An Annual Report extends from April 1 of one year to March 31 of the next year. The due date for any given report will be 30 days after the end of its Reporting Period, unless otherwise stated. A summary of due dates for all Monitoring Reports can be found in Part III. Summary of Reporting Requirements of this program.
- 10. "Receiving Waters" refers to any surface water, which actually or potentially receives surface or ground waters, which pass over, through or under waste materials or contaminated soils.
- 11. "Affected Persons" refers to all individuals who either own or reside upon the land that directly overlies any part of that portion of gas or liquid-phase release that has migrated beyond the facility boundary.

C. SAMPLING AND ANALYTICAL METHODS

Sampling collection, storage, and analysis shall be performed according to the most recent version of Standard USEPA methods, and in accordance with an approved sampling and analysis plan. Water and waste analysis shall be performed by a laboratory approved by the State of California for these analyses. Specific methods of

analysis must be identified. If methods other than USEPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Water Board's Executive Officer prior to use. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Water Board. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements. In addition, the Discharger is responsible for seeing that the laboratory analysis of all samples from Monitoring Points and Background Monitoring Points meets the following restrictions:

- 1. The methods and analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90 percent non-numerical determinations (i.e. "trace" or "ND") in data from Background Monitoring Points for that medium, the analytical methods having the lowest "facility-specific method detection limit (MDL)", defined in Part I.B.7., shall be selected from among those methods which would provide valid results in light of any "Matrix Effects" (defined in Part I.B.6.) involved.
- "Trace" results, results falling between the MDL and the facility-specific practical quantitation limit (PQL), shall be reported as such, and shall be accompanied both by the estimated MDL and PQL values for that analytical run and by an estimate of the constituent's concentration.
- 3. MDLs and PQLs shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. These MDLs and PQLs shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the laboratory, rather than simply being quoted from USEPA analytical method manuals. If the laboratory suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged accordingly, along with an estimate of the detection limit and quantitation limit actually achieved.
- 4. All QA/QC data shall be reported, along with the sample results to which it applies, including the method, equipment, and analytical detection limits, the recovery rates, an explanation of any recovery rate that is less than 80 percent, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name and qualifications of the person(s) performing the analyses. Sample results shall be reported unadjusted for blank results or spike recovery.
- 5. Upon receiving written approval from the Regional Water Board's Executive Officer, an alternative statistical or non-statistical procedure can be used for determining the significance of analytical results for a constituent that is a common laboratory contaminant (i.e., methylene chloride, acetone, diethylhexyl phthalate, and di-n-octyl phthalate) during any given Reporting Period in which QA/QC samples show evidence of laboratory contamination for that constituent. Nevertheless, analytical results involving detection of these analytes in any

background or downgradient sample shall be reported and flagged for easy reference by the Regional Water Board staff.

- 6. Unknown chromatographic peaks shall be reported, along with an estimate of the concentration of the unknown analyte. When unknown peaks are encountered, second column or second method confirmation procedures shall be performed to attempt to identify and more accurately quantify the unknown analyte.
- 7. In cases where contaminants are detected in QA/QC samples (i.e. field, trip, or laboratory blanks), the accompanying sample results shall be appropriately flagged.
- 8. The MDL shall always be calculated such that it represents a concentration associated with a 99 percent reliability of a non-zero result.

D. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the Discharger or laboratory, and shall be retained for a minimum of five (5) years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Water Board. Such records shall show the following for each sample.

- 1. Identity of sample and of 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 and time of sampling;
- 3. Date and time that analyses were started and completed, and the name of the personnel performing each analysis;
- 4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;
- 5. Calculations of results; and
- 6. Results of analyses, and the MDL and PQL for each analysis.

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E. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. DETECTION MONITORING REPORT

A written "Detection Monitoring Report" shall be submitted twice annually, in addition to an "Annual Summary Report". Every five years, the Discharger shall submit a report concerning the direct analysis of all Constituents of Concern as indicated in the "Summary of Self-Monitoring and Reporting Programs". All reports shall be submitted no later than their respective due dates as summarized in Part III, Summary of

Monitoring and Reporting Requirements. The reports shall be comprised of at least the following:

a. Letter of Transmittal

A letter transmitting the essential points in each report shall accompany each report. Such a letter shall include a discussion of any requirement violations found since the last such report was submitted, and shall describe actions taken or planned for correcting those violations. If the Discharger has previously submitted a detailed time schedule for correcting said requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred since the last submittal, this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or above, or by his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct;

