

# **Guidelines for Participation in the Compost Refund Program**

## **1. Eligibility**

The purpose of this document is to assist municipal solid waste (MSW) facility permit holders in enrolling in the Compost Refund Program. MSW facility permittees are eligible to receive a credit of 15 percent of the solid waste fees collected by the facility up to allowable composting costs as provided for in Texas Health and Safety Code (HSC) Section (§) 361.0135 (a). For a Type I or Type IV landfill, the credit increases to a maximum of 20 percent of the solid waste fees collected by the facility if, in addition to composting the yard waste, the operator of the facility voluntarily bans the disposal of yard waste at the facility (see Attachment A). This document also provides guidance on the preparation, as a permit modification under 30 Texas Administrative Code (TAC) § 305.70, of a Compost Plan required by HSC § 361.0135, to obtain the subject refund.

Terms used in this document shall have the meanings assigned by HSC Chapter 361, 30 TAC Chapter 330, and 30 TAC Chapter 332.

MSW facility permit holders that may apply for the Compost Refund are those with on or off-site composting operations who demonstrate:

- (1) the refunds are used to lease or purchase and operate equipment necessary to compost yard waste;
- (2) composting operations are actually performed; and
- (3) the finished compost material produced by the facility is returned to beneficial use.

Permittees who intend to compost onsite and do not have current authorization through their original permit, a permit modification, or amended permit approval, must obtain a permit modification as required by 30 TAC § 305.70 (See Attachment B for facilities needing to apply for a permit modification to compost onsite). All composting activities must comply with the requirements of 30 TAC Chapter 332 (Composting), as well as all other applicable laws and regulations.

## **2. Effective Date**

The Compost Refund Program was continued, effective September 1, 1999. This, the second version of these guidelines, effective September 1, 2003, revises and/or adds clarification to all items of this document. Facilities already receiving the credit, in order to be assured of receiving the credit without interruption, will have 30 days following the issuance of these guidelines, to submit a revised Compost Plan in accordance with this document. Facilities that submit a revised Compost Plan will continue to receive the composting credit according to their current, approved Compost Plan and current administrative procedures until the Texas Commission on Environmental Quality (TCEQ) approves or rejects their revised Compost Plan. To update an already approved Compost Plan, current participants only have to submit information addressing item 4A in these guidelines. Facilities that do not currently report a breakdown of allowable expenses will be audited and the

amount of credit or discount will be based on the audit findings. Facilities that do not update their Compost Plan in accordance with these guidelines within 30 days following the issuance of these guidelines, will cease to receive the composting credit until they submit a revised Compost Plan in accordance with this document and receive written notice of approval from the TCEQ. New applicants may apply at any time.

### **3. Allowable Expenses**

The only allowable expenses that are to be used towards the compost refund are equipment and operator expenses incurred as a direct result of composting operations. The definition of composting as stated in HSC § 361.421(2) shall apply when determining which operations' expenses are eligible to be used towards the compost refund. Texas Health and Safety Code § 361.421(2), defines composting as "The controlled biological decomposition of organic materials through microbial activity. Depending on the specific application, composting can serve as both a volume reduction and a waste treatment measure. A beneficial organic composting activity is an appropriate waste management solution that shall divert compatible materials from the solid waste stream that cannot be recycled into higher grade uses and convert these materials into a useful product that is put to beneficial reuse as a soil amendment or mulch."

### **4. Compost Plan**

All MSW facility permittees wanting to receive the Compost Refund must submit a Compost Plan to the TCEQ and receive written approval of the Plan from the Waste Permits Division. In part, the purpose of the Compost Plan is to provide the method to be used to capture expenses relative to the facility's equipment and operator costs incurred as a direct result of composting operations. An example table demonstrating how a facility may show equipment and operator hours required to conduct composting operations at the facility is provided below as Table 1. The method provided in the plan will also be used in the calculation of the compost refund at the end of each reporting quarter. The Compost Plan shall be prepared as a permit modification, under 30 TAC § 305.70 (Municipal Solid Waste Permit and Registration Modifications), to the Site Operating Plan of the landfill's permit. As a minimum, the Compost Plan should address the following:

- A. The Compost Plan should provide sufficient information to determine that the refunds are used to lease or purchase and operate equipment necessary to compost yard waste. Sufficient information is determined by the following:
  - i. an example of the type of equipment utilized and whether it is leased, purchased, or contracted for service;
  - ii. a brief explanation of how each piece of equipment is used in the composting

- process;
- iii. estimated percentage of time each piece of equipment will be dedicated to the composting process;
  - iv. estimated operator/labor hours directly related to the composting process; and
  - v. if the equipment is leased, purchased, or contracted for service, a statement describing the method(s) of recapturing cost using standard business practices.

