



## Best Practices in Wood Waste Recycling

### *Establishing a Tipping Fee Structure*

#### **Material: Wood Waste**

**Issue:** Wood waste processors must set a tipping fee (receiving charge) that allows their business to be profitable. The tipping fee must cover expenses yet, remain competitive with other local recycling or disposal options. Also, an acceptable profit margin per unit (cubic yard or ton) of incoming material should be considered. Establishing a tipping fee ensures that the facility operates profitably.

**Best Practice:** This Best Practice outlines the process for determining the tipping fee at a new or existing facility.

**Implementation:** The tipping fee is perhaps the only variable of the facility's financial system. Therefore, calculating the desired tipping fee requires "working backwards." The cost to process the wood waste (processing costs) is determined by the facility's monthly operating expenses and payment capital expenditures. The tipping fee (per unit basis) is determined by dividing the total tipping revenue by the material tonnage or cubic yards of incoming material. Therefore to determine the tipping fee, the tipping revenue must first be calculated using the following equation:

$$\text{Tipping Revenues} = (\text{Processing Costs} + \text{Profit Margin}) - \text{Material Revenues}$$

where:

1. Processing Costs = Monthly Operating Expenses + Monthly Payments on Capital Expenditures.

**Operating Expenses.** These expenses are necessary costs to remain in business and typically include the following:

- Labor;
- Overhead (e.g., benefits, employment taxes);
- Utilities;
- Transportation for Processed and incoming materials;
- Vehicle and Other Equipment Maintenance;
- Taxes;
- Disposal Costs For Removed Contaminants and Rejected Materials;
- Licenses and Permits;
- Insurance;
- Loan and Lease Payments;
- Advertising;
- Testing and Other Monitoring
- Miscellaneous Supplies.

**Capital Expenditures.** These expenses are also necessary costs to remain in business. They are typically large expenses that are amortized or depreciated over time and include the following:

- Processing Equipment;
- Vehicles;
- Buildings And Other Structures;
- Site Preparation;
- Initial Capital Outlays (e.g., Permits and Site Preparation); and
- Other Large Initial or Occasional Expenditures.

---

## Best Practices in Wood Waste Recycling

2. Profit Margin = The amount of profit a facility desires.
3. Material Revenues = The money generated from end-product sales of processed materials. This may also include fees for special services, such as obtaining permits, or other sources, such as grants.

Most facilities handle more than one incoming material and sell processed materials to more than one market. Therefore, the tipping fee should be calculated for each of the different types of incoming materials. A variation of this approach is to calculate the additional processing costs and lower market revenues, and then apply this difference to a base fee.

Another factor to consider in determining the tipping fee is the local competition, or lack of it. A lower tipping fee generates lower profits. However, a lower tipping fee could be applied temporarily to carve out a larger share of supply from a competitive sourcing market or if one anticipates higher market revenues in the future. A higher tipping fee, presumably allowed by non-competitive pricing for other local alternatives, generates higher profits. It could also be justified as a hedge against future increases in costs or reductions in market revenues. In either case, the local disposal costs and the relative tip fees of direct competitors generally determine the tipping fee's upper limit. Another option is to impose a contamination penalty fee or penalty surcharge for loads that require higher levels of processing.

**Benefits:** Establishing a fee structure that charges more for lower-value materials or that charges for contaminated loads allows a facility to remain both competitive and profitable.

**Application Site:** Processing Facility.

**Contact:** For more information about this Best Practice, contact CWC (206) 443-7746, e-mail [info@cw.org](mailto:info@cw.org).

### **References:**

1. Brickner, Robert. *Recovery 1*, Resource Recycling. November 1996.
2. Hlavka, Rick. Green Solutions. South Prairie, WA.
3. Sargent, Robert. Rainier Wood Recyclers. Kent, WA.

*Issue Date / Update:* March 1997