- b. Each Detection Monitoring Report and each COC Report shall include a compliance evaluation summary. The summary shall contain at least:
 - 1) For each monitored ground water body, a description and graphical presentation of the velocity and direction of the ground water flow under/around the WMF, based upon water level elevations taken during the collection of the water quality data submitted in the report;
 - 2) Pre-Sampling Purge for Samples Obtained From Wells: For each monitoring well addressed by the report, a description of the method and time of water level measurement, of the type of pump used for purging and the placement of the pump in the well, and of the method of purging (the pumping rate, the equipment and methods used to monitor field pH, temperature, and conductivity during purging, the calibration of field equipment, results of the pH, temperature, conductivity, and turbidity testing, the well recovery time, and the method of disposing of the purge water);
 - Sampling: For each Monitoring Point and Background Monitoring Point addressed by the report, a description of the type of pump or other device used and its placement for sampling, and a detailed description of the sampling procedure (number and description of the samples, field blanks, travel blanks, and duplicate samples taken, the type of containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations);
- c. A map or aerial photograph showing the locations of observation stations, Monitoring Points, and Background Monitoring Points;
- d. For each Detection Monitoring Report and each COC Report, include laboratory statements of results of all analyses demonstrating compliance with Part I.C.;

- e. An evaluation of the effectiveness of the run-off/run-on control facilities:
- f. A summary and certification of completion of all Standard Observations (Part I.B.5.) for the WMF, for the perimeter of the WMF, and for the Receiving Waters; and
- g. The quantity and types of wastes discharged and the locations in the WMF where waste has been placed since submittal of last such report.

CONTINGENCY REPORTING

- a. The Discharger shall report by telephone concerning any seepage from the disposal area immediately after it is discovered. A written report shall be filed with the Regional Water Board within seven (7) days, containing at least the following:
 - 1) A map showing the locations(s) of seepage;
 - 2) An estimate of the flow rate;
 - 3) A description of the nature of the discharge (e.g., all pertinent observations and analyses); and
 - 4) Corrective measures underway or proposed.
 - b. Should the initial statistical comparison (Part III.A.2.) or non-statistical comparison (Part III.A.3) indicate, for any Constituent of Concern or Monitoring Parameter, that a release is tentatively identified, the Discharger shall immediately notify the Regional Water Board verbally as to the Monitoring Point(s) and constituent(s) or parameter(s) involved, shall provide written notification by certified mail with seven (7) days of such determination (Section 20420(j), Title 27), and shall carry out a discrete retest pursuant to Part III.A.4. If the retest confirms the existence of a release, the Discharger shall monitor the indicated constituent(s) in tracking mode instead of detection mode (see Part III.A.1.b of the M&RP) at that well. In any case, the Discharger shall inform the Regional Water Board of the outcome of the retest as soon as the results are available, following up with written results submitted by certified mail within seven (7) days of completing the retest analysis.
 - c. If either the Discharger or the Regional Water Board determines that there is significant physical evidence of a release (Section 20420(j), Title 27) the Discharger shall immediately notify the Regional Water Board of this fact by certified mail (or acknowledge the Regional Water Board's determination) and shall carry out the requirements of Part I.E.2.d. for all potentially-affected monitored media.
 - d. If the Discharger concludes that a release has been discovered:
 - The Discharger shall, within 90 days of discovering the release, submit a Revised Report of Waste Discharge proposing an Evaluation Monitoring Program meeting the requirements of Section 20420(k)(5) and Section 20425, Title 27; and

- 2) The Discharger shall, within 180 days of discovering the release, submit a preliminary engineering feasibility study meeting the requirements of Section 20420(k)(6), Title 27.
- e. Any time the Discharger concludes or the Regional Water Board Executive Officer directs the Discharger to conclude that a liquid- or gaseous-phase release from the WMF has proceeded beyond the facility boundary, the Discharger shall so notify all persons who either own or reside upon the land that directly overlies any part of the plume (Affected Persons).
 - Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the Discharger's current knowledge of the nature and extent of the release; and
 - 2) Subsequent to initial notification, the Discharger shall provide updates to all Affected Persons – including any newly Affected Persons – within 14 days of concluding there has been any material change in the nature or extent of the release.

