

AUDIT FORM 1

This form can be used to collect information on materials already being recycled or reused by your establishment. For each of these materials, you should document the material type, the market (hauler, broker, or end user), date of implementation, and monthly weight recycled or reused.

The information you will need is as follows:

- 1) Column 1 - "Material" - List all materials that are currently being or have previously been recycled or reused (such as corrugated cardboard, aluminum cans, scrap metal, etc.). (See #5 below)
- 2) Column 2 - "Recycler's Name" - List the name, address, telephone number and contact name of your current market(s).
- 3) Column 3 - "Date Recycling Began" - Document the date when you implemented recycling or reuse programs for each material.
- 4) Column 4 - "Weight/Month" - Review weight slips and/or payment receipts to determine weight of material recycled. List the average amount that would be recycled each month.
- 5) For materials where recycling or reuse has ceased, note the date when it ceased and why, as well as any other pertinent information.

Audit Form 1

EXISTING MATERIALS RECYCLED

List each material that leaves your facility for the purpose of recycling or reuse

MATERIAL	RECYCLER'S NAME	DATE RECY- CLING BEGAN	WEIGHT/ MONTH

List any of the above materials that you have stopped recycling or do not intend to continue recycling in the future. Explain why recycling was (or is going to be) discontinued and give the date when the program ended (or will end). Also explain how material is separated, collected, and removed from the facility.

AUDIT FORM 2

This form is the heart of the audit process. Its purpose is to gather data on the weights of various materials in your facility that could be recycled or reused. All the materials listed are recyclable to some extent, and most can be recycled within Pennsylvania.

It is important to provide accurate data on weights and monthly totals prior to making marketing decisions. Accurate data is important for making reasonable estimates of materials costs and staffing needed to operate your program, as well as potential revenue and savings. This is especially important if your establishment must meet a specific payback period to justify capital expenses.

Generally, generation rates--i.e. volumes and weights--remain fairly constant unless there is a significant change in your operation. However, market prices fluctuate according to supply and demand. In order to keep a handle on your recycling program and its costs, revenues and savings, it is a good idea to measure weights/volumes of materials on a regular basis. Appendix E contains a conversion table to help you calculate weights and volumes of materials.

The information you will need is as follows:

- 1) **Column 1 - "Recyclable Waste Material"** - Lists the most common materials, and leaves space to list any materials that are abundant in your waste stream and may be potentially recyclable, such as process waste, production overruns and packaging materials. Don't impose arbitrary limits on materials listed--if you generate a material in volume, it may be worth considering for recycling or waste reduction measures.
- 2) **Column 2 - "Weight (Tons/Month)"** - Note the weight of each material you generate in volume. For example, if a vending machine dispenses 90 glass beverage containers per month, weigh one bottle and multiply by 90 to determine monthly weight. The conversion table in Appendix E may help in your estimations.
- 3) **Column 3 - "Information/Remarks"** - Record specific comments that relate to the materials audited. Your comments should provide additional information about the material that may be pertinent as you establish your program. Possible comments might include:
 - Where waste is generated (single location, multiple locations?)
 - Whether waste is commingled with other wastes, and ease of separation
 - Contamination level (markets need clean materials)--can it be kept free of contaminants?
 - Variations in generation rate (daily, monthly, seasonal, etc.)
 - Availability of space for separate collection of the material at the source(s) of generation
- 4) **Box - "Total Weight (Tons/Month)"** - Total the weights of all potentially recyclable or reusable materials. This total, compared with the total weight of your waste stream (determined in Audit Form 4), will illustrate the potential of your program. You may find that some products are not currently recyclable because of low volume or lack of markets, but knowing what you generate may help in the future as market or waste disposal conditions change.

Audit Form 2 WASTE MATERIAL AUDIT

RECYCLABLE WASTE MATERIAL	WEIGHT* TONS/MONTH	INFORMATION/REMARKS
COMPUTER PAPER (CPO)		
HIGH GRADE OFFICE PAPER		
MIXED OFFICE PAPER		
CORRUGATED CARDBOARD		
NEWSPAPER		
GLASS CONTAINERS		
FLINT (CLEAR)		
BROWN		
GREEN		
ALUMINUM CANS		
STEEL/TIN CANS		
FERROUS METAL		
NONFERROUS METAL		
SCRAP WOOD		
PALLETS		
LEAF/YARD WASTE		
PLASTICS		
BATTERIES (1)		
TIRES		
DRUMS (2)		
OTHER		
TOTAL WEIGHT (TONS/MONTH)		

*If weights are estimates, note "E" for estimate.

