Recycle Wood Pallets

Recommended Action

Your company generates approximately 20-cubic yards of wood pallet waste every 4 to 5 days. This accounts for 12 percent of solid waste hauling costs. At current disposal rates, you now pay $4,700 per year for the disposal of all wood waste. A 40% reduction in waste hauling costs can be realized via no-cost pickup by a wood pallet buyer.

Assessment Recommendation			
Waste Quantity (yards^3)	Cost Savings	Implementation Cost	Payback (years)
1,500	$2,300	$0	0

Background

Wood pallet recycling is an area of considerable recycling opportunity and indeed this sector has seen considerable growth in the past decade. The use of plastics and composites in pallet production has increased significantly, as have the number of used-pallet buyers and recyclers. Pallets obtained by these buyers are either resold or ground to produce other products such as landscaping mulch and fertilizer. Most local pallet-recycling companies waive pickup fees if 50 percent of the pallets are in resale condition, for example pallets are sturdy, free of rot and cracks.

Anticipated Savings

The primary savings resulting from the selling of wood pallets are from avoiding the cost associated with wood-waste disposal. By recycling wood pallets, you can divert approximately 75 pickups (P) of 20 yd^3 each, or 1,500 yd^3 of wood per year. The savings (S$) are

$$
\begin{aligned}
S\$ &= P \times C \\
&= 75 \text{ pickups/year} \times \$50/\text{pickup} \\
&= \$3,750/\text{year}
\end{aligned}
$$

where,

        C   =   Cost per pickup, $50.

Another annual cost with this recommendation is to ensure pallets are neatly stacked for pickup by the recycling company. One hour is a rough estimate of the time needed to stack pallets prior to pickup. The labor cost of this recommendation is $19.98/hr (W). We are assuming the recycler will pickup pallets as often as your solid waste disposal company does.

C$	=	W x P
	=	$19.98/hr x 1 hr/pickup x 75 pickups/yr
	=	$1,500/yr

Total cost savings (TC$) would be

TC$	=	S$ - C$
	=	$3,800/yr - $1,500/yr
	=	$2,300/yr

Implementation Costs

There is no implementation cost associated with this recommendation so the payback will be immediate.