

Guidelines for Complying with Financial Assurance Requirements for Recycling, Composting, and Mulching Facilities

On October 13, 2004, the Texas Commission on Environmental Quality (TCEQ) adopted amendments to Title 30 Texas Administrative Code (30 TAC), Chapter 37, Subchapter J; Chapter 328, Subchapter A; Chapter 330, Subchapters A and K [moved to Subchapter L in 2006 revision to Chapter 330]; Chapter 332, Subchapters C and D; and Chapter 335, Subchapter A. Certain rules in these subchapters were amended to require Financial Assurance for Recycling Facilities legislated by House Bill 1823 (HB 1823, 78th Legislature, 2003).

Except as otherwise approved by the executive director, an owner or operator of a recycling facility that stores combustible material outdoors, or that poses a significant risk to public health and safety as determined by the executive director, shall provide a written cost estimate, in current dollars, showing the cost of hiring a third party to close the facility by disposition of all the processed and unprocessed materials in accordance with all applicable regulations.

The estimate must equal the costs of closure of the facility, including disposition of the maximum inventories of all processed and unprocessed combustible materials stored outdoors on site during the life of the facility. The estimate must be based on the costs of hiring a third party that is not affiliated with the owner or operator, as defined in 30 TAC Chapter 328, Section (§) 328.2 (relating to Definitions), and must be based on a per cubic yard and/or short ton measure for collection and disposition costs.

Calculating Closure Costs Estimates

Closure cost estimates must include the disposition of the maximum inventories of all processed and unprocessed materials on site during the life of the facility in accordance with all applicable regulations.

1. Estimate the maximum amount of combustible materials (including unprocessed feedstocks, material in process, and processed materials) that will be stored outdoors at your facility at any time. For the purpose of this calculation, materials stored in a non-combustible container with four sides, a top, and a bottom (or a paved or compacted floor) will not be considered to be stored outdoors. Estimates should be expressed in either cubic yards or short tons (2,000 pounds), whichever can be most easily and accurately estimated. Provide a written description and/or site diagram showing the amounts, types, and location of combustible material stored outdoors.
2. **Estimate the costs of hiring a third party for disposition of each type of material described in your estimate (Item 1 above).** The estimate can be based on either of the following methods:
 - a. **Provide a written quote for disposition costs from an independent contractor not affiliated with the facility.** An affiliated contractor is one that owns or controls more than 20% of the voting interest, fair market value, profits, proceeds, or capital gains of the facility; or one that is at least 20% owned or controlled by the facility. Separate quotes are

required if more than one contractor is needed for disposition of different types or amounts of material.

- (1) Each quote must list:
 - (A) The name, Texas Employer Identification Number, physical address, telephone number, and any environmental licenses, permits, or other authorizations held by the contractor;
 - (B) The type(s) and amount(s) of material to be handled by the contractor;
 - (C) How disposition will be accomplished for each type of material; and
 - (D) Itemized and total costs for disposition of materials.

Note: If disposition of a particular material requires disposal at a permitted or registered facility such as a municipal solid waste landfill or transfer station, or a registered or permitted land application site, the name and address of the facility, or the owner and address of the land application site must be included.

- (2) All quotes must be based on the contractor's taking possession of the materials covered by the quote at the facility site.

- b. **For any materials listed in Item 1 for which a quote for disposition is not provided, closure costs must be calculated with the assumption that these materials will be disposed of at an authorized disposal facility.** These costs must be calculated by the following method:

- (1) **Calculate the disposal cost for each type of material.** Disposal cost can be determined by contacting the nearest disposal facility that is permitted to accept the materials at your site. The disposal charge, or tipping fee, should be in the same measure (cost per cubic yard or per ton) as your material amount estimate (Item1). The volume-to-weight conversion table in *Appendix B* may be used to convert tons to cubic yards for this purpose.

Your estimated disposal cost will be the maximum amount of material estimated in Item 1 multiplied by the per-ton or per-cubic yard disposal cost.