**Table 1**  
 (To be used as an example only)

Example Equipment Type	Example of equipment's use in composting	Estimated percentage of time used	Estimated operator/labor hours
Case Loader	Move and haul finished compost	37.5 %	15 hours per week
Windrow Turner	Turn and mix compost windrows	25 %	10 hours per week

- B. The Compost Plan should provide sufficient information to determine that composting operations are actually performed. Sufficient information is determined by the following:
  - i. the identification of materials to be designated as compost feedstock to be accepted for processing: Yard trimmings must be accepted for processing; additional acceptable feedstocks include any materials allowable for composting under the terms of the applicable authorization (e.g. notification, registration, etc.); and
  - ii. brief description of the composting operation.

To qualify for the credit, compost produced by facilities requiring notification, registration, or permitting under 30 TAC Chapter 332 must have undergone all processes and met all product standards required by the applicable authorization prior

to release for beneficial reuse. Prior to beneficial reuse, compost produced by facilities exempt from notification, registration, or permitting requirements must be a dark, loose, earthy smelling material that resembles rich soil.

- C. The Compost Plan should provide sufficient information to determine that the finished compost material produced by the facility is returned to beneficial reuse. Sufficient information is determined by the incorporation of a plan for marketing and distribution that demonstrates beneficial reuse of the compost in the Compost Plan. Beneficial reuse is defined in 30 TAC §332.2 as “Any agricultural, horticultural, reclamation, or similar use of compost as a soil amendment, mulch, or component of a medium for plant growth, when used in accordance with generally accepted practice and where applicable is in compliance with the final product standards established by this chapter [30 TAC Chapter 332]. Simply offering a product for use does not constitute beneficial reuse. Beneficial reuse does not include placement in a disposal facility, use as daily cover in a disposal facility, or utilization for energy recovery.”
- D. If the facility already has authorization within its permit for composting, any modification(s) and/or a copy of the pages addressing composting from the original or amended permit must be attached to the Compost Plan. If composting takes place at an off-site facility with a notification, registration, or permit as required by 30 TAC Chapter 332, a copy of the off-site facility’s notification, registration, or permit must be submitted as an attachment to the Compost Plan before the plan can be approved.

## **5. Record-keeping Requirements**

As defined in Item 3 of this document, the Compost Plan should include information describing how the facility incurs costs and should also provide appropriate supporting documentation. The facility will be audited against the information provided in their Compost Plan. The methods of incurring costs may vary, however all Compost Plans will be required to include the same level of detail for incurring costs. Recipients of the composting credit must maintain the following records and make them available upon request to TCEQ personnel for compliance-auditing purposes.

- A. Records of the volume of finished compost:
  - i. the volume of finished compost that is ready for beneficial reuse.

- B. Records of the amount of compost beneficially reused, as applicable:
  - i. receipts for any compost moved from the composting site for beneficial reuse, showing the date, the volume of the compost, and the recipient;
  - ii. records of the volume of any compost beneficially reused onsite, specifying the date(s), and a description of the beneficial reuse(s);
  - iii. documentation that any brush and/or mulch that has been sent off-site for composting and beneficial reuse has been composted and beneficially reused.
  
- C. Documentation of expenses for composting yard waste. This documentation should include, but not be limited to, signed invoices and/or receipts for leasing, purchasing, and operating equipment necessary to compost yard waste. The allowable expenses that are eligible to be used towards the compost refund are equipment and operator expenses incurred as a direct result of composting operations as defined in Item 3 of this document. For recipients claiming the credit for composting operations conducted by another party (i.e. contracted services), documentation should include, but not be limited to, paid invoices from the transactions between the landfill and any party engaged in composting the material. This documentation must show the allowable equipment and operator expenses incurred as a direct result of composting operations as defined in Item 3 of this document, as applicable.

