

Waste and Brand Audit Guide

Zero waste practitioners – from neighbourhoods to cities – regularly conduct waste audits to monitor the types and volume of waste generated in a particular area. These systematic exercises help decision makers and communities to develop resource management plans which include at-source segregation, comprehensive composting and recycling schemes, residual waste reduction and product redesign. The data generated will also help city officials design collection systems and schedules, decide what policies to enact, identify what kind of collection vehicles to use, how many workers to employ, and what kind of technology to invest in, among others. All these components lead to our zero waste goal: reduce the amount of resources disposed in landfills and incinerators to ZERO.

In addition to identifying the most common types of waste, audits can also cover the identification of brands and companies that use disposable, low-value or non-recyclable packaging for their products.

On September 11-20, 2017, environmental organizations working against toxics and pollution issues in the Philippines and key members of the Break Free from Plastic Movement (breakfreefromplastic.org) conducted a series of simultaneous daily activities on Freedom Island, a Ramsar site and protected area that is a critical marine and bird habitat in Manila Bay, Philippines. These activities were a coastal cleanup, a waste audit and a brand audit. Despite its importance, tons of trash, particularly plastic waste, end up along Freedom Island's beaches everyday.

Through these activities, #BreakFreefromPlastic aims to gather important data to call for innovations in product packaging and waste management to ensure that NOTHING ends up in our oceans, landfills and other disposal facilities.

This guide was prepared with input from GAIA, Mother Earth Foundation and Citizen consumer and civic Action Group. This guide, though developed for the 2017 Freedom Island cleanup and audits, may be adapted for use in other audit exercises.

1. Planning

1.1. First identify the cleanup area.

Decide which area you want to focus on for your cleanup effort, and your reasons and justifications for focusing on that area. The area may be an important wetland site like Freedom Island, a popular beach, a nesting area for birds, etc. For the clean-up activity on Freedom Island, the area was divided into 10 zones to manage area assignments efficiently, particularly for various teams or groups joining the event. During the cleanup period, the cleanup team should start with Zone 1 on Day 1, and then move to Zone 2 on Day 2, and so on.

1.2. Assign areas and teams for the cleanup and waste audit.

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Ideally, there should be separate teams to do the collection and the audits. The cleanup team will be in charge of collecting the waste, and the audit team will be in charge of sorting through the waste and recording the results.

Decide how many teams you need to make the work most efficient. A waste audit team will ideally have a team leader, a recorder and several sorters. For the Freedom Island audit, there were 5 waste audit teams which were composed of 1 team leader, 2 recorders and 6 sorters.

The audit stations should be covered areas with ground sheets. You may want to use tents if your target area lacks proper buildings. Ground sheets protect the ground from further contamination, make the waste easier to see and sort and will also facilitate easier clean-up after the audit.

1.3. Decide how to select sample data.

Decide how much and what kind of data you need. It may not be possible to conduct an audit for 100% of all waste collected, particularly if the clean-up area is large and if resources and the time to do the audit are limited.

The BFFP teams on Freedom Island focused on collecting all waste and doing a waste audit for **10% of the waste collected in the target areas**. For the **brand audit, five (5) sacks of branded residual materials** were taken from the total residual fraction using random sampling.

1.4. Training for waste audit teams.

Waste audit teams should be trained before the actual event on how to use the forms and how to do the audits. Roles may also be assigned during the training (team leader, recorders, sorters) to make sure that everyone clearly knows his or her responsibilities during the audit day. Trainings are essential to answer questions that participants may have, and to clearly communicate the clean-up and audit processes.

Those participating as cleaners only can receive instructions during the day of the cleanup. However, make sure that guidelines (clothing, what to bring, etc) are clearly communicated to participants beforehand.

2. Actual Waste Audit

2.1. Waste Collection.

For the Freedom Island event, teams of five to 10 people, including 5 waste pickers, collected ALL waste in the identified cleanup area for the day. Each cleanup zone covered a stretch of 20 x 20 meters of Freedom Island's shoreline. Volunteers were advised NOT to be selective in the waste collection and pick up ALL waste on the surface. All collected waste was brought to the audit stations for measurement and 10% was audited.

