DRAFT STATE WATER RESOURCES CONTROL BOARD MONITORING AND REPORTING PROGRAM NO. DWQ-2012-XXXX

FOR ORDER NO. DWQ-2012-XXXX: STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR THE DISCHARGE OF WASTES AT COMPOST MANAGEMENT UNITS

A. FINDINGS

The State Water Resources Control Board (State Water Board) finds that:

- LEGAL AUTHORITY. In accordance with California Water Code (Water Code) section 13000 et seq., this Monitoring and Reporting Program for the General Waste Discharge Requirements for the Discharge of Wastes at Compost Management Units, Order No. DWQ-2012-XXXX (MRP) implements the regulations and policies adopted by the State Water Board, including that agency's regulations under California Code of Regulations (Cal. Code Regs.) titles 23 and 27; implements applicable Regional Water Quality Control Plan (Basin Plan) provisions adopted for each respective Regional Water Quality Control Board (Regional Water Board); implements applicable provisions of the California Health and Safety Code; and is consistent with CalRecycle's regulations in Cal. Code Regs. title 14, section 17850 et seq.
- PURPOSE. This MRP is necessary to determine compliance with General Waste Discharge Requirements for the Discharge of Wastes at Compost Management Units, Order No. DWQ-2012-XXXX (Order). This MRP also prescribes a monitoring program, pursuant to Monitoring Specifications, section F of the Order, to ensure the protection of water quality and beneficial uses of groundwater and surface waters throughout the state.
- 3. **DISCHARGER.** A "Discharger", as the term applies under the Order and this MRP, is any person responsible for discharging, or proposing to discharge waste to a Compost Management Unit (CMU); or any person who owns and/or operated a CMU; or any person responsible for ensuring compliance with the maintenance and monitoring operations at the CMU, as required under the Order and this MRP.
- 4. BASIS FOR MONITORING. Dischargers enrolled under the Order are automatically subject to the requirements and provisions of this MRP, unless the Regional Water Board Executive Officer issues a replacement or updated MRP to address site-specific conditions at an enrolled CMU. If operating outdoors, CMUs are exposed to precipitation, and the potential exists to saturate piles of feedstocks, additives, amendments, and compost (active or stabilized), which can generate wastewaters (e.g., process storm water, leachate, etc.). Wastewaters can then percolate to groundwater, or enter surface waters if not properly managed. A release of wastes, waste constituents, or waste degradation products derived from these sites may create, threaten to create, or contribute to a condition of contamination, pollution, or nuisance as defined in Water Code section 13050. As a condition of enrollment under the Order, the Discharger is required to implement a monitoring and reporting program in order to determine at the earliest feasible time whether a release of waste has occurred or is threatening to occur in an effort to protect water quality. The requirements of this MRP constitute the minimum monitoring program standards required for CMUs located within the state.
- 5. **BASIS FOR REQUIRING TECHNICAL AND MONITORING REPORTS.** Water Code section 13267 provides that the State Water Board may require the Discharger, past Dischargers, or suspected Dischargers, to furnish technical and monitoring reports provided that the burden, including costs, of these reports must bear a reasonable relationship to the need for, and the benefits to be obtained from, the required reports. In requiring those reports, the State Water Board must provide the Discharger with a written explanation with regard to the need for the reports, and must identify the evidence that supports requiring the person to provide the reports.

The technical and monitoring reports required by this MRP are needed to ensure that Dischargers – enrolled under Order – conduct their composting operations in a manner that does not result in an adverse impact to surface or groundwater resources. The burden of providing the required reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

6. **BASIS FOR SITE MAINTENANCE.** Inadequate maintenance at CMUs may create conditions whereby waste constituents or solid materials may be discharged in a manner that creates, threatens to create or contribute to a condition of contamination, pollution, or nuisance, adversely affecting the quality of waters of the state.

Regular monitoring and reporting of conditions at CMUs is essential for the Discharger, the Regional Water Board, and/or the State Water Board (collectively referred to as the Water Boards) to intervene as early as possible, to correct problems where releases of wastes or waste constituents threaten to create, or contribute to a condition of contamination, pollution, or nuisance.

7. **APPLICABILITY.** All CMUs, as described in Finding No. A.10 of the Order will be subject to the requirements herein upon the initial effective date of this Order, with exception to existing permitted CMUs (Finding No. A.10 of the Order) for which more stringent waste discharge requirements (WDRs) have been issued by a Regional Water Board.

IT IS HEREBY ORDERED that pursuant to Water Code section 13267, the Discharger shall comply with the following MRP requirements. Failure to comply with requirements of this MRP can result in the imposition of civil monetary liability.