- (2) **Estimate loading costs** using one of the following formulas (*estimated loading costs must be not less than \$500, regardless of calculation method*):

Loading Cost = Maximum amount of material (in cubic yards) x \$0.80 per cubic yard, or

Loading Cost = Maximum amount of material (in tons) x \$1.00 per ton

(3) **Estimate the cost of hiring a third party to transport your materials to an authorized disposal facility**, using the following method:

(A) Estimate the number of truckloads necessary to transport the maximum amount of material on site to a permitted disposal facility using one of the formulas below. These formulas are based on:

- A legal gross weight limit of 80,000 pounds for vehicles on Texas public roadways;
 - A transfer trailer with a load capacity of 100 cubic yards; and
 - A tractor/trailer combination weighing 30,000 pounds.
- (i) For materials with a density of 500 pounds or less per cubic yard, the number of truckloads necessary for transportation = the cubic yards of material estimated in Item 1 ÷ 100 cubic yards (nominal capacity of a transfer trailer).
- (ii) For materials with a density of more than 500 pounds per cubic yard, the number of truckloads necessary for transportation = the weight of the material estimated in Item 1 ÷ 50,000 pounds.

(B) Provide the name and physical address of the nearest disposal facility authorized to accept the materials on your site. Determine the number of miles between this disposal facility and your facility site.

(C) Calculate the cost of transportation. Transportation cost is equal to the number of truckloads multiplied by the mileage to the disposal facility multiplied by \$2.50 per loaded mile.

(4) Calculate the total estimated cost for disposal of materials:

Total Estimated Cost
for Disposal of Materials = Loading Cost + Transportation Cost + Disposal Cost

3. Calculate the Total Facility Closure Cost by adding the costs quoted in item 2a or calculated in item 2b. This will be the cost upon which your financial assurance requirement is based.

4. Submit Your Closure Cost Estimate. Unless otherwise requested by the executive director,

- a. **New facilities** must submit their cost estimates for financial assurance with any new registration application or notification at least 90 days prior to receipt of materials; and
- b. **Existing facilities** must submit their closure cost estimates by January 3, 2005 (within 60 days of the effective date of the rule).

c. Where to send cost estimates

- (1) U.S. Mail:
Municipal Solid Waste Permits Section –MC 124
Waste Permits Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

- (2) Overnight Delivery:
Municipal Solid Waste Permits Section – MC 124
Waste Permits Division
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, TX 78753

Obtaining a Financial Assurance Mechanism

1. Rule Reference

Regulations detailing requirements of the financial assurance mechanisms are found in 30 TAC Chapter 37, Subchapter J. Owners and operators are also subject to many of the requirements of Subchapters A through D of Chapter 37. Subchapter J describes which portions of Subchapters A through D are applicable.

2. Financial Assurance Requirement

Either the owner or the operator of the facility must obtain financial assurance in an amount not less than the closure cost estimate.

3. Obtaining Financial Assurance

- a. **Acceptable Financial Assurance Mechanisms.** Owners and operators may choose from any of the mechanisms listed, including:
 - (1) **Letters of credit** (30 TAC §37.231);
 - (2) **Surety bonds guaranteeing payment** (30 TAC §37.211);
 - (3) **Surety bonds guaranteeing performance** (30 TAC §37.221) – for permitted compost facilities only;
 - (4) **Insurance policies** (30 TAC §37.241);

- (5) **Fully funded trusts** (30 TAC §37.201); or
- (6) **A financial test** (30 TAC §37.251), “self insurance” – requires audited financial statement and tangible net worth of \$10 million.

b. Dealing with Financial Assurance Providers

- (1) Before committing to any mechanism, make sure that the provider will agree to furnish the documents described in the appropriate section of 30 TAC Chapter 37 (noted above) as proof of your financial assurance. The required wordings for these mechanisms are different from those that the financial assurance provider would normally issue.
- (2) Each of these mechanisms and the entities providing them will have varying requirements regarding the information needed in order to underwrite the mechanism. Fees for the mechanisms will likely be assessed on an annual basis and will vary between providers.
- (3) It is recommended that you contact the Financial Assurance Unit at (512) 239-0300 to make sure the prospective financial assurance mechanism provider meets state and federal standards for financial strength.

4. Sources of Financial Assurance

- a. **Insurance agents** are good sources for obtaining insurance or surety bonds.
- b. **Financial institutions** (banks, etc.) can provide letters of credit and trust accounts.

5. Submitting Proof of Financial Assurance

- a. **Deadlines:** Unless otherwise directed in writing by the executive director,
 - (1) Facilities operating on or before November 4, 2004 must submit proof of financial assurance within 60 days after approval of your closure cost estimate or by May 2, 2005 (180 days after the effective date of the rule), whichever comes first.
 - (2) New facilities must submit proof of financial assurance prior to receiving any materials unless otherwise directed in writing by the executive director.

b. What to Send to the TCEQ

- (1) A cover letter that includes:
 - (A) A statement that proof of financial assurance is being submitted for a recycling facility;
 - (B) The name of the facility;
 - (C) The name, address, telephone, and other contact information for the facility owner or operator;

- (D) The level of authorization (notification, registration, or permit) required for the facility, and any TCEQ identifying numbers such as permit or registration numbers; and
- (E) A contact name and phone number for the issuer of the financial assurance mechanism.

(2) The original mechanism(s) issued by the financial assurance provider.

c. Where to send proof of financial assurance

- (1) U.S. mail:
Municipal Solid Waste Permits Section – MC 124
Waste Permits Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087
- (2) Overnight delivery:
Municipal Solid Waste Permits Section – MC 124
Waste Permits Division
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, TX 78753

6. **Retain Proof of Financial Assurance on Your Facility Site.** Documentation of the financial assurance mechanism(s) must be maintained until the facility is closed in accordance with regulations and the executive director approves the closure. Once you have received written approval of the closure, you may request release of the mechanism at the above addresses.

Appendix A Recycling, Composting, and Mulching Facility Exemptions

Recycling, composting, or mulching facilities that are exempt from the registration and permit requirements under 30 TAC §330.11(e)(2) or under 30 TAC Chapter 332 may also be exempt from the financial assurance requirements of HB 1823, material storage requirements of 30 TAC §328.4, and the reporting and record-keeping requirements of 30 TAC §328.5, if:

1. The facility is owned or operated by a local government (city or county), or by a state or federal agency; or
2. The facility is a metal smelter or a secondary metal recycler affiliated* with a smelter that
 - a. Processes metal for recycling using more than just hand tools, and
 - b. Profits from the resale of the metals it processes; or
3. The facility receives more than 50 percent of its incoming materials from the public or haulers not affiliated with the facility, and accepts no financial compensation (tipping fees, discounts, or “hidden charges”) for any of the materials it receives. This exemption applies to buy-back operations, community drop-off centers, and in-house recycling and composting activities, as long as all other requirements are met; or
4. The facility is owned or operated by the holder of a municipal solid waste disposal permit, or an affiliate of a municipal solid waste (MSW) disposal permit holder. *Affiliation is defined in 30 TAC §328.2(1) as a relationship between two “persons,” or business entities, in which one owns or controls more than 20 percent of the voting interest, fair market value, profits, proceeds, or capital gains of the other.*

For more information on specific requirements for recycling and composting facilities, please contact:

Municipal Solid Waste Permits Section – MC 124
Waste Permits Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087
(512) 239-2335
mswper@tceq.texas.gov

Appendix B

Average Densities for Recyclable Materials

This information is provided to help convert quantities of recyclables from volume measurements to weights in tons. If necessary, first use the *Volume Conversion Factors* at the bottom to convert volume measurements to cubic yards. Multiply the quantity in cubic yards of a material times the appropriate density from the table below to get total pounds, and then divide by 2000 pounds per ton to get short tons.

Table 1. Average densities for papers.

Material	Level of Processing	Pounds per Cubic Yard	Cubic Yards per Ton
Old Newspapers	Loose	450	4.5
Old Newspapers	Baled	900	2.2
Old Corrugated Cartons	Loose	100	2
Old Corrugated Cartons	Baled	750	2.7
Office and High Grade Paper	Loose	350	5.7
Office and High Grade Paper	Baled	750	2.7
Mixed & Other paper	Loose	150	13.3
Mixed & Other paper	Baled	650	3

Table 2. Average densities for plastics.

