Economic and Operational Feasibility

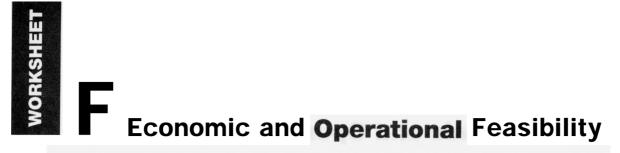
EEHSX80/

Use this worksheet to evaluate the economic and operational feasibility of the waste reduction options under Consideration.

This table in this worksheet will enable you to examine more closely the potential Waste reductions options that passed your initial screening in worksheet E. Much of the information requested on this worksheet involves business judgement concerning such factors as the effect each option is likely to have on productivity and the ease of implementation. You may want to consult with department managers on some issues. Certain questions may not be applicable to all waste reduction option

For the economic evaluation sections of this worksheet, refer to purchasing records, disposal records, waste sort or facility walk-through data, and interviews with company employees, as well as information recorded on earlier worksheet Consult company purchasing officals, financial advisor, or department managers as necessary.

Fill out a separate workksheet for each waste reduction option to be evaluated copying the forms as needed. Use the last page of this worksheet to summarize the economic, operational, and intangible factors associated with waste reduction options under evaluation



Waste Reduction Option_____

Operational Factors

A. Could this option improve or reduce product or service quality? How?

B. Could this option improve or reduce productivity? How?

C. Will additional staff or time be required to implement, operate, or maintain this option? How many'? What would additional staff be required to do?

-	on be Implemented within to bace or a change in layout				
Will any nev	r equipment be needed? If	so, what?			
	mpanes willing to purchase lect material.	e collected recyclab	ole materials? List are	a buyers or haulers	
	e materials be donated to a	loool community a	roup or listed with a	motoriala avahanga?	

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Capital Costs for This Option	
Equipment Purchased (e.g., baler, containers)	
	\$
	\$
	\$
Facility/Storage Preparation (e.g., grading a site for composting)	\$
Installation/Utility Connection (for equipment such as compactors)	\$
Initial Staff Training	\$
Initial Promotional and Educational Materials	\$
Other (specify)	\$
	\$
	\$
	\$
	Total Capital Costs
. Annual Operating Costs for This Option	
. Annual Operating Costs for This Option Materials and Supplies	\$/year
	\$/year \$/year
Materials and Supplies	\$/year
Materials and Supplies Operation & Maintenance	\$/year
Materials and Supplies Operation & Maintenance (e.g., labor, equipment, storage space, service contracts, utility charge	\$/year es)
Materials and Supplies Operation & Maintenance (e.g., labor, equipment, storage space, service contracts, utility charge Transportation	\$/year es) \$/year
Materials and Supplies Operation & Maintenance (e.g., labor, equipment, storage space, service contracts, utility charge Transportation Ongoing Staff Training	\$/year es) \$/year \$/year
Materials and Supplies Operation & Maintenance (e.g., labor, equipment, storage space, service contracts, utility charge Transportation Ongoing Staff Training Ongoing Promotion and Education	\$/year \$/year \$/year \$/year \$/year
Materials and Supplies Operation & Maintenance (e.g., labor, equipment, storage space, service contracts, utility charge Transportation Ongoing Staff Training Ongoing Promotion and Education	\$/year \$/year \$/year \$/year \$/year \$/year
Materials and Supplies Operation & Maintenance (e.g., labor, equipment, storage space, service contracts, utility charge Transportation Ongoing Staff Training Ongoing Promotion and Education	\$/year \$/year \$/year \$/year \$/year \$/year \$/year



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C. Avoided Waste Removal Costs for this Option

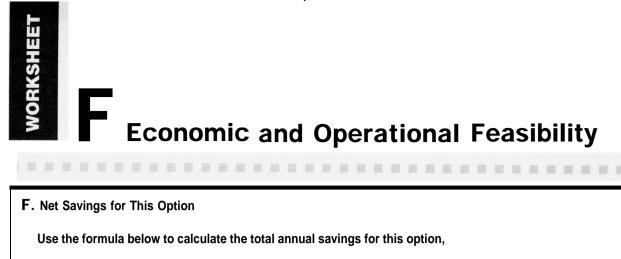
Use the table below to calculate the annual avoided removal costs for this waste reduction option. Using data from the waste sort, purchasing records, and interviews with personnel as a starting point, estimate the annual amount of waste this option will reduce. If necessary, use the conversion factors listed in Appendix D to convert the amount of waste material being reduced (Column 3 below) to the same unit of measure (e.g., cubic yards or tons) as your waste removal cost.