B. MONITORING REQUIREMENTS

1. STANDARD MONITORING PROVISIONS

- a. Pursuant to Monitoring Specifications, section F of the Order, any Discharger subject to the specification of the Order must implement, to the satisfaction of the Regional Water Boards, the requirements specified in this MRP.
- b. The Discharger, in accordance with the Order, must monitor and sample all liquids (e.g., groundwater, wastewaters) as directed in this MRP, for those analytes specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP, or as proposed in an approved Notice of Intent (NOI). Sample collection must follow standard United States Environmental Protection Agency (USEPA) methods, and must be analyzed at a laboratory accredited by the California Department of Public Health.
- c. All monitoring instruments and equipment must be properly calibrated and maintained as necessary to ensure accuracy of measurements.
- d. The Discharger must retain records of all monitoring information, including all calibration and maintenance records, and copies of all reports required by this MRP, for a minimum of *5 years* from the date of sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding the discharge or when requested by the Regional Water Board. Records of monitoring information must include at a minimum:
 - i. The date, identity of sample, monitoring point from which the sample was collected, and time of sampling or measurement;

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- ii. The name of the individual(s) who performed the sampling or measurements;
- iii. Date and time that analyses were started and completed;
- iv. The analytical techniques or method used, including method of preserving the sample and the identity and volume of reagents used;
- v. Calculation of results;
- vi. Results of analyses performed and method used (as proposed in an approved NOI) for calculating the concentration limits for each naturally occurring constituents, based on background water quality monitoring data;
- vii. Results of analyses and the method detection limit (MDL) for each non-naturally occurring constituents;
- viii. Laboratory quality assurance results (e.g., percent recovery, response factor, etc.); and
- ix. Chain of Custody forms.
- e. The Discharger must, to the satisfaction of the Regional Water Boards, collect all analytical samples required under this MRP, in a manner that assures sample integrity.
- f. The Discharger must certify under penalty of perjury that all monitoring systems at the CMU are designed and certified by a qualified professional (e.g., registered civil engineer, professional geologist, or other registered certified specialty geologist) licensed by the State of California.
- g. The Discharger must certify under penalty of perjury that all monitoring wells and other borings drilled to satisfy the requirements of the Order and this MRP must be drilled by a licensed drilling contractor, pursuant to California Water Code section 13750.5, and must be logged during drilling under the direct supervisions of a person who is an appropriately qualified professional, licensed by the State of California, pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1, and who has expertise in stratigraphic well logging. These logs must be submitted to the appropriate Regional Water Board upon completion of the drilling as part of the Annual Monitoring and Maintenance Report.
 - i. Soils must be described in the geologic log in accordance with current industry-wide practices.
 - ii. Rock must be described in the geologic log in a manner appropriate for the purpose of the investigation.
 - iii. Where possible, the depth and thickness of saturated zones must be recorded in the geologic log.
- h. Dischargers enrolled under the Order and subject to the requirements specified in this MRP must, as part of any wastewater detention pond, leachate seep, groundwater, and/or vadose zone monitoring, collect and analyze samples for the constituents of concern specified in Table No. 1 below. For those monitoring parameters specified below as field parameters are Constituents of Concern (COCs) that are tested for verifying produced-water-reading stability during the presampling purge, prior to taking test samples, and as such, field parameters are not subject to compliance testing. All other COCs listed in Table No. 1 below are subject to compliance testing during period for each monitoring point (i.e., wastewater detention ponds, lysimeters, groundwater monitoring wells).

MONITORING PARAMETERS	UNITS	SAMPLING FREQUENCY	REPORTING FREQUENCY			
Field Parameters						
pH ¹	pH Units	Semi-annually	Annually			
Specific Conductance ¹	μmhos/cm or μS/cm	Semi-annually	Annually			
Turbidity ¹	NTU	Semi-annually	Annually			
Monitoring Parameters	Monitoring Parameters					
Ammonia as Nitrogen	mg/L	Semi-annually	Annually			
Arsenic	mg/L	Semi-annually	Annually			
Biological Oxygen Demand (BOD)	mg/L					
Cadmium	mg/L					
Calcium	mg/L					
Chemical Oxygen Demand (COD)	mg/L					
Chloride	mg/L	Semi-annually	Annually			
Chlorophenoxy Herbicides	μg/L	Semi-annually	Annually			
Chromium	mg/L	Semi-annually	Annually			
Fluoride	mg/L	Semi-annually	Annually			
Lead	μg/L	Semi-annually	Annually			
Magnesium	mg/L	Semi-annually	Annually			
Mercury	mg/L Semi-annually		Annually			
Nickel	mg/L Semi-annually		Annually			
Nitrate + Nitrite as Nitrogen	mg/L	mg/L Semi-annually				
Nitrate as (NO ₃)	mg/L	mg/L Semi-annually				
Nitrite as Nitrogen	mg/L	Semi-annually	Annually			
рН	pH Units	Semi-annually	Annually			
Potassium	mg/L	Semi-annually	Annually			
Selenium	mg/L	Semi-annually	Annually			
Sodium	mg/L	Semi-annually	Annually			
Specific Conductance	μmhos/cm or μS/cm	Semi-annually	Annually			
Sulfate	mg/L	Semi-annually	Annually			
Thallium	mg/L	Semi-annually	Annually			
Total Dissolved Solids	mg/L	Semi-annually	Annually			
Total and Fecal Coliform	MPN/100 mL	Semi-annually	Annually			
Total Kjeldahl Nitrogen (TKN)	mg/L	Semi-annually	Annually			
Total Phosphorous	mg/L	Semi-annually	Annually			

Table No. 1 – Constituents of Concern

¹ These constituents of concern are field parameters measured during each sampling event. Note: mg/L = milligrams/liter; μ g/L = micrograms/liter; NTU = nephelometric turbidity units; μ S/cm = microsiemens per centimeter; μ mhos/cm = micromhos per centimeter; MPN/100 mL = Most Probable Number per 100 milliliters

i. The point of compliance for any water standard at any CMU enrolled under the Order, and subsequently this MRP, is a vertical surface located at the hydraulically down-gradient limit of the CMU that extends down through the uppermost aquifer underlying the CMU.