(1) Note whether automotive or consumer

(2) Note whether fiber, plastic, or steel

AUDIT FORM 3

This form is a monthly waste pickup/pull worksheet. It will help you to determine the weight of your waste and the cost of disposal. Each pickup or pull must be documented. Completion of the worksheet will result in a monthly average summary of data which will be used in Audit Form 4. A separate form should be completed for each container.

The information you will need is as follows:

- 1) Line 1 - "Disposal Container - Type/Size" - Identify the type of container for which data is provided, based on the container sizes and types listed on Audit Form 4. Compactors, rollofs and lugger boxes are hauled away as a unit, and that container may not return to your facility. Dumpsters are generally front or rear loaded onto a compactor truck and left at your facility. If you do not know the size of your container(s), ask your trash hauler or measure them and compute volume (cubic yardage).
 - 2) Column 1 - "Date of Collection" - Record the date container was pulled or emptied.
 - 3) Column 2 - "Percent Filled When Collected" - Provide an estimate of how full the container was when pulled or emptied.
 - 4) Column 3 - "Front/Rear Load Dumpster Pickup Cost" - Record the cost for each pickup. If a flat monthly fee is assessed, enter the fee in the "Average" block at the bottom of the column in Line B, but continue to enter the collection dates. If billing is done by pickup, record the charge for each pickup.
- Columns 4-6 relate to compactor, rolloff or lugger box containers.
- 5) Column 4 - "Weight of Waste" - Enter the weight (tons or pounds) of waste, which should be provided to you by the hauler. It should be provided on a weight slip that the hauler signs and receives.
 - 6) Column 5 - "Landfill Tip Fee" - Enter the charge made to dump the contents of the container, based on weight provided on the weight slip. Do not include special charges, such as for tire disposal, in this column. Notes of special charges should be made on Audit Forms 1 and/or 2 or in the "Notes" column.
 - 7) Column 6 - "Pull Charge" - Enter the charge made by your hauler to pick up your container, deliver it to the waste disposal facility, and drop off an empty container. This is usually a flat fee.
 - 8) Column 7 - "Notes" - Enter any unusual fees or other information in this column.
 - 9) Line A - "Totals" - Enter sums for Column 3, 4, 5, and 6--all weights and charges. Number of collections should also be counted and recorded.
 - 10) Line B - "Averages" - Enter average costs and weights based on number of collections ("Total" divided by Number of Collections = Average).

Audit Form 3

MONTHLY WASTE PICKUP/PULL WORKSHEET

Complete one of these forms for each type of container that is picked up or pulled from the facility.

Disposal Container Type/Size

		Front/Rear Load Dumpster	Rolloff/Lugger/Compactor			
Date of Collection	% Filled When Collected	Pickup Cost	Weight of Waste	Disposal Cost (Tipping Fee)	Pull Charge	Notes
						Line A - Totals
						Line B - Averages

AUDIT FORM 4

This form provides a summary sheet for all the types of waste containers you use, thus providing for a container/collection cost audit. By entering data from all containers on this form, you should be able to determine total monthly disposal costs. It is essentially a summary of the information collected on Audit Form 3.

If more than one hauler is used or if your business self-hauls wastes, a separate form should be completed for each hauler. This will enable you to evaluate the economics of each arrangement.

Information gathered on each Audit Form 3 should be recorded on a separate line on Audit Form 4. Totals and averages to be transferred are found on Lines A and B of Audit Form 3.

Audit Form 4

CONTAINER/COLLECTION COST AUDIT

Complete one of these forms for each waste contract and for waste hauled directly by your business.

Disposal Containers				Front and Rearload Dumpster		Compactor/Rolloff/Lugger			
Type	Size	Number of Collections Per Month	Percent Filled when Collected	Average Cost/Pickup	Monthly Cost	Average Weight of Waste	Average Disposal Cost (Tipping Fee)	Average Charge per Collection	Monthly Cost

Hauler Name _____

Containers

Type

Size

Compactor 30, 40 (usually 22 ft. long - height determines volume)

Rolloffs (open tops) 20, 30, 40

Lugger Boxes 8, 10

Dumpsters

Front Load 2, 4, 6, 8

Rear Load 1, 1.5, 2, 3, 4, 6, 8, 10