3. ANNUAL SUMMARY REPORT

The Discharger shall submit an annual report to the Regional Water Board on April 30th each year covering the previous monitoring year. This report shall contain:

- a. A Graphical Presentation of Analytical Data (Section 20415(e)(14), Title 27). For each Monitoring Point and Background Monitoring Point, submit in graphical format the laboratory analytical data for all samples taken within at least the previous five (5) calendar years. Each such graph shall plot the concentration of one or more constituents over time for a given Monitoring Point and 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. For any given constituent or parameter, the scale for background plots shall be the same as that used to plot downgradient data. On the basis of any aberrations noted in the plotted data, the Regional Water Board's Executive Officer may direct the Discharger to carry out a preliminary investigation (Section 20080(d)(2), Title 27), the results of which will determine whether or not a release is indicated:
- b. All monitoring analytical data obtained during the previous two six-month Reporting Periods, shall be presented digitally in tabular form, in a file format acceptable to the Regional Water Board's Executive Officer. Data sets too large to fit on a single disk may be submitted on disk in a commonly available compressed format (e.g., PK-ZIP or NORTON BACKUP). The Regional Board regards the submittal of data in hard copy and on disk as "...the form necessary for..." statistical analysis (Section 20420(h), Title 27) in that this facilitates periodic review by the Regional Water Board's statistical consultant;
- A comprehensive discussion of the compliance record, and the result of any corrective action taken or planned which may be needed to bring the Discharger into full compliance with the WDRs;

- d. A map showing the area, if any, in which filling has been completed during the previous monitoring year;
- e. A written summary of the ground water and soil-pore gas (if applicable) analyses, indicating any changes made since the previous annual summary report; and
- f. An evaluation of the effectiveness of the Leachate Collection and Removal System (LCRS), pursuant to Section 20340, Title 27.

PART II: MONITORING AND OBSERVATION SCHEDULE A.

WASTE MONITORING

Report semi-annually, as part of the Monitoring Report on **April 30** (Winter/Spring – Reporting Period October 1 through March 31) and **October 30** (Summer/Fall – Reporting Period April 1 through September 30).

- 1. Record the total volume of refuse in cubic yards disposed of at the WMF during each reporting period, showing locations and dimensions of the refuse on a sketch or map.
- 2. Record a description of the waste stream, including the percentage of the waste type (i.e., residential, commercial, industrial, or construction debris).

B. WATER, VADOSE ZONE, AND SOIL-PORE GAS SAMPLING/ANALYSIS FOR DETECTION MONITORING

- 1. Thirty-Day Sample Procurement Limitation. For any given monitored medium, the samples taken from all Monitoring Points and Background Monitoring Points to satisfy the data analysis requirements for a given reporting period shall all be taken within a span not exceeding 30 days, and shall be taken in a manner that ensures sample independence to the greatest extent feasible (Section 20415(e)(12), Title 27). Ground water sampling shall also include an accurate determination of the ground water surface elevation and field parameters (pH, electrical conductivity, temperature) for that Monitoring Point or Background Monitoring Point (Section 20415(e)(13), Title 27); ground water elevations taken prior to purging the well and sampling for Monitoring Parameters shall be used to fulfill the Spring and Fall ground water flow rate/direction analyses required under Part II.B.6. Statistical or non-statistical analysis shall be carried out as soon as the data is available, in accordance with Part III of this program.
- 2. "Indirect Monitoring" for Monitoring Parameters Done Semi-Annually. For each monitoring medium, all Monitoring Points assigned to detection monitoring and all background Monitoring Points (Part II.B.4.) shall be monitoring semi-annually pursuant to the following schedule and for parameters listed in the Part III. Summary of Self Monitoring and Reporting Programs of this program:

First Semi-Annual: October 1 through March 31 – Report Due April 30 Second Semi-Annual: April 1 through September 30 – Report Due October 30

Monitoring for Monitoring Parameters shall be carried out in accordance with Part II.B.1. and Part III of this program.