2. WASTEWATER DETENTION POND MONITORING

a. Any Discharger enrolled under the Order, and having a wastewater detention pond onsite (e.g., as required for Tier 2 CMUs, Design Specifications, section E.2 of the Order), must:

- i. Perform quarterly inspections of the wastewater detention pond whereby the Discharger:
 - (1) Evaluates the condition of the liner system;
 - (2) Estimates the available capacity, and the current volume of wastewaters (gallons) or solids (cubic yards) contained in the pond; and
 - (3) Evaluated the general conditions of the ancillary containment structures (i.e., ditches, berms, working surfaces) associated with the conveyance of wastewaters to the detention pond.
- ii. Conduct semi-annual monitoring consisting of, but may not be limited to, the collection of wastewater samples from the wastewater detention pond, and analysis of those samples for the constituents specified in Monitoring Requirements, section B.1.h, Table No. 1of this MRP, in accordance with Monitoring Requirements, section B of this MRP, whereby the Discharger:
 - (1) Makes an accurate determination of the field parameters specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP;
 - (2) Sample each wastewater detention pond as consistently in the reporting period as feasible, considering the time needed to collect and analyze the samples, review the analytical data, and to prepare this information for submittal to the appropriate Regional Water Board.
- b. Pursuant to Reporting Requirements, section I.5 of the Order, the Discharger must submit a *Wastewater Detention Pond Monitoring Report* to the appropriate Regional Water Board. The report shall contain the information required under Reporting Requirements, section D.2.c of this MRP.

3. TIER 3 – SPECIFIC MONITORING

- a. General. Pursuant to Design Specifications, section E.3.b of the Order, Dischargers of Tier 3 CMUs must conduct routine leachate monitoring, and either groundwater or vadose zone monitoring, in accordance with Monitoring Requirements, section B.3 of this MRP. The resulting monitoring information must be submitted to the appropriate Regional Water Board, in accordance with Reporting Requirements, section B of this MRP, as part of the *Tier 3 – Specific Monitoring Report*.
- b. Leachate Monitoring. Dischargers enrolled under the Order who are implementing the requirements for Tier 3 CMUs, and who observe leachate at any time seeping from any feedstock, additive, amendment, or compost (active or stabilized) pile at the CMU must:
 - i. Notify the appropriate Regional Water Board pursuant to Reporting Requirements, section D.3.b of this MRP;
 - ii. To the greatest extent feasible:
 - (1) Make an accurate determination of the field parameters specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP; and
 - (2) Collect and analyze samples for the analytes specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP and in accordance with Standard Monitoring Provisions, section B.1 of this MRP;
 - iii. Return the leachate to either the source pile, or otherwise managed as approved in an NOI as appropriate under the requirements of the Order and this MRP; and

- iv. Determine and report, in accordance with Reporting Requirements sections I.6 and I.9 of the Order, the cause of the leachate seep; and the measures taken to successfully mitigate, and minimize leachate seeps from occurring in the future. Dischargers may be subject to modification, revocation and reissuance, or termination under this Order, pursuant to Finding No. A.17 of the Order.
- c. **Groundwater Monitoring.** Unless a Regional Water Board determines, based on site specific conditions, that either groundwater or vadose zone monitoring is unwarranted, Dischargers enrolled under the Order who are implementing the requirements for Tier 3 CMUs must semi-annually monitor either the groundwater or vadose zone underlying the CMU, as follows:
 - i. Dischargers of CMUs having site conditions such that the highest anticipated depth to groundwater is equal to, or less than 150 feet below ground surface (bgs) must:
 - (1) Install and maintain a sufficient number of groundwater monitoring, as proposed in an approved NOI, adequate to monitor the groundwater beneath the CMU. This system of monitoring wells, at a minimum, must consist of one background well located at the hydraulically up gradient limit of the CMU, and two compliance wells located along the point of compliance at the CMU, as specified in Monitoring Requirements, section B.1.i of this MRP;
 - (2) Install and maintain each groundwater monitoring well to a depth sufficient to yield groundwater samples from the uppermost water-bearing unit and provide the best assurance of the earliest possible detection of a release from the CMU;
 - (3) During the first year of operation under the Order, implement a groundwater monitoring program, whereby:
 - (a) Quarterly groundwater samples will be collected from the CMUs background monitoring well(s), and analyzed for those naturally occurring constituents specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP, unless otherwise proposed in an NOI approved by the Executive Office of the Regional Water Board;
 - (b) Concurrently, groundwater samples will be collected from the CMUs background and compliance monitoring wells semi-annually, and be analyzed for those non-naturally occurring constituents specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP;
 - (c) Static groundwater elevations in all groundwater monitoring wells will be measured to the nearest 0.01 foot prior to pumping, for each groundwater sampling event;
 - (d) Groundwater, prior to purging and sampling of any groundwater monitoring well, will be assessed to identify the presence of a floating immiscible layer. If an immiscible layer is found, the Discharger must notify the Regional Water Board within **24 hours** of the discovery;
 - (e) An accurate determination of the field parameters specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP, will be made for each groundwater monitoring well prior to collecting samples;
 - (f) Groundwater samples should be collected as consistently in the reporting period as feasible, considering the time needed to collect and analyze the samples, review the analytical data, potentially retests and evaluation, and to prepare this information for submittal to the appropriate Regional Water Board.
 - (4) Implement a semi-annual groundwater monitoring program, whereby:

