WORKSHEET C | CONDUCTING A WASTE AUDIT

Use this worksheet if you need a more detailed profile of the amounts and types of waste generated at your facility than a records review and/or facility walk-through can provide.

When conducting a waste audit (also known as a waste sort), you can either choose to collect all waste generated during the day or select a representative sample of about 50 pounds from each collection container (e.g., dumpster). This is more appropriate for larger companies. Some companies may choose to conduct a visual audit instead, estimating the amount of specific types of material in each container.

Determine the size and location of the area in which you will sort the waste. If large quantities of waste will be sorted, a large, flat area such as a parking area works well. It may be possible to use large indoor rooms for smaller waste sorts. Obtain building management approval and work with them to conduct the waste audit when it will cause the least disruption – likely after work hours. A team of three or four is usually adequate for a small- to medium-sized facility. Expect the waste audit to take a few hours.

MATERIALS NEEDED:

- **Broom/shovel**
- **Camera** (digital or video)
- **Cardboard boxes**
- **Clipboard**
- **Dustpan**
- **First aid kit**
- **Pens and/or markers**
- **Trash bags** (plastic)
- **Rubber gloves**
- **Scale**
- **A copy of this worksheet**
- **Plastic sheeting/drop cloth**

***REMEMBER** to wear old clothes, long pants, long sleeves and closed shoes.*

1. BEGIN THE WASTE AUDIT.

A. Assemble the waste to be sorted, using either one day's worth of waste or an otherwise representative sample of waste from your facility.

B. Weigh the empty containers that the sorted waste will be placed into and record these weights on a label on each container.

C. Sort the waste sample by major material type categories (paper, plastic, glass, metal, compostable organics, other)

D. If needed, further sort each major material types into more specific component subcategories (e.g., glass could be sorted into clear, green, brown or other)

E. Place the sorted materials into separate labeled containers.

2. CALCULATE THE NET MATERIAL CATEGORY WEIGHTS.

A. Weigh each filled waste container and subtract the weight of the container to obtain the net material type weight. Record the net material type weight on the space provided on the Waste Audit Form, column A (beginning on page 23). If you are not sorting into more detailed material subcategories, proceed to Step 2-C.

B. If you sorted the material types into subcategories, add their net weights and record the total net material weights on the Waste Audit Form.

C. Add all the total material type weight figures to determine the total sample weight and record this total at the bottom of the Waste Audit Form.

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3. CALCULATE THE PERCENT TO TOTAL SAMPLE WEIGHT.

A. Use this formula to calculate the percentage each material type represents of the total sample weight.

net material type weight	÷	total sample weight	X 100	=	NaN %
					percent of total sample weight

B. Record data in column B on Waste Audit Form. Use the data in the Percent of Total Sample Weight column to create a pie chart to help compare the percentages of the different material types in the waste stream.

4. ESTIMATE TOTAL ANNUAL WASTE GENERATION BY MATERIAL TYPE.

A. If you sorted one (typical) day's worth of waste, estimate the weight of waste generated for each material type annually using the following formula.

net material type weight	X	number of working days per year	=	0
				weight of material generated annually

B. If you sorted a representative sample, first weigh or estimate all the waste generated by your company that day. Calculate the amount of waste generated annually for each material type by using the following formulas.

total sample weight (all types)	÷	total waste amount generated per day	=	NaN
				sort multiplier

net material type weight	÷	sort multiplier	X	number of working days per year	=	NaN
						annual weight of material

C. Repeat the appropriate calculation (A or B) for each material type and record on Waste Audit Form, Column C. Note, this process does not include any materials currently being recycled. The intent is to focus on identifying waste streams currently being disposed of in landfills. If your company wants to know the total tons generated, add in the quantity of any materials known to be recycled per year.

▶ WASTE AUDIT FORM

AUDIT SPECIFICS		
Date of Audit:	Department(s):	
Source of Sample:		
Sample Collected (specify weight): ◯ All Waste ◯ Representative Sample		POUNDS
Total Weight of Waste Generated on Audit Date:		POUNDS
Team Members Conducting the Audit:		
Factors Affecting the Audit:		

MATERIAL	COLUMN A Net Material Type Weight	COLUMN B Percent of Total Sample Weight (All Material Types)	COLUMN C Weight of Material Type Generated Annually
PAPER			
Green bar computer paper			
White ledger paper			
White form-feed paper			
White copy paper			
White ledger pads			
Cash register receipts			
Adding machine tape			
Envelopes			
Windowed envelopes			
Colored paper			
Yellow legal pads			
Letterhead			
Message pads			
Newspapers			
Magazines			
Corrugated cardboard			
Cardboard tubes			
Mixed waste paper			
Unwanted mail			
Coated stock			
Stick-on notes			
Paperboard (e.g., cereal boxes)			
Paper plates/cups			

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MATERIAL	COLUMN A Net Material Type Weight	COLUMN B Percent of Total Sample Weight (All Material Types)	COLUMN C Weight of Material Type Generated Annually
PAPER (continued)			
Napkins/towels			
Tissue paper			
Wax-coated paper			
Plastic-coated paper			
Carbon paper			
Other paper			
PLASTIC			
#1 PET (e.g., soda bottles)			
#2 HDPE bottles (e.g., milk jugs)			
#2 HDPE film			
#3 Vinyl bottles, pipe, siding			
#4 LDPE film			
#5 Polypropylene			
#6 Polystyrene foam			
#6 Rigid polystyrene			
Other plastic			
METAL			
Aluminum cans			
Aluminum foil			
Other aluminum (rain gutters, etc.)			
Steel cans			
Other ferrous metals			
Other metals			
GLASS			
Brown			
Clear			
Green			
Other			
LIGHTING			
Fluorescent bulbs			
Incandescent bulbs			
FOOD SCRAPS			
Baked goods			
Cooking oil			
Fruit/vegetable scraps			
Grease			
Meat scraps			
Other food scraps			

MATERIAL	COLUMN A Net Material Type Weight	COLUMN B Percent of Total Sample Weight (All Material Types)	COLUMN C Weight of Material Type Generated Annually
WOOD			
Lumber			
Crates			
Pallets			
Land-clearing debris			
Other wood			
YARD TRIMMINGS			
Grass clippings			
Leaves and brush			
AUTOMOTIVE ITEMS			
Lead-acid batteries			
Used motor oil			
Used oil filters			
Used antifreeze			
Scrap tires			
Other automotive items			
MISCELLANEOUS ITEMS			
Furniture			
Linens/towels			
Mattresses			
Rechargeable batteries			
Appliances			
Electronics			
Toner/inkjet cartridges			
OTHER MATERIAL			