



Conducting a Waste Audit

A waste audit begins with the selection of an audit team. A representative of each area of your business – maintenance, cleaning, mailroom, purchasing, production line, the building manager, and management – must be included, because each is responsible for the waste stream. It is vitally important for upper management to serve on the team, both to authorize release of necessary records and to demonstrate the company's commitment to the effort.

Depending on the size of your establishment, **choose two or three people to head up the waste audit team.** They must be motivated, personally interested in and committed to getting the facts with the intention of following up on the waste audit with a program to reduce and recycle the maximum amount of material.

THE WALK-THROUGH

To assess company waste generation, the first thing the audit team will do is research how waste is currently managed, and **fill out Profile 1.**

Following the completion of Profile 1, the team will **conduct a walk-through of the facility.** The inspection should start where materials are first received, noting all operations that generate waste, what types of waste are produced, and how they are managed. Pay attention to the particular types of material discarded at each point of disposal. The walk-through may result in

preliminary conclusions about reduction/recycling opportunities. Take notes and refer to them when the entire audit is completed. Be sure to pay close attention to:

- receiving area
- lounge
- stock room
- cafeteria, kitchen & lunchroom
- individual offices & desks
- assembly lines
- copy & fax machines
- shipping

THE TRASH SORT

With a basic understanding of your operation's waste management, the team is ready to take a hands-on approach. **Wearing protective clothing, the audit team will meet at the end of a workday or shift to physically sort through waste generated during that day.** (If the amount or type of trash varies substantially from day to day, the team might want to conduct this inspection on random days over the course of two weeks and then compute an average profile of one day's waste.)

Since this exercise will require the team to physically sort through the trash, puncture-resistant gloves and old clothes are a must. To conduct the inspection, spread out a large plastic sheet and dump the day's waste on it. Do not sort recyclables in an area where they might come in contact with food and become contaminated. Use a scale, if possible, to estimate the percentage of each category in the waste stream. If you produce a large amount of waste on a daily basis, use a representative sample of your trash

containers. Conduct the inspection in a garage, fenced-in area, or other enclosed location. This will keep trash from blowing away and is easy to clean up afterwards.

Using Profile 2, estimate what percentage each material comprises of your daily waste stream. Be aware that the identification list might not include everything you find in your waste. There is room at the end of the list to add other categories. Remember, this guide is intended for municipal solid waste audits.

MATERIALS QUANTIFICATION

After broadly identifying the types and percentages of waste generated by the walk-through and visual/hands-on inspection, the team has reached the final element of the audit – quantifying the amounts of each of these wastes. The quantity of materials generated is important because even though many items in the waste stream might be recyclable, they must be present in sufficient volume to make separate collection feasible. This is particularly true for smaller businesses that might need to cooperatively market their recyclables to generate enough volume. **You will have to choose one of the two ways to quantify your waste, using either Profile 3, Option A or Option B.** Option A focuses on information obtained from purchasing records, and option B uses a volume-to-weight conversion chart to determine monthly tonnage of each component. Select the option that best suits your business operations. Be sure to start with components that comprise a large percentage of the waste stream.

Use Profile 3, Option A or Option B for each segment of your waste stream. Make several copies of Profile 3 so that you have enough clean sheets to quantify all of the significant elements of the waste stream.

OPTION A

Completion of Profile 3, Option A requires the audit team to review purchasing records for each of the materials checked off on the identification list (Profile 2). This review will determine how much comes into your facility on a monthly basis. (In an office environment, for example, a vast amount of what is purchased is discarded. In a manufacturing facility, a majority of items purchased become part of the company's product.)

In addition to purchasing records, pay careful attention to other ways materials enter your operations (i.e., mailings, donations). On line (A) of Profile 3, you will put the monthly amount in pounds received by your establishment. Line (B) is an estimate of how much of each type of material is not discarded. Find this amount by estimating how many pounds of each material are retained in your establishment (for filing, storage, etc.) and add it to the amount that leaves the establishment via mail, customers, etc.

It is important that, on line (C), your calculations also estimate how many pounds of each material are currently recycled. Add the amount recycled (C) to the amount that you estimate is retained or mailed out of the office (B). Subtract this subtotal from the amount of material received on a monthly basis (A). This figure will be the total amount disposed.

OPTION B

If Option B is used, the form should be completed at the end of the Trash Sort. If you have a scale, weigh each component and use this form to determine monthly weights. If there is no scale available, estimate the volume in cubic yards to determine weight. Then use the form to determine monthly weights.