- (a) Groundwater samples will be collected from the CMUs background and compliance monitoring wells semi-annually, and be analyzed for both naturally and non-naturally occurring constituents specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP;
- (b) Static groundwater elevations in all groundwater monitoring wells will be measured to the nearest 0.01 foot prior to pumping, for each groundwater sampling event;
- (c) Groundwater, prior to purging and sampling of any groundwater monitoring well, will be assessed to identify the presence of a floating immiscible layer. If an immiscible layer is found, the Discharger must notify the Regional Water Board within **24 hours** of the discovery;
- (d) An accurate determination of field parameters specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP, will be made for each groundwater monitoring well prior to collecting samples;
- (e) Groundwater samples should be collected as consistently in the reporting period as feasible, considering the time needed to collect and analyze the samples, review the analytical data, potentially retests and evaluation, and to prepare this information for submittal to the appropriate Regional Water Board.
- ii. All groundwater monitoring activities conducted at the CMU in accordance with Monitoring Requirements, section B.3.c of this MRP, must coincide with the timing specified in Reporting Requirements, section D.4, Table No. 2 of this MRP.
- d. **Vadose Zone Monitoring.** Dischargers of CMUS having site conditions such that the highest anticipated depth to groundwater is greater than 150 feet bgs must:
 - i. Install and maintain a pan lysimeter sufficiently sized and constructed, as proposed in an approved NOI, to:
 - (1) Provide the best assurance of the earliest possible detection of a release from the CMU;
 - (2) Make an accurate determination of the field parameters specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP;
 - (3) Monitor for wastewaters through the collection and analysis of samples for the analytes specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP and in accordance with which Standard Monitoring Provisions, section B.1 of this MRP; and
 - (4) Allow for the return of wastewaters either to the material piles onsite, or be otherwise managed as approved in an NOI.

The Discharge, in an approved NOI, may propose an alternative type of vadose zone monitoring to provide the best assurance of the earliest possible detection of a release from the CMU.

- ii. Implement a semi-annual vadose zone monitoring program, whereby:
 - (1) The conditions of the pan lysimeter, or approved alternative, will be evaluated;
 - (2) The volume of wastewaters, if present, will be estimated in gallons;
 - (3) The field parameters, specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP, will be accurately determined in the event wastewaters are present;
 - (4) Wastewater, if present, will be collected in a manner that assures sample integrity, and analyzed for those constituents shown in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP;

(5) Wastewater, if present, should be collected and sampled as consistently in the reporting period as feasible, considering the time needed to collect and analyze the samples, review the analytical data, and to prepare this information for submittal to the appropriate Regional Water Board.

C. DATA ANALYSIS

- 1. The Discharger must ensure, to the satisfaction of the Regional Water Boards, that the method of analysis for each of the constituents specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP, is appropriate for the expected concentration.
- 2. The Discharger, for the analytical results produced from each monitoring point (i.e., wastewater detention pond, leachate seep, groundwater monitoring well) sampled during the respective reporting period (Reporting Requirements, section D.4 of this MRP) must:
 - a. Tabulate the cumulative (current and historical) data for at least the previous five years (if available);
 - b. Flag the analytical results that:
 - i. For those naturally occurring constituents specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP, falling at or above the established background water quality concentrations;
 - For those non-naturally occurring constituents specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP, falling between the MDL and the practical quantitation limit (PQL); or
 - MDLs and PQLs must be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. In a relative interference-free laboratory derived MDLs and PQLs are expected to closely agree with published USEPA MDLs and PQLs;
 - (2) If the laboratory suspect that, due to a change in matric or other effects, the MDL and PWL for a particular analytical run differs significantly from historic MDL and PQL values, the results must be flagged and reported in the QA/QC report;
 - (3) The MDL must always be calculated such that it represents a concentration associated with a 99 percent reliability of a non-zero results;
 - (4) The PQL must represent the lowest concentration at which a numerical value can be assigned with reasonable certainty.
 - iii. For any of the constituents specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP, falling at or above applicable Basin Plan water quality objectives (including background values).
 - c. For each applicable monitoring point, generate a time-series graph (e.g., semi-log plot), presenting the current and historical (at least the previous five years) analytical monitoring data for those constituents specified in Monitoring Requirements, section B.1.h, Table No. 1 of this MRP.
- 3. Dischargers enrolled under the Order, who are implementing the requirements for groundwater monitoring at a Tier 3 CMU, pursuant to Monitoring Requirements, section B.3 of this MRP, whereby the Regional Water Board Executive Officer, through review of the analytical data, suspects there is physical evidence of a release at the CMU, may be required to:

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- a. Perform statistical analysis of the data to determine there is a measurably significant evidence of a release from the CMU, at any monitoring point; and/or
- b. In the event the Discharger cannot determine there is measurably significant evidence of a release from the CMU, as a result of limited historical groundwater analytical data at the CMU, increase the groundwater sampling and analysis at the CMU from semi-annually to quarterly.