Material	Level of Processing	Pounds per Cubic Yard	Cubic Yards per Ton
Plastic Bottles	Loose	40	50
Plastic Bottles	Baled	400	5
Plastic Bottles	Granulated	600	3.3
Plastic Film	Baled	850	2.4
Other Plastic	Loose	50	40
Other Plastic	Baled	600	3.3

Table 3. Average densities for organic materials.

Material	Level of Processing	Pounds per Cubic Yard	Cubic Yards per Ton
Brush	Loose	333	6
Ground Wood & Mulch	2"-3" screen	500	4
Compost	Windrowed/piled (50% moisture)	1250	1.6
Compost	Finished (40% moisture)	1000	2
Pallets	Whole	40 pounds each	50 pallets / ton
Textiles	Loose	175	11.4
Textiles	Baled	450	4.45

Volume conversion factors:

27 cubic feet = 1 cubic yard
 46656 cubic inches = 1 cubic yard
 One Gaylord box (40x48x36 inches) = 1.48 cubic yard
 One 55-gallon barrel = 0.27 cubic yard

To get volume in cubic yards:

Divide the number of cubic feet by 27
 Divide the number of cubic inches by 46656
 Multiply number of Gaylord boxes by 1.48
 Multiply number of 55-gallon barrels by 0.27

Appendix C Closure Cost Estimate Worksheet

1. List the types and maximum amounts of combustible materials stored outdoors at your facility at any time. Specify material amounts in tons or cubic yards.

Type of Material	Maximum Amount Stored Outdoors

2. Total amount of combustible materials stored outdoors (from Item 1): _____
3. Attach quotes for disposition of any or all of these materials. Each quote should specify the type(s) and amount(s) of material it covers, and a cost for disposition of each.

4. Total amount of materials covered by quotes: _____

5. Total cost of disposition covered by quotes: \$ _____

6. Subtract the total amount of materials covered by quotes (Item 4) from the total amount of materials from Item 2:

Item 2 total _____

Item 4 total _____

= _____

If the number you entered for Item 6 is zero, the dollar figure entered for Item 5 is your financial assurance cost estimate. If this number is greater than zero, complete items 7 - 19 to determine the cost of disposition for materials not covered by quotes.

7. Nearest disposal facility authorized to accept materials on your site:

8. Tipping fee (disposal charge) at this facility (*use the same unit of measurement as in Item 2*):

8(a) _____ per cubic yard or

8(b) _____ per ton

9. Disposal cost = Item 6 x Item 8(a) or 8(b) = \$ _____

10. Collection cost for materials not covered by quotes:

Multiply the number recorded on Item 6 by \$0.80 if calculated in cubic yards, or
Multiply the number recorded on Item 6 by \$1.00 if calculated in tons.

Collection cost: \$_____ (if this number is less than \$500, enter \$500 on this line)

11. Transportation cost for materials not covered by quotes:

Distance from your facility to the disposal facility named on Item 7: _____ miles

12. Use the chart in Appendix B to determine the density of each type of combustible material stored outdoors at your facility.

13. Total volume of materials with densities of less than 500 pounds per cubic yard:

_____ cubic yards

14. Total weight of materials with densities greater than 500 pounds per cubic yard:

_____ tons

15. Divide the number of cubic yards entered for Item 13 by 100: _____

16. Divide the number of tons entered for Item 14 by 25: _____

17. Add the numbers you have entered for Items 15 and 16: _____

This is the number of truckloads necessary to transport your materials for disposition.

18. Multiply the number you entered for Item 17 by the number of miles from your facility to the nearest authorized disposal facility (Item 11). _____

This is the number of "loaded miles" required for transportation to a disposal facility.

19. Multiply the number you entered for Item 18 by \$2.50: \$ _____

This is the cost of transportation for materials not covered by quotes.

20. Total closure cost: Add the dollar figures you entered for Item 5: \$ _____

Item 9: \$ _____

Item 10: \$ _____

Item 19: \$ _____

Total amount of your financial assurance responsibility: \$ _____