- 3. "Direct Monitoring" of all Constituent of Concern Every Five (5) Years. In the absence of a release being indicated: (1) pursuant to Part III.A.4. for a Monitoring Parameter, (2) based upon physical evidence, pursuant to Part I.E.2.c. or (3) by a study required by the Regional Water Board's Executive Officer based upon anomalies noted during visual inspection of graphically-depicted analytical data (Part I.E.3.a.), then the Discharger shall sample all Monitoring Points and Background Monitoring Points of water-bearing media, not including soil-pore gas, for all Constituents of Concern every fifth year, with successive direct monitoring efforts being carried out alternately in the Spring of the first semi-annual monitoring period of one 5-year sampling event (monitoring period ends March 31) and the fall of the second semi-annual monitoring period (monitoring period ends September 30) of the next 5-year sampling event, and every fifth year, thereafter. Direct monitoring for Constituents of Concern shall be carried out in accordance with Parts II.B.3 and III. of this program, and shall encompass only those Constituents of Concern listed in the Summary of Self-Monitoring and Reporting Program.
- 4. "Monitoring Points and Background Monitoring Points for Each Monitored Medium": The Discharger shall sample the following Monitoring Points and Background Monitoring Points in accordance with the sampling schedule given under Parts II.B.2. and II.B.3 (immediately foregoing), taking enough samples to qualify for the most appropriate test under Part III.
 - a. For ground water in the uppermost aquifer: The Monitoring Points shall be existing landfill Point of Compliance (downgradient) wells SC-MW-2 and SC-MW-3, and more recently constructed wells GLA-2, GLA-3A, GLA-4, and GLA-5. The Background Monitoring Points shall be existing landfill well SC-MW-1 and recently constructed upgradient well GLA-1. Following relocation of the existing 7.8 acre landfill, wells SCMW-1, SCMW-2, and SC-MW-3 will be properly abandoned and removed from the monitoring program.
 - b. Groundwater monitoring wells are shown on Figure 3, attached hereto and made as part of this Board Order.
- 5. <u>Initial Background Determination:</u> For the purpose of establishing an initial pool of background data for each Constituent of Concern at each Background Monitoring Point in each monitored medium (Section 20415(e)(6), Title 27):
 - a) Whenever a new organic Constituent of Concern is added to the Water Quality Protection Standard, including any added by the adoption of this Order, the Discharger shall collect at least one sample quarterly for at least one (1) year from each Background Monitoring Point in each monitored medium and analyze for the newly-added constituent(s); and

- b) Whenever a new Background Monitoring Point is added, including any added by this Board Order, the Discharger shall sample it at least quarterly for at least one (1) year, analyzing for all Constituents of Concern and Monitoring Parameters.
- 6. <u>Semiannual Determination of Ground Water Flow Rate/Direction:</u> (Section 20415(e)(15), Title 27): The Discharger shall measure the water level in each well and determine ground water flow rate and direction in each ground water body semiannually, including the times of expected highest and lowest elevations of the water level for the respective ground water body. This information shall be included in the semi-annual monitoring report.
- 7. <u>Vadose Zone Monitoring</u>: Due to the shallow depth to groundwater beneath the current and proposed expansion WMU, it is impractical to conduct vadose zone monitoring. The RWQCB and the LEA do not require vadose zone monitoring at the facility.
- 8. <u>Gas Monitoring</u>: Perimeter gas monitoring probes shall be sampled quarterly using a portable combustible gas meter to check for the presence of methane gas while the landfill is operating.
 - a) Gas monitoring results shall be reported to the Regional Water Board semiannually.
 - b) During the post-closure maintenance period, monitoring shall be performed on a semi-annual basis, or at a frequency determined by the Regional Water Board's Executive Officer.
 - c) A corrective action plan shall be implemented in the event that methane gas is detected in quantities greater than the maximum allowable level in Section 17783, of Title 14, or 40 CFR Section 258.23
- 9. <u>Leachate Monitoring</u>: In accordance with RWQCB Order No. 93-071, a composite leachate will be collected annually in October for the routine monitoring parameters as well as for those analytes listed in Appendix II of 40 CFR 258, with retest sampling in April if constituents are detected that have not been previously detected in leachate. Verified leachate parameters will be used to develop a site-specific list of COCs.

PART III: STATISTICAL AND NON-STATISTICAL DATA ANALYSES

A. The Discharger shall use the following methods to determine if there has been a measurably significant indication of release from the WMF. For any given data set, proceed sequentially down the list of statistical analysis methods listed in Part III.A.2., followed by the non-statistical method in Part III.A.3., using the first method for which the data qualifies. If that analysis tentatively indicates a measurably significant indication of release, implement the retest procedure under Part III.A.4.