The statistical method, by which the Discharger must review the analytical data, will be specified by the Regional Water Board Executive Officer.

4. If the Discharger determines, pursuant to the evaluation requirements above, that there is measurably significant evidence of a release from the CMU at any groundwater monitoring well, the Discharger may demonstrate, to the satisfaction of the Regional Water Board, that a source other than the CMU caused the evidence of a release or that the evidence is an artifact cause by an error in sampling, analysis, evaluation, or by natural variation in the groundwater. The Discharger, however, must not be relieved of the requirements specified in this MRP, until such time as the Regional Water Board informs the Discharger that a successful demonstration has been made. The Dischargers enrollment under the Order and this MRP, pending review by the Regional Water Board Executive Officer may be subject to modification, revocation and reissuance, or termination.

D. REPORTING REQUIREMENTS

1. STANDARD REPORTING REQUIREMENTS

- a. **General.** The Discharger must furnish to the appropriate Regional Water Board, within a reasonable time, any information which the Water Boards may request to determine whether cause exists for modifying, revoking and reissuing, or terminating enrollments under the Order or this MRP. The Discharger must also furnish, upon request by the Water Boards, copies of records required to be kept by the Order.
- b. Report Submittals. In accordance with Reporting Requirements, section I.20 of the Order, the Discharger must submit all reports required under this MRP is in a searchable, electronic format (i.e., Portable Document Format (PDF) and Electronic Deliverable Format (EDF) via the State Water Board's Internet GeoTracker system at http://geotracker.waterboards.ca.gov/. The electronic data must be uploaded on or prior to the regulatory due dates set forth in Reporting Schedule, section D.4 of this MRP. The Discharger must upload to the Geotracker system the following information (if applicable):
 - i. Laboratory Analytical Data. Analytical data (including geochemical data) for all water samples in EDF format. Water and wastewater data includes analytical results of samples collected from monitoring wells, lysimeters, or other approved monitoring systems at the CMU.
 - ii. Location Data. The latitude and longitude of any permanent monitoring points for which data is accurate to within one meter and referenced to a minimum of two reference points from the California Spatial Reference System (CSRS-H), if available.
 - iii. **Monitoring Well Elevation Data.** The surveyed elevation relative to a geodetic datum of any permanent monitoring well. Elevation information must be provided for the top of groundwater well casings, the bottom of the screened interval, and the bottom of the groundwater monitoring well (if a sump exists) for all groundwater monitoring wells.

- iv. **Depth to Water Data.** The depth to groundwater and elevation of groundwater surface must be provided in monitoring wells even if groundwater samples are not actually collected during the sampling event.
- v. **Monitoring Well Screen Intervals.** The depth to the top of the screened interval and the length of screened interval for any permanent monitoring well.
- vi. **Compost Management Unit Map.** A map or maps which display discharge locations, streets bordering the Compost Facility, and sampling locations for all soil, water, and vapor samples. The sample map is a stand-alone document that may be submitted in various electronic formats. An updated map may be submitted at any time.
- vii. Boring Logs. Boring logs prepared by an appropriate licensed professional.
- viii. **Electronic Report.** A complete copy (as searchable PDF document) of all maintenance and monitoring reports, including the signed transmittal letter, professional certifications, and all data presented in the reports.
- ix. Report Submittal Format. Larger documents must be divided into separate files at logical places in the report to keep the file size manageable. All correspondence and documents submitted to the appropriate Regional Water Board must include a reference code in the header or subject line identifying the Regional Water Board office name and, if applicable, the first initial of the branch name (e.g., "Central Valley Region F").
- c. Use of Licensed Professionals. Any plan or report submitted in compliance with the requirements of this MRP, which required technical interpretation, or proposes either a design, or a design change (or which notes occurrences) that might affect the CMUs containment and/or monitoring systems structures must be prepared by, or under the direction of, appropriately qualified professionals (e.g., registered civil engineer, professional geologist, or other registered certified specialty geologist). In addition, the lead qualified professional must sign and provide his or her registration number, or stamp the submitted plan or report.

The Discharger must provide documentation that plans and reports required under this MRP are prepared by, or under the direction of, appropriately qualified professional pursuant to Reporting Requirements, section D.1.f of this MRP. The California Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of licensed professionals. The lead professional must sign and provide his or her registration number, or stamp the submitted plan or report.

- d. **Transmittal Letter.** A letter summarizing the significant findings must be submitted with each report. The transmittal letter must include the following minimum information:
 - i. A summary of any area of non-compliance with this MRP which incurred during the reporting period. The summary may include verbal and written notices of violations from state and local regulatory agencies regarding monitoring and/or maintenance deficiencies or violations noted by the Discharger, such as the exceedance of water quality protection standards (pursuant to the Regional Water Boards' Water Quality Control Plan [Basin Plan]), failure to conduct monitoring as required by this MRP, failure to implement adequate BMPs, or any other violation of this MRP.
 - ii. A discussion of any condition identified since the last report was submitted, that does not comply with the requirements of this MRP or the Order, and a description of all actions taken or planned to achieve compliance. If areas of non-compliance have not occurred since the previous submittal, this must be stated in the transmittal letter.
 - iii. The person signing the transmittal letter must make the declaration certification provided in Reporting Requirements, section D.1.f of this MRP.

- e. **Incomplete Reports.** In the event the Discharger becomes aware that it failed to submit any relevant facts in an NOI or in any report to the Regional Water Board, the Discharger must promptly submit such facts or information.
- f. **Reporting Declaration.** All application, reports, or information submitted to the Regional Water Boards must be signed and certified as follows:
 - i. The NOI must be signed as follows:
 - (1) For a corporation by a principal executive officer of at least the level of vice president.
 - (2) For a partnership or sole proprietorship by a general partner or the proprietor, respectively.
 - (3) For a municipality, state, federal, or other public agency by either a principal executive officer or ranking elected official.
 - (4) For a military facility by the base commander or the person with overall responsibility for environmental matters in that branch of the military.
 - ii. In addition to those persons designated in Reporting Requirements, section D.1.f.i of this MRP, applications, reports, or other information submitted to the appropriate Regional Water Board may signed and certified by a duly authorized representative of that person. An individual is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in Reporting Requirements, section D.1.f.i of this MRP;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
 - (3) The written authorization is submitted to the Regional Water Board.
 - iii. Any person signing a document under this section must make the following certification:

"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. ANNUAL MONITORING AND MAINTENANCE REPORT

a. General.

- i. The Discharger may submit all applicable annual reports specified in Reporting Requirements, sections D.2.b-d of this MRP, to the appropriate Regional Water Board under one cover in accordance with Reporting Schedule, section D.4 of this MRP.
- ii. The Discharger, when presenting new analytical data as part of any applicable annual report specified in Reporting Requirements, sections D.2.b-d of this MRP, to the appropriate Regional Water Board, must include a copy of the complete laboratory analytical report(s), signed by the laboratory director, and at a minimum contain:
- (1) Complete sample analytical reports;
- (2) Complete laboratory quality assurance/quality control (QA/QC) reports;
- (3) A discussion of the sample and QA/QC data;
- (4) A properly completed "chain of custody" from the analyzed samples; and
- (5) A transmittal letter stating whether or not all of the analytical work was supervised by the director of the laboratory, and contain the following statement:

"All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services in accordance with current United States Environmental Protection Agency (USEPA) procedures."

- iii. The Discharger, when presenting new analytical data as part of any applicable annual report specified in Reporting Requirements, sections D.2.b-d of this MRP, to the appropriate Regional Water Board, must specify in the test methods used to analyze any water or wastewaters collected pursuant to the Monitoring Requirements, section B of this MRP. Dischargers proposing to use a test procedure or method other than those included in the most current version of *"Test Methods for Evaluations of Solid Waste, Physical/Chemical Methods, SW-846"* or 40 CFR, Part 136, *"Guidelines Establishing Test Procedures for the Analysis of Pollutants; Procedures for Detection and Quantification,"* must submit a *Sampling and Analysis Plan* containing the rationale for the change, to the appropriate Regional Water Board for review and approval by the appropriate Regional Water Board Executive Officer prior to implementing the requested change.
- iv. The Discharger observing any deficiencies or non-compliance associated with any applicable monitoring requirements specified in the Order or this MRP, must incorporate a discussion of the observed deficiency/non-compliance as part of any applicable annual report.
 - (1) The Discharger must include as part of the discussion:
 - (a) The observation date and time;
 - (b) The type of deficiency/non-compliance observed at the CMU;
 - (c) The cause for the deficiency/non-compliance;
 - (d) The corrective actions undertaken, or planned to resolve the deficiency/non-compliance, including the date and time of repairs; and
 - (e) The measures undertaken by the Discharger to prevent the reoccurrence of this observed deficiency/non-compliance; and
 - (f) Photographs of the observed deficiencies/non-compliance.

- (2) The Discharger must maintain a permanent log, kept at the office of the Discharger, recording all deficiencies/non-compliances observed at the CMU. The Discharger must make the permanent log available for review upon request. The permanent log must:
 - (a) Document the action undertaken to correct each deficiency, including a photograph showing the area after corrective action; and
 - (b) List all state and local agencies contacted, the results of the inspections, and any actions taken to correct all noted deficiencies.
- b. Working Surface Conditions and Maintenance Report. All Dischargers enrolled under the Order must, at a minimum, perform quarterly inspections of the working surface, berms, ditches, erosion control best management practices (BMPs), or other containment structures (as proposed in the Discharger approved NOI), and report the resulting observations annually to the appropriate Regional Water Board. The Discharger must, as part of the Working Surface Conditions and Maintenance Report, include the following information to the appropriate Regional Water Board:
 - i. A discussion of any significant findings, including any deficiencies with regards to:
 - (1) The date and time of inspections;
 - (2) The condition of the working surface, including, but not limited to berms and ditches;
 - (3) The effectiveness of erosion control BMPs;
 - (4) Maintenance activities associated with, but not limited to, the working surface, berms, ditches, and erosion control BMPs.
 - ii. All observed deficiencies must be photographed and recorded in the Working Surface Conditions and Maintenance Report and in a permanent log that is kept at the office of the Discharger. The permanent log must be made available for review upon request. Documentation of the action to correct each deficiency and a photograph showing the area after corrective action must be included in the Working Surface Conditions and Maintenance Report and the permanent log. The permanent log must list all state and local agencies, the results of the inspections, and any actions taken to correct all noted deficiencies.
 - iii. As part of the *Working Surface Conditions and Maintenance Report* the Discharger must certify, under penalty of perjury, that the working surface, berms, ditches, erosion control BMPs, and all other approved containment structures are constructed, maintained, and functioning properly, and are protective of the waters of the state. In the event maintenance activities are undertaken as part of a corrective action to mitigate deficiencies with effectiveness of the watewater detention pond, the Discharger, following the completion of corrective measures, must submit to the appropriate Regional Water Board, a *Re-Certification Report* as specified in Reporting Requirements, section D.3.a of this MRP.
- c. Wastewater Detention Pond Monitoring and Maintenance Report. Any Discharger enrolled under the Order, and having a wastewater detention pond onsite (e.g., Tier 2 CMUs), or as proposed in the Dischargers' approved NOI, must conduct wastewater detention pond monitoring (specified in Monitoring Requirements, section B.2 of this MRP), and report on the resulting information annually to the appropriate Regional Water Board.
 - i. The Discharger, at a minimum, must include the following information in the Wastewater Detention Pond Monitoring and Maintenance Report:
 - (1) The date and time of inspection;

