

DIY Simple Workplace Waste Audit

A visual audit of your waste stream is a simple way to learn the amount and types of materials you are throwing away and what steps you can take to reduce your waste and improve your bottom line.

Suggested Equipment:

- An audit form (See Table 1 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.
- 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

Table 1: Sample Audit Form

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

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Set-up:

Decide which department(s)/location(s) the waste be sampled from (receiving area, lounge, cafeteria/kitchen/lunchroom, individual offices/desks, copy and fax machines, shipping/mail room). If sampling from multiple locations, the locations should be easily distinguishable for the day of the sort. This can be accomplished by

- Labeling bags according to the area/departments they were collected with sticker or twist-tie tag, or
- Using different colored garbage bags in the areas/departments being sampled.

Note: To pull a representative sample, make sure that the volume of garbage from the sample area represents the total volume ratio.

To get a comprehensive picture of your waste, request that janitorial staff collect and set aside waste collected from your business/building over the course of a few days so that the waste never enters the dumpster.

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 (See Appendix A for a sample list of materials). 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 it 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].

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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 form in Table 2 below.

Table 2: Sample Audit Form - Completed

Material Present	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%

* Note: When in doubt, check with your recycler 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 completed sample form in Table 2 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.

Recycling at Work is a national voluntary initiative brought to you by:



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