# DRAFT REQUIREMENTS

## General Waste Discharge Requirements for Composting Operations

### May 2014

## Applicability

### Activities not required to obtain coverage under this General Order

1. Agricultural Composting;
2. Chipping and Grinding Facilities and Operations;
3. Lot Clearing by local governmental agencies (i.e., grubbing, tree trimming, etc.) for fire protection;
4. Composting activities that are within vessel and fully-enclosed;
5. Composting operations processing less than 5,000 cy per year of materials allowed under Tier I or Tier II of this Order that implement the following management practices:
   1. Completely cover all materials during rain events to prevent the generation of contaminated non-process wastewater and leachate; and
   2. Manage the application of process water to prevent the production of leachate.
6. Composting operations included with requirements under existing Waste Discharge Requirements or other general waste discharge requirements.
7. Composting less than 500 cubic yards of allowable feedstocks on site at any given time.

### Total Facility Capacity

- **< 25,000 cy** (all allowable materials received, processed, and stored: feedstock, amendments, active and curing composting, and finished product) and meets the siting criteria below.
- **> 25,000 CY** (all allowable materials received, processed, and stored: feedstock, amendments, active and curing composting, and finished product) or **< 25,000 cy** which does not meet the siting criteria for depth to groundwater, distance to surface water, and distance to nearest drinking water supply well.

### Depth to Groundwater

Dependent on Soil Percolation Rate as follows (minutes per inch - MPI using percolation test):
- **< 1 MPI**: 50 feet
- **1 MPI - 5 MPI**: 20 feet
- **> 5 MPI - 30 MPI**: 8 feet
- **> 30 MPI**: 5 feet

### Distance to Surface Water

- ≥ 100 feet

### Distance to nearest drinking water supply well

- ≥ 100 feet

### Allowable Feedstocks

- Agricultural material, green material, paper material, vegetative food material, or a combination of these feedstocks, including anaerobic digestate derived from the acceptable feedstocks
- Agricultural material, green material, paper material, vegetative food material, biosolids (Class A, B, and/or Biosolids EQ which meet CFR Title 40, Part 503.13 Table 3 limits), food materials, manure, or a combination of these feedstocks, including anaerobic digestate derived from the acceptable feedstocks

### Prohibited Feedstocks

- a. Animal carcasses;
- b. Any feedstock, additive, or amendment other than those applicable or listed in an approved Notice of Intent;
- c. Liquid wastes other than those of food origin that has been approved by the Executive Officer;
- d. Medical wastes as defined in the Health and Safety Code, section 117690;
- e. Radioactive Wastes;
- f. Septage;
- g. Sludges, including but not limited to sewage sludge, water treatment sludge, and industrial sludge;
- h. Wastes classified as “hazardous” as defined in the Cal. Code Regs., title 22, section 66261.3; and
- i. Wood containing lead-based paint or wood preservatives, or ash from such wood.

### Additives/Amendments

- Total no more than 10% on a total volume weight basis of the following: fertilizing material; manures; anaerobic digestate (**solid**) from other feedstocks not listed in this tier; and other approved by the Executive Officer.
- Total no more than 30% on a total volume weight basis of the following: fertilizing material, liquid food material, **anaerobic digestate (solid)**, and other approved by the Executive Officer.