- (2) An evaluation of the general condition of the wastewater detention pond liner system, including, but not limited to an estimate of the available capacity, and the current volume of volume of wastewaters (gallons) and solids (cubic yards) contained in the detention pond;
- (3) An evaluation of the general conditions of the ancillary containment structures (i.e., ditches, berms, working surface) associated with the conveyance of wastewaters to the detention pond; and
- (4) A discussion of the general maintenance activities undertaken associated with the wastewater detention pond;
- (5) A discussion of any observed deficiencies or non-compliance associated with the wastewater detention pond during the reporting period
- ii. The Discharger, as part of the *Wastewater Detention Pond Maintenance and Monitoring Report*, must certify, under penalty of perjury, that the wastewater detention pond is constructed, maintained, and functioning properly, and is protective of the waters of the state. In the event maintenance activities are undertaken as part of a corrective measure to mitigate deficiencies with effectiveness of the wastewater detention pond, the Discharger, following the completion of corrective measures, must submit to the appropriate Regional Water Board, a *Re-Certification Report*, as specified in Reporting Requirements, section D.3.a of this MRP.
- d. Tier 3 Specific Monitoring Report. Applicable solely to those Dischargers owning and/or operating, and implementing the design specification for a Tier 3 CMU as proposed in an approved NOI. The Discharger operating a Tier 3 CMU must conduct leachate monitoring and either groundwater or vadose zone monitoring in accordance with Monitoring Requirements, section B.3 of this MRP, and report on the resulting information pursuant to the requirements specified in Reporting Requirements, section D.4 of this MRP. At a minimum, *Tier 3 Specific Monitoring Reports* must include all analytical data and graphical representations of that data, as specified in Monitoring Requirements, section B.3 of the MRP, as well as the following information:
 - i. A discussion of any significant findings, including any deficiencies with regards to:
 - (1) The date and time of inspections;
 - (2) The condition of all groundwater and/or vadose zone monitoring structures; and
 - (3) Maintenance activities associated with any groundwater or vadose zone monitoring structure.
 - ii. All observed deficiencies must be photographed and recorded in the *Tier 3 Specific Monitoring Report* and in a permanent log that is kept at the office of the Discharger. The permanent log must be made available for review upon request. Documentation of the action to correct each deficiency and a photograph showing the area after corrective action must be included in the *Tier 3 Specific Monitoring Report* and the permanent log. The permanent log must list all state and local agencies, the results of the inspections, and any actions taken to correct all noted deficiencies.
 - iii. As part of the *Tier 3 Specific Monitoring Report* the Discharger must certify, under penalty of perjury, that all of the groundwater and/or vadose zone monitoring structures are constructed, maintained, and functioning properly. In the event maintenance activities are undertaken as part of a corrective action to mitigate deficiencies with effectiveness of any groundwater or vadose zone monitoring structure, the Discharger, following the completion of corrective measures, must submit to the appropriate Regional Water Board, a *Re-Certification Report* as specified in Reporting Requirements, section D.3.a of this MRP.
 - iv. Initial *Tier 3 Specific Monitoring Report* must be submitted in accordance with Reporting Requirements, section D.2.d of this MRP, and at a minimum provide:

- (1) All analytical data collected in accordance Monitoring Requirements, section B.3 of this MRP;
- (2) The method of analysis for calculating the concentration limits for the naturally occurring constituents (as proposed in an approved NOI), and non-naturally occurring constituents specified in Monitoring Requirements, section B.1.h, Table No.1 of this MRP; and
- (3) The concentration limits for the constituents specified in Monitoring Requirements, section B.1.h, Table No.1 of this MRP.
- v. In the event leachate, at any time, is observed seeping from any feedstock, additive, amendment, or compost (active or stabilized) pile at a Tier 3 CMU, the Discharger must conduct leachate monitoring (specified in Monitoring Requirements, section B.3.b of this MRP), and report on the resulting information annually to the appropriate Regional Water Board. As part of the *Tier 3 Specific Monitoring Report*, the Discharger must report the following minimum information to the appropriate Regional Water Board:
 - (1) A discussion of any significant findings, including any deficiencies with regards to:
 - (a) The date and time of observed seep;
 - (b) The pile type (i.e., feedstock, additive, amendment, compost (active or stabilized) or composition there of;
 - (c) The cause for the leachate seep (i.e., overwatering, precipitation, etc.);
 - (d) To the satisfaction of the Regional Water Boards, the estimated volume (in gallons) and/or rate (gallons per day) of leachate being generated; and
 - (e) Maintenance activities associated with release of leachate.
 - (2) All observed leachate seeps must be photographed and recorded in the *Tier 3 Specific Monitoring Report*, and in a permanent log that is kept at the office of the Discharger. The permanent log must be made available for review upon request. Documentation of the action to correct each deficiency and a photograph showing the area after corrective action must be included in the *Tier 3 Specific Monitoring Report* and the permanent log. The permanent log must list all state and local agencies, the results of the inspections, and any actions taken to correct all noted deficiencies.