## **6. Reporting Requirements**

In order to receive credit, the facility operator must include, as an attachment to the landfill's quarterly report, the completed TCEQ Municipal Solid Waste Compost Refund Program Reporting Requirements form (Attachment C). This form must be returned signed and dated and shall provide the following information for the previous quarter:

- A. A quarterly summary providing a breakdown of all allowable equipment and operator expenses incurred as a direct result of composting operations for each of the three months in a quarter. This breakdown of expenses should include, but not be limited to, equipment and associated operating costs (i.e. repair costs, fuel costs, etc.) and labor costs, for each piece of equipment. The breakdown of expenses should summarize all allowable equipment and operator expenses for each piece of equipment on a per month basis. In addition, a total expenditure of all allowable equipment and operator expenses incurred for each month and for the quarter should

be provided. Allowable expenses are those as defined in Item 3 of this document.

Note: The above information may be submitted in tabular form. An example is provided as Table 2 in Attachment D.

- B. The total volume of the material in sections 5(A)(i) and 5(B)(i) of this document.

## **7. Calculation of the Refund**

The refund will be applied as a credit against fees collected by the facility under Health and Safety Code § 361.013(a), effective the following billing period after the date on which the commission approves the Compost Plan. The credit is equal to the equipment and operator expenses incurred as a direct result of composting operations as defined in Item 3 of this document. Total credit awarded in any fiscal year (September 1 - August 31) will not exceed either of the following:

- A. all allowable equipment and operator expenses incurred as a direct result of composting operations as defined in Item 3 of this document for the same fiscal year; and
- B. 15 percent of the solid waste fees collected by the facility under Health and Safety Code § 361.0135(a), for the same fiscal year; or
- C. 20 percent of the solid waste fees collected by the facility under Health and Safety Code § 361.0135(a), for the same fiscal year if, in addition to composting the yard waste, the operator of the facility voluntarily bans the disposal of yard waste at the facility (see Attachment A).

## **8. Annual Audit**

The TCEQ will conduct an annual audit of recipients' composting operations to ensure activities are being conducted in accordance with their Compost Plan. The Waste Permits Division may require recipients to submit copies of any or all of the records required under Item 5 of these guidelines. In addition, agency staff may conduct telephone interviews and/or site visits of participating facilities. Failure to comply with the Compost Plan or substantiate quarterly reports may result in the retroactive revocation of the compost credit.

**9. Assistance to Interested Parties**

The TCEQ's Waste Permits Division, at (512) 239-2334, can provide assistance regarding:

- instructions for obtaining the Compost Refund; and
- regulatory requirements applicable to compost operations.

The TCEQ's Small Business & Environmental Assistance Division, at (512) 239-6742, can provide information on the following to MSW facilities interested in participating in the Compost Refund program:

- available training for compost facility operators;
- grinding and composting contractors; and
- markets for compost.

### **Attachment A: Enacting a Ban on Yard Trimmings Disposal**

Yard trimmings include leaves, grass clippings, yard and garden debris, brush, and clean woody vegetative material six inches or less in diameter. Yard trimmings do not include stumps, roots, or shrubs with intact root balls. To establish a ban on the disposal of yard trimmings, the permittee must request a permit modification per 30 TAC §305.70 which addresses the following requirements:

1. Post signs at the entrance to the landfill stating both that the facility has banned the disposal of yard trimmings and that the drivers of all vehicles containing yard trimmings must inform the gatehouse attendant.
2. Ask drivers at the gatehouse if their vehicles contain yard trimmings, or perform a visual inspection of all loads as they enter.
3. At the gatehouse, hand out flyers explaining the ban and encourage customers to source-separate yard trimmings from other municipal solid waste.
4. Direct vehicles containing yard trimmings to off-load at a well-marked location separate from any active landfill cells. If yard trimmings can be cleanly separated from non-compostable, non-putrescible materials in a load, reasonable efforts must be made to off-load them at this designated site. Note: Yard trimmings and other positively-sorted organic materials from the municipal solid waste stream may be composted only at a registered facility according to the requirements of 30 TAC Chapter 332.
5. If the landfill operator operates a residential solid waste collection program:
  - A. Provide every customer with at least two separate printed notices of the ban (flyers, door hangers, etc.);
  - B. Provide a separate collection for yard trimmings or a convenient drop-off location(s) with posted instructions on separating yard trimmings;
  - C. Provide follow-up reminders and incentives to follow the instructions (e.g. volume-based disposal fees or non-collection of improperly separated yard trimmings).
6. If the landfill operator is a municipality, enact a city ordinance specifying penalties for violations (a sample ordinance will be sent to you on request).

### **Attachment B: Permit Modification for Composting at a Landfill**

If the landfill's permit does not already authorize on-site composting operations, a permit modification per 30 TAC §305.70 is necessary for an exempt, notification, or registered compost facility at an MSW landfill site. The modification must include the following revisions to the permit, as required by 30 TAC Chapter 330:

1. The Site Plan. The site plan needs to show compost facility and any changes to the internal roadway plan or facility layout.
2. The Surface Water Protection Plan. The surface water protection plan needs to show control, for the design storm (twenty-five year/twenty-four hour rainfall event), of run-on, run-off, and the internal drainage of the compost facility. It also needs to show collection and containment of contaminated water generated by the compost facility. All water coming into contact with feedstocks before, during, or after the composting process is considered contaminated and cannot be discharged from the permitted facility without TCEQ authorization.
3. The Site Operating Plan. The site operating plan (SOP) needs to show the proposed level of staff and equipment required to operate the site and a process description of the proposed operation. This revision to the SOP may be incorporated as an appendix titled "Permit Modification for Compost Operations."

Note: A request for a permitted compost operation at a permitted MSW landfill site requires an application for a major amendment.

**Attachment C:**

**Texas Commission on Environmental Quality  
 Municipal Solid Waste Compost Refund Program  
 Reporting Requirements**

**Permit/Registration Number:** \_\_\_\_\_ **Site Name:** \_\_\_\_\_

**Reporting Quarter:** \_\_\_\_\_ **Billing Period:** \_\_\_\_\_

Facility was inactive this quarter.

**Please provide the following:**

**A.**

Equipment Type	Hours Used	Equipment Costs	Maintenance Costs	Fuel Costs	Labor Costs	Total Costs
Total						
Total composting expenses for the billing period:						

**B.** The total volume of the following items:

1. \_\_\_\_\_ Volume in cubic yards of finished compost that is ready for beneficial reuse.
2. \_\_\_\_\_ Volume in cubic yards of compost that has moved from the composting site for beneficial reuse.

**I certify under penalty of law that this document and all the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. All reported expenses are a result of monies expended to lease, purchase, and operate equipment necessary to compost yard waste. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.**

Name (print): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Attachment D: Example of a Quarterly Summary Breakdown**

**Table 2**  
 (To be used as an example only)

September 2002

Equipment Type	Hours Used	Equipment Costs	Maintenance Costs	Fuel Costs	Labor Costs	Total Costs
Case Loader	168	\$2,436.10	\$0.00	\$210.32	\$1,825.68	\$4,472.10
Windrow Turner	80	\$3,685.65	\$0.00	\$150.36	\$560.24	\$4,396.25
<b>Total</b>						<b>\$8,868.35</b>

Total composting expenses for September 2002: \$8,868.35

October 2002

Equipment Type	Hours Used	Equipment Costs	Maintenance Costs	Fuel Costs	Labor Costs	Total Costs
Case Loader	490	\$3,824.91	\$0.00	\$175.26	\$1,368.36	\$6,912.15
Windrow Turner	263	\$4,952.12	\$0.00	\$110.26	\$313.87	\$5,800.38
<b>Total</b>						<b>\$12,712.53</b>

Total composting expenses for October 2002: \$12,712.53

November 2002

Example Equipment Type	Hours Used	Equipment Costs	Maintenance Costs	Fuel Costs	Labor Costs	Total Costs
Case Loader	246	\$2,832.47	\$0.00	\$193.82	\$1,658.49	\$4,684.78
Windrow Turner	118	\$4,119.58	\$0.00	\$134.61	\$457.29	\$5,303.38
<b>Total</b>						<b>\$9,988.16</b>

Total composting expenses for November 2002: \$9,988.16

Total composting expenses for 1<sup>st</sup> Quarter Fiscal Year 2003: \$ 31,569.04