Waste Reduction Activity	Waste Material Being Reduced	Amount of Waste Reduced per Time Period	Annual Amount of Waste Reduced	Waste Removal Cost	Annual Avoided Removal Cost
		X Annual Multiplier =		x	
Replace single-use plates with dishes in cafeteria	Single-use plates	5 cubic yards per week	260 cubic yards per year	\$3 per cubic yard	\$780

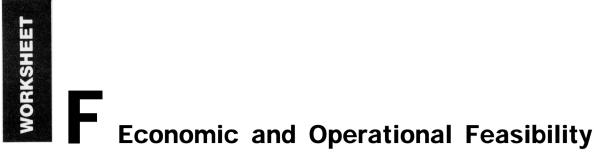
D. Avoided Purchase Costs for this Option

If the waste reduction option under consideration will result in the opportunity to purchase fewer supplies or materials, use the formula below to calculate the annual avoided purchase costs for this option.

Type of Material				
	_ X		\$	
Annual reduction in purchasing [In same unit of measure as the unit price]	g U	Init price		Annual Avoided Purchase Costs
E. Annual Revenues for this Use the formula below to estim	•	for this option (if any).		
+	Colo of itomo in o	+	=	\$
Sale of recyclable materials	Sale of items in a materials exchange	Sale of con	ipost	Revenues

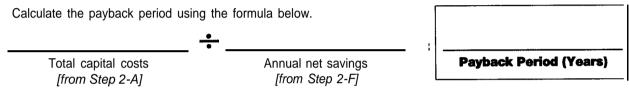


F. Net Savings for This Optior)			
Use the formula below to ca	culate the total annual savin	as for this ontion		
		igs for this option,		
+	+		= \$	
Annual avoided	Annual avoided	Annual revenues		Total Annual
removal costs	purchase costs	[from Step 2-E]		Savings
[from Step 2-C]	[from Step 2-D]			
G. Net Annual Cost or Savings	s for This Option			
Subtract the total annual operation resulting from this waste red			the net a	nnual cost or savings
			\$	
Total annual savings	Total a	nnual		nnual Net
[from Step 2-E]	operatin		Costs or Savings	
	[from St	tep 2-B]		······
H. Interpreting Net Costs If the figure arrived at in 2-F	is positive, proceed to 2-1,			
	,			
If the figure arrived at in 2-F numbers to ensure you have need to determine whether t intangible benefits (such as In addition, be sure to consi components of your program in overall program savings.	e accounted for all potential of his option belongs in your w improved public relations ar der the program as a whole.	costs and savings. If the r vaste reduction program. Id employee morale), you This option might make	esult is th If this opti might cor sense if th	e same, you will on has other nsider including it. ne other



1. Payback Period for This Option

Payback period is one of many ways of measuring the economic feasibility of the options under consideration. The payback period measures the amount of time needed for the cumulative revenues or savings resulting from the waste reduction program to equal the initial investment. (This calculation is only relevant when annual savings or revenues exceed annual costs.) If your company uses other measures of investment worthiness (internal rate of return, net present value, etc.) you may wish to use one of these methods instead of calculating the payback period.



Note: If the payback period is longer than the useful life of any of the equipment purchases listed in 2-A, add the costs of replacing this equipment to 2-A and recalculate the payback period.

3 Other Factors

Aspects of the options that cannot easily be expressed using the Economic and Operational Feasibility tables and formulas may be explained below. (These intangible factors include improved working environment, corporate image, employee and customer satisfaction, community relations, and recognition.) List the intangible advantages and drawbacks associated with implementing this option.

WORKSHEET

Use this table to s	ummarize the econo	omic and operational fe	easibility of your wast	e reduction options.
Option	Projected Amount of waste reduced	Annual Net Cost or savings	Payback Period	Operational and Intangible Advantages and Drawbac
Recycling office paper	200 reams of paper	\$2,000 savings	Less than 1 year	Strong local paper recycling market, easy to implement, good for employee involvemer