3. OTHER REPORTS AND NOTIFICATIONS

- a. **Re-Certification Report.** Any Discharger enrolled under the Order, and subject to the requirements of the MRP, must submit to the appropriate Regional Water Board a *Re-Certification Report* within 30-days of completing of all corrective actions associated with mitigating any deficiencies observed at the CMU. The *Re-Certification Report* must include:
 - i. A description of the deficiency, including, but not limited to, the date and time the deficiency was observed, the location of the deficiency, and type of deficiency; and
 - ii. A description of the mitigating measures completed to correct the deficiency, including, but not limited to, the date and time of the corrective measures, the work activities performed,
 - iii. A statement certifying, under penalty of perjury, that the affected containment structures are again constructed, maintained, and functioning properly, and if applicable, protective of the waters of the state.
- b. **Violations Notification.** If the Discharger determines there has been a violation of the requirements specified in either the Order or this MRP, the Discharger must notify the Regional

Water Board office by telephone as soon as practicable, within 24-hours or no later than the following business day, once the Discharger has knowledge of the violation. The Regional Water Board may, depending on the severity of the violation, require the Discharger to submit a separate technical report regarding the violation within **10 working days** of the initial notification. Pursuant to Finding No. A.17 of the Order, the Discharger's permit may also be subject to modification, revocation and reissuance, or termination.

- c. **Significant Maintenance Activities Notification.** The Discharger must notify the appropriate Regional Water Board, either in writing, email, facsimile, or telephone, at least **2** *working days* prior to any significant maintenance activities at the CMU. Significant maintenance activities might include, but are limited to:
 - i. Activities which could alter existing surface drainage patterns;
 - ii. Activities which could change the existing slope configuration; or
 - iii. Activities resulting in the installation or destruction of any monitoring system at the CMU (e.g., groundwater monitoring wells, lysimeter, etc.)

4. **REPORTING SCHEDULE.**

- a. All reports submitted on an annual basis, in accordance with the requirements of the Order and this MRP, must be received by the appropriate Regional Water Board at or before 5:00 pm on or before the due date specified in Reporting Schedule, section D.4.d, Table No. 2 of this MRP.
- b. All applicable reports submitted on an annual basis, to the appropriate Regional Water Board, may be combined under one cover in accordance with Reporting Schedule, section D.4 of this MRP.
- c. All other applicable reports must be submitted to the appropriate Regional Water Board as specified in Reporting Requirements, section D.3 of this MRP.
- d. Reporting Schedule.

Table No. 2: Reporting Schedule

Report Type	Report Frequency	Report Period	Report Due close of business
Annual Monitoring and Maintenance Report	Annually	1 January – 31 December	1 February ¹

¹ In the event February 1 falls on a weekend, the Discharger may submit the applicable report on the next immediate subsequent business week day.

E. PROVISIONS.

- 1. **ENFORCEMENT DISCRETION.** Pursuant to Water Code section 13350, the State Water Board and Regional Water Boards reserve their right to take any enforcement action authorized by law for violations of the terms and conditions of this MRP.
- 2. ENFORCEMENT NOTIFICATION. Failure to comply with the requirements of this MRP may subject the Discharger to enforcement action, including but not limited to: imposition of administrative civil liability in an amount not to exceed \$1,000 for each day the violation occurs under Water Code section 13268; not to exceed \$5,000 for each day in which the violation occurs under Water Code section 13350; and not to exceed \$10,000 for each day in which the violation occurs under Water Code section 13308; or referral to the Attorney General for injunctive relief or civil or criminal liability.

- 3. REQUESTING RECONSIDERATION OR JUDICIAL REVIEW. Pursuant to Water Code section 13330 et seq., any person aggrieved by this MRP may, not later than 30 days from the date of adoption, file a petition for a writ of mandate for reconsideration by the State Water Board, or judicial review. Petitions which are not received within 30 days of the State Water Boards adoption of the MRP will not be subject to review by any court.
- 4. **DELEGATION OF AUTHORITY.** The State Water Board has delegated to the nine Regional Water Board Executive Officers, all the powers and authority that may be delegated pursuant to Water Code section 13223. The State Water Board intends for the Executive Officers to make modification or revisions in appropriate cases, to this MRP; and to grant Discharges enrollment or termination under the Order and this MRP pursuant to the eligibility and termination criteria established in the Order.
- 5. **APPLICABILITY.** This MRP Order must be implemented by all Dischargers subject to the General Waste Discharger Requirements Order No. DWQ-2012-XXXX, unless an individual MRP has been issued for the site.

Ordered by:____

Tom Howard Executive Director