- <u>Water Quality Monitoring Objective</u>. The objective of the detection monitoring program is to determine whether any monitoring parameter (MPar) has exhibited a measurably significant increase at any well. Therefore, the Discharger shall monitor each well/MPar pair in one of the two following modes:
 - a. <u>Detection Mode</u>. The purpose of Detection Mode monitoring is to monitor all MPars for measurably significant indication of a release using Concentration Limits or non-statistical data analysis methods described below.
 - b. <u>Tracking Mode</u>. For any MPar that has exhibited a measurably significant increase, concentration-versus-time plots will be prepared and reported semiannually to monitor changes in the MPars concentration at that location for the purpose of evaluating if a release has occurred.
- Concentration Limits. The Discharger shall use concentration limits (CLs) to analyze naturally occurring MPars in Detection Mode. The CL for each constituent shall be determined using intrawell prediction limits in accordance with Title 27 Section 20415(e) and the statistical guidance package (EPA, 2009) that the State is currently implementing at other sites. The Discharger shall update and/or recalculate these CLs every four years. The Discharger may propose an alternative statistical method pursuant to Section 20415(e)(8)(E) acceptable to the Executive Officer.
- 3 <u>Non-Statistical Method.</u> The Discharger shall use the following non-statistical method for all Constituents of Concern and VOCs, which are not amenable to statistical tests under Part III.A.2. A measurably significant indication of a release occurs in a given sample when:
 - 1) Two or more of the MPars/VOCs exceed their respective MDLs; or
 - 2) One or more of the MPars/VOCs equals or exceeds its respective PQL.
- <u>Discrete Retest</u> (Section 20415(e)(8)(E), Title 27). In the event that the Discharger concludes that a release has been tentatively indicated (under Parts III.A.2. or III.A.3.), the Discharger shall, within 30 days of this indication, collect two (2) new suites of samples for the indicated Constituent(s) of Concern or MPars at each indicating Monitoring Point. For organic constituents, the scope of the laboratory analysis for the non-statistical retest samples shall be narrowed to involve only those constituents detected in the sample which initiated the retest. As soon as the data is available, the Discharger shall rerun the statistical method (or non-statistical comparison) separately upon each suite of retest data. For any indicated Monitoring Parameter or Constituent of Concern at an affected Monitoring Point, if the test results of either (or both) of the retest data suites confirms the original indication, the Discharger shall conclude that there is a measurably significant increase at that well for the constituent(s) indicated in the validating retest sample. Furthermore, thereafter, the Discharger shall monitor the indicated consistent(s) in tracking mode instead of detection mode (see Part III.A.1.b of this M&RP) at that well, and shall highlight this conclusion and these changes in the next scheduled monitoring event.

SUMMARY OF SELF-MONITORING AND REPORTING PROGRAMS

A. WASTE MONITORING (In the Landfill)

The Reporting Periods are from October 1 through March 31, and from April 1 through September 30, respectively. The First Semi-Annual Report shall be submitted on or before April 30 each year. The Second Semi-Annual Report shall be submitted on or before October 30 each year.

- 1. Record the total volume of refuse in cubic yards disposed of at the site during each monitoring period, showing locations and dimensions on a sketch or map.
- 2. Record a description of the waste stream, including the percentage of the waste type (i.e., residential, commercial, industrial, or construction debris).

B. ON-SITE OBSERVATIONS

 Weekly site inspections to be reported semi-annually. As described in Part I.B.5., standard observations of the site including the landfills, nearby surface waters, and the perimeter. Discharger shall document inspections and corrective actions (if any).

C. GROUND WATER ANALYSIS FOR DETECTION MONITORING

"Indirect Monitoring" for Monitoring Parameters Done Semi-annually. The ground water monitoring points assigned to Detection Monitoring in Part II.B.4. of this Program, and shall be sampled <u>semi-annually</u>. Reporting Periods are from October 1 through March 31, and from April 1 through September 30, respectively. The First Semi-Annual Report shall be submitted on or before April 30 each year. The Second Semi-Annual Report shall be submitted on or before October 30 each year.

The Detection Monitoring Points shall be sampled for the following Monitoring Parameters:

Parameter & Constituents		Unit
1) 2) 3) 4) 5) 6) 7)	Ground water Elevation Temperature (field measurement) pH (field measurement) Specific Conductance (field measurement) Total Dissolved Solids (TDS) Nitrate Nitrogen Total Hardness	(USGS Datum) °F pH Units Micromhos/cm mg/I mg/I mg/I
8)	Volatile Organics (Appendix I, 40 CFR 258)	μg/l

(EPA Method 8260)

The collection, preservation and holding times of all samples shall be in accordance with United States Environmental Protection Agency (USEPA) approved procedures. Unless otherwise approved by the Regional Water Board's Executive Officer, all analyses shall be conducted by a laboratory certified by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 CFR 136), promulgated by the USEPA.

2. "Direct Monitoring" of all Constituents of Concern Done Every Five Years. In the absence of a release being indicated: (1) pursuant to Part III.A.4. for a Monitoring Parameter; (2) based upon physical evidence, pursuant to Part I.E.2.c.; or (3) by a study required by the Regional Water Board's Executive Officer based upon anomalies noted during visual inspection of graphicallydepicted analytical data (Part I.E.3.a.), the Discharger shall sample all Monitoring Points and Background Monitoring Points of water-bearing media, not including soil-pore gas, for all Constituents of Concern every five years. Successive direct monitoring efforts shall be carried out alternately in the Winter/Spring of one Five-Year sampling event (Reporting Period for Winter/Spring is from October 1 through March 31), and in the Summer/Fall of the next Five-Year sampling event (Reporting Period for Summer/Fall is from April 1 through September 30), and every five years thereafter. Direct monitoring for Constituents of Concern shall be carried out pursuant to Parts II.B.1 and III of this program, and shall encompass only those Constituents of Concern that do not also serve as a Monitoring Parameter. The next Five-Year sampling event will occur during the Summer/Fall 2016.

The Constituents of Concern for water-bearing media (i.e. ground water and surface water) shall consist of the combined listing of all constituents listed in Appendices I and II, 40 CFR Part 258, in addition to:

Constituent	<u>Units</u>
TDS	mg/L
Sulfate	mg/L
Carbonate	mg/L
Chloride	mg/L
Sodium	mg/L

The Five-Year Constituents of Concern Report shall be submitted with the appropriate Semi-Annual Report for that five-year sampling event.

SUMMARY OF REPORTING REQUIREMENTS

1 The Discharger shall arrange the data in tabular form so that the specified information

is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with Waste Discharge Requirements.

- 2. Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurement(s);
 - 2. The individual(s) who performed the sampling or measurement(s);
 - 3. The date(s) analyses were performed;
 - 4. The individual(s) who performed the analyses;
 - 5. The analytical techniques or method used; and
 - 6. The results of such analyses.
- 3. Each report shall contain the following statement:

"I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations."

- 4. A duly authorized representative of the Discharger may sign the documents if:
 - a. The authorization is made in writing by the person described above;
 - b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and
 - c. The written authorization is submitted to the Regional Board's Executive Officer.
- 5. Monitoring Reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this Monitoring and Reporting Program.
- 6. <u>Semi-Annual Reports.</u> Monitoring Reports shall be submitted to the Regional Water Board semi-annually according to the following schedule:

First Semi-Annual Report (Winter/Spring - October 1 through March 31) - Report due April 30

Second Semi-Annual Report (Summer/Fall – April 1 through September 30) – Report due October 30

- 7. Annual Reports. Annual Monitoring Reports shall be submitted to the Regional Water Board by April 30 of the each year, covering the Reporting Period from April 1 of one year through March 31 of the next year.
- 8. **Five-Year COC Reports.** Continuing with the 2011 Winter/Spring COC sampling event schedule, with successive sampling efforts being carried out alternately between the Summer/Fall Monitoring Period of one Five-Year sampling event, and the Winter/Spring of the next five-year sampling event, and every fifth year thereafter, as long as the WMF is in operation and through the closure/post-closure period.

The Five-Year COC Report shall be submitted with the appropriate Semi-Annual Report due on by either April 30 or October 30, whichever is appropriate for the

particular Five-Year COC sampling event, pursuant to Parts II.B.3. and III., Summary of Monitoring and Reporting Programs, C.2. of this Monitoring and Reporting Program.

9. <u>Contingency Reports.</u> Notify immediately by telephone, and submit a written report pursuant to Part I.D.2. of this Monitoring and Reporting Program.

10. Submit Monitoring Reports to:

California Regional Water Quality Control Board Colorado River Basin Region 73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260

Ordered by:

ROBERT PERDU Executive Officer May 16, 2013