

Conducting a Simple Waste Audit at Your Business

What you can measure, you can manage! A visual audit of your waste stream is a simple way to learn the amount and types of materials you are throwing away and therefore, what steps you can take to reduce your waste, and improve your bottom line. Below are instructions to conduct such an audit.

Suggested Equipment:

- An audit form such as in the table below. The idea is to note materials present in the trash; categorize them as (a) recyclable, (b) compostable, (c) garbage, or (d) hazardous waste; and note the percent volume they occupy when compared with all other materials present.

Material Present	Material Type	Recyclable	% by vol.	Compostable	% by vol.	Garbage	% by vol.	Hazardous Waste	% by vol.	Total
Newspaper	Paper									
Plastic Packaging	Plastic									
Compact Discs	Plastic									
Soda Cans	Metal									
Food Scraps	Organic									
Cleaning Products	Hazardous Waste									
Grand Total										

- Pencils/pens
- One medium to large tarp
- Gloves: a combination of latex or nitrile gloves and ordinary garden gloves provide good protection (consider puncture-proof gloves if you think you might have sharps in the waste)
- Box cutter(s)
- Camera
- Tape Measure

Set-up:

The way to get a comprehensive picture of your waste is to collect it over the course of a few days and then examine it comprehensively. Request that custodial staff collect and set aside waste collected from your business/building over the course of a few days.

Method:

Step 1: Set out waste. Place the selected waste on the open tarp.

Step 2: Measure the volume of waste. The pile will most likely not be entirely regular, therefore, record the average length, width and height of the pile, in inches, using the tape measure.

Step 3: Note number of days over which waste was collected. Average time required to generate a certain volume of waste allows you to extrapolate waste amounts for a longer time period.

Step 4: Open the bags of waste. Use the box cutter to split open the bags of waste. You can choose to either empty the bags onto the tarp or if you are able to observe all the contents of the bag, leave the waste bagged for easier clean-up.

Step 5: Photograph waste. Take multiple photographs of the waste, including, if any, materials of particular note (e.g. significant numbers of glass bottles or large amounts of office paper).

Step 6: Note all materials present. In the left hand column of your list, make a note of every material you see in the waste. Next, note what material type each material is, i.e. paper, plastic, metal, organic, hazardous waste, other (such as "unknown") etc.

Step 7: Estimate composition by volume for each material present. Beginning with the most commonly present material, estimate visually its percentage *by volume*.

[Tip: Imagine you are filling empty garbage bags with the different materials you have found present in the waste. Each material gets its own bag. Next imagine how many bags you might fill with one of these materials (such as plastic packaging which is voluminous) compared to the number you would fill with another material (such as newspaper, which is denser and therefore, occupies less space). This simple visualization exercise will allow you to estimate the percentage by volume of each material of the total waste sample].

Repeat this process for each noted material. The total of these percentage estimates should sum to 100%. Your completed audit form might look like the sample form below:

Material	Material Type*	Recyclable	% by vol.	Compostable	% by vol.	Garbage	% by vol.	Hazardous Waste	% by vol.	Total
Newspaper	Paper	✓	10%							10%
Plastic Packaging	Plastic	✓	15%			✓	46%			61%
Compact Discs	Plastic	✓								
Soda Cans	Metal	✓	20%							20%
Food Scraps	Organic			✓	4%					4%
Compact fluorescent bulbs	Hazardous Waste							✓	5%	5%
Grand Total			45%		4%		46%		5%	100%

* You may wish to consult with your recycler, recycling posters, or SPU's website (<http://www.seattle.gov/util/>) to learn whether a material is recyclable, compostable, garbage, or hazardous waste.

Analyzing the percentages:

This audit form allows you to categorize your waste into four different streams that require different handling. Using the sample filled form for analysis, your waste is:

Recyclable 45%
 Compostable 4%
 Garbage 46%
 Hazardous Waste 5%

This quick number crunching reveals the following things:

1. Recoverable (i.e. compostable or recyclable) materials form the greatest part of your waste, thus, a significant cost saving opportunity.
2. Hazardous waste, which needs to be disposed at hazardous waste stations, is being improperly disposed in the regular garbage.
3. Efforts to reduce waste are best focused on increasing recycling rates.
4. Tenant/employee education may also include choosing products that come with reduced packaging.
5. Depending on the size of your building/business, a food scrap recycling program will significantly reduce the weight of your garbage.