### Construction

- Surfaces must be capable of preventing degradation of waters of the state. Such structures are designed, constructed, and maintained to: (1) sloped to prevent ponding and impede vertical movement of liquid phase constituents of concern; (2) reliably transmit any free liquid laterally to a containment structure; and (3) prevent conditions that could cause a condition of contamination, pollution, or nuisance.
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<th>Requirement Type</th>
<th>Tier I</th>
<th>Tier II</th>
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| **Pads**         | All working surfaces must be capable of resisting damage from movement of mobile operating equipment and weight of piles and have a hydraulic conductivity of $1.0 \times 10^{-5}$ cm/s or less, which consists of one of the following:  
(a) Compacted soils, with a minimum thickness of one foot;  
(b) Asphaltic concrete or Portland cement concrete; or  
(c) An equivalent engineered alternative as proposed in an approved NOI. | In lieu of meeting the hydraulic conductivity requirement prescribed above, the applicant may propose to perform a groundwater protection monitoring program. If this choice is selected, the applicant must submit a *Groundwater Protection Monitoring Program Work Plan* to the Executive Officer for approval. |
| **Wastewater Handling System (i.e. pond, tanks)** | Applicant shall provide a *Water and Wastewater Management Plan* that describes how the wastewater will be managed to prevent discharge. The *Water and Wastewater Management Plan* shall describe the design, operations, and maintenance of the systems, including water balance calculations and assumptions.  
Wastewater handling system must be designed and operated to manage all wastewater from a minimum 25-year return annual total precipitation value* distributed monthly in accordance with average (mean) precipitation values or equivalent engineered alternative approved by the Executive Officer.  
*http://www.dwr.water.ca.gov/floodmgmt/hafoo/csc/climate_data/# | Applicant shall provide a *Water and Wastewater Management Plan* that describes how the wastewater will be managed to prevent discharge. The *Water and Wastewater Management Plan* shall describe the design, operations, and maintenance of the systems, including water balance calculations and assumptions.  
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<td>Drainage/Conveyance</td>
<td>Ditches must be sized to convey all precipitation and runoff from a 25-year, 24-hour peak storm event. Ditches must be properly sloped to prevent ponding and kept free and clear of debris to allow for continuous flow of liquid. Ditches must be inspected and cleaned out prior to the rainy season every year.</td>
<td>Drainage ditches must be designed to convey all precipitation and runoff from a 25-year, 24-hour peak storm event and meet a hydraulic conductivity of (10^{-5}) cm/s or less, which consists of one of the following: (a) Compacted soils, with a minimum thickness of one foot; (b) Asphaltic concrete or Portland cement concrete; or (c) An equivalent engineered alternative approved by the Executive Officer.</td>
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<td>Berms</td>
<td>If used, must prevent run-on to and runoff from the operational area from a 25-year, 24-hour peak storm event.</td>
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<td>Storm Water/ Wastewater</td>
<td>Composting Operations may be required to comply with the Industrial Storm Water General Permit Order 97-03-DWQ (General Industrial Permit). If discharging stormwater that was unable to meet the requirements of the General Industrial Permit, must obtain appropriate National Pollutant Discharge Elimination System (NPDES) wastewater discharge permit.</td>
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<td>Monitoring</td>
<td>Facility Inspections: Annual winterization survey and maintenance activities. Quarterly site inspections of the surface and drainage.</td>
<td>Water Quality: perform quarterly inspections of the system, estimate available capacity and volume, and ancillary structures. If using a pond, conduct annual monitoring of the liquid within the pond in Spring (when there is sufficient water to sample).</td>
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<td>Wastewater Management System Handling System Monitoring:</td>
<td>If using a pond, the pan lysimeters shall be checked monthly during the wet season for fluid. Upon detection of fluid, contact the Regional Water Board within 48 hours; collect a sample and analyze for the list of constituents below; remove liquid from the monitoring device; and monitor weekly for the remainder of the season. If liquid reappears in the same season, collect and analyze the sample for the same list of constituents. If a release is confirmed, submit a Response Action Plan for review and approval by Regional Board staff.</td>
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<td>Constituents of Concern: Field Parameters (pH, dissolved oxygen, EC, temperature, turbidity); General (TDS, Ammonia, BOD, Nitrite, Ortho-Phosphate, phosphorus, fecal coliform, TKN, total organic carbon); General Minerals (bicarbonate alkalinity, chloride, sulfate, nitrate, calcium, sodium, magnesium, potassium); Dissolved Metals (aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium (total), copper, Iron, lead, manganese, mercury, molybdenum, nickel, selenium, thallium, vanadium, and zinc)</td>
<td>If using tanks, must be monitored in accordance with applicable laws and regulations.</td>
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<td>Revised Notice of Intent</td>
<td>Submit a revised Notice of Intent at least 180 days prior to (1) any significant changes to the operations; (2) any proposed changes to the Design Specification; (3) any proposed change to the monitoring program; or (4) any change to the activities that may affect compliance.</td>
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<td>Design Report and Construction Quality Assurance Plan</td>
<td>Submit a <strong>Design Report</strong> and a <strong>Construction Quality Assurance Plan</strong> at least 60 days prior to any new construction of any working surfaces, wastewater ponds, berms, ditches, or other protection containment structure for approval prior to construction.</td>
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<td>Final Construction Quality Assurance Report</td>
<td>Submit a <strong>Final Construction Quality Assurance Report</strong> within 30 days after completion of any construction documenting that the structures were constructed in accordance with the <strong>Design Report</strong> and tested as outlined in the approved <strong>Construction Quality Assurance Plan</strong>.</td>
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<td>Violation Notification Requirements</td>
<td>If the Discharger determines a violation of requirements of this Order or MRP occurs, the Discharger must notify the appropriate Regional Water Board staff by telephone or electronic mail within 48-hours once the Discharger has knowledge of the violation. This notification must include a description of the noncompliance and its cause, the period of noncompliance (providing exact dates and times); and if the noncompliance has not been corrected, the anticipated time the noncompliance is expected to continue. The notification must also include steps taken or planned to reduce, eliminate, or prevent recurrence of the noncompliance. Depending on the severity of the violation, the Regional Water Board staff may require the discharger to submit a separate technical report regarding the violation within 10 working days of the initial notification.</td>
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<td>Enrollment</td>
<td><strong>New Operations</strong> Must file Notice of Intent, filing fee, and technical report not less than 6 months prior to anticipated construction. Must receive Notice of Applicability prior to operating.</td>
<td><strong>Existing Operations</strong> Must file Notice of Intent, filing fee, and technical report <strong>within 1 year of adoption of the Order</strong>. The Technical Report shall include a schedule for full compliance and must be as short as practicable but may not exceed 6 years from the date the Notice of Applicability is issued.</td>
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