2.2. Prepare materials for sorting.

The sorting team should have the following materials for the sorting:

- weighing scale;
- containers (preferably drums or pails that have been calibrated to measure volume) for each type of waste;
- ground sheet;
- tongs for picking up and sorting;
- and waste charts and forms.

The containers should also contain labels, based on the (specified in the table 1 at the bottom of this document).

Each sack will be emptied onto the ground sheet, and the sorters using tongs will start separating materials one by one. It is advised to focus on auditing one sack at a time to minimize the amount of waste spread out in the audit station, and to give the team ample room to move around.

2.3. Segregate waste by category.

The Freedom Island audit used all 19 waste categories. These categories are based on the types of waste identified in previous waste audits along Manila Bay. You may decide what categories are most useful for you.

These categories are also in this [form](#). In the form, different types of waste - plastic bags for example - should be tallied based on volume (number of containers) and weight (in kilograms / grams).

Name of Organization: _____	Date of Audit: _____
Names of Recorders: _____	_____
Names of Sorters: _____	_____
Time of Audit (Start/End): _____	Zones Audited: _____

CLASSIFICATION	VOLUME	WEIGHT	Time Recorded
1. Plastic Bags			
(Weighing) 1 st			
2 nd			
3 rd			
4 th			
5 th			
6 th			
7 th			
8 th			
9 th			
10 th			
TOTAL			

No need to compress or flatten the piles of waste inside the containers in getting the estimated volume.

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Data must be entered immediately into the forms after each measurement, whether of volume or weight.

At the end of each day, the **total volume** and **weight measured** by each audit team must be calculated. All forms must be submitted to a designated *record keeper* who should make sure that the data will be recorded and tabulated at the end of the activity.

Alternatively, if there is enough manpower, you may decide to assign groups to pick up different waste streams and have those measured and weighed directly. The important thing is to make sure that all waste will be picked up, categorized and measured, and that at the end of the day, the target area is clean.

2.4. Sort waste by brand.

After the waste audit, a **brand audit** will be done on the residual fraction of the waste. A different set of forms will be used for this activity, and the residual plastic waste will be separated into 3 major categories:

- food packaging,
- household items and
- personal care products

In addition, the types of products and types of packaging will also be identified. Please refer to the brand audit forms, as follows:

- [Food Packaging Brand Audit Form](#)

BRAND AUDIT FORM
Food Packaging

Organization: _____ Dates of Clean-up/Audit: _____
 Names of Recorders: _____
 Names of Sorters: _____
 Time of Audit (Start/End): _____ Audit Zones: _____ Total Volume: _____ Total Weight: _____

Manufacturer	Local / International	Brand Name	Type of Product	Type of Packaging	Tally (Indicate with tally marks)	Total Pieces
1.						
2.						
3.						
4.						
5.						
6.						
7.						

1 Food Packaging

TYPE OF PRODUCT	
B/C	biscuits, crackers, cupcakes, etc
BF	fast food (burger wraps, ketchup packs, etc)
BI	breakfast items (coffee, creamer, choco drink, milk, spreads, etc)
JF	junk food (chips, nuts, etc)
B/D	beverages and drinks (soda, iced tea, juice, etc)
KI	kitchen items (meats, mixes, soy sauce, vinegar, oil, seasoning, etc)
C/S	candies and sweets (candy, chocolates, bubble gum, ice cream, etc)
N	noodles (noodle cups, all types of noodles)

TYPE OF PACKAGING	
SL	single layer
PS	polystyrene
ML	multi-layer, composites, laminates
HP	hard plastics
F	foil
PET	polyethylene
ES	expanded polystyrene
O	others

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- [Household Items Brand Audit Form](#)

BRAND AUDIT FORM
Household Products and Others

Organization: _____ Dates of Clean-up/Audit: _____
 Names of Recorders: _____
 Names of Sorters: _____
 Time of Audit (Start/End): _____ Audit Zones: _____ Total Volume: _____ Total Weight: _____

Manufacturer	Local / International	Brand Name	Type of Product	Type of Packaging	Tally (Indicate with tally marks)	Total Pieces
1.						
2.						
3.						
4.						
5.						
6.						
7.						

1 Household Products

TYPE OF PRODUCT				TYPE OF PACKAGING			
C	Cleamers (acids, bleach, etc)	D	Detergents (soap, liquid soap, powders, dishwashing liquid)	SL	single layer	PS	polystyrene
CT	Cleaning tools (sponges, rubbers, gloves, etc)	T	Textiles (rags, rags, cloths, etc)	ML	multi-layer, composites, laminates	HP	hard plastics
CB	Cigarette butts	O	Others	F	foil	PET	polyethylene
				ES	expanded polystyrene	O	others

- [Personal Care Products Brand Audit Form](#)

BRAND AUDIT FORM
Personal Care

Organization: _____ Dates of Clean-up/Audit: _____
 Names of Recorders: _____
 Names of Sorters: _____
 Time of Audit (Start/End): _____ Audit Zones: _____ Total Volume: _____ Total Weight: _____

Manufacturer	Local / International	Brand Name	Type of Product	Type of Packaging	Tally (Indicate with tally marks)	Total Pieces
1.						
2.						
3.						
4.						
5.						
6.						

1 Personal Care Products

TYPE OF PRODUCT				TYPE OF PACKAGING			
D/N	Diapers and napkins, wipes	O	Others	SL	single layer	PS	polystyrene
HC	Hair care (shampoo, conditioner, shaving cream, gels, mousse, etc)	OC	Oral care (toothpaste, mouthwash, floss, etc)	ML	multi-layer, composites, laminates	HP	hard plastics
MP	Medically-related products (medicines, cottons buds, cotton, band-aids, ointment tubes, medicine vials, etc)	SC	Skin care (soap, lotion, moisturizer, deodorant, astringents, creams, colognes, perfume, facial wash, sun screen, etc)	F	foil	PET	polyethylene
				ES	expanded polystyrene	O	others

Same with the waste audit, all data should be inputted into the forms at the end of each day, and the totals should be calculated.

Important: all team leaders should sign against all data collected at the end of each day.

3. Final recording of audit data.

- 3.1. All of the daily results must be recorded and tabulated in the final waste and brand [audit tally forms](#).
- 3.2. The final results of the brand audits can then be made public. For example, the Freedom Island event data were made public in this format - <http://ba.plasticpolluters.org/manufacturers/philippines>

Note: For BFFP members only (for now), the data can be submitted for addition to the plasticpolluters.org online platform that will incorporate the results of brand audits conducted elsewhere by other BFFP groups. Separate instructions for this are available from info@breakfreefromplastics.org.

Other important things to consider:

Cleanups and audits are challenging activities to do. It is important to make sure that participants are as comfortable as possible, and that their safety is protected at all times.

1. Make sure that all participants are reminded to wear proper clothing (closed shoes, comfortable/light clothing, long pants, sun protection).
2. Also ensure that there is a first aid team on stand by, and trained first aid personnel to provide assistance if needed.
3. It is also important to provide water, food, rest areas and wash rooms, particularly if your activity is a multi-day event such as was the case with the Freedom Island clean-up.

For this particular exercise, waste should be classified into 19 categories:

Table 1. Waste Classification

Waste Type	Description
1. Plastic Bags	T-shirt bags, sando bags
2. Composite/Multi-layered packaging	Shampoo/toothpaste sachets, 3-in-1 coffee sachets, junk food wrappers, etc
3. Single-layer plastics	Plastic labo, some junk food wrappers and other kinds of plastics that are not classified as t-shirt bags
4. Polystyrene	Food containers, coffee cups, disposable plastic cups and utensils
5. Hard Plastic (HDPE / LDPE / PP)	All kinds of hard plastics like shampoo bottles, lotion bottles, bottle caps, etc except PVC and PET

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6. PET plastics	Soda bottles, water bottles, juice bottles
7. Drinking straws	
8. Diapers and sanitary pads	
9. Metals / Cans	Aluminum, foil, other types of metals
10. Glass	All kinds of glass except thermometers, light bulbs and medical supply/medicine bottles
11. Paper / cartons / cardboards	All kinds of paper products
12. Biodegradable waste	All kinds of bio waste except paper and cartons
13. Cigarette butts	
14. Textile	All kinds of cloths, rags, etc
15. Ceramics	Pottery, plates, mugs, ceramic figurines, etc
16. Hazardous waste	Paint cans, PVC plastic (laminates, tarpaulins, linoleum, PVC toys, shower curtains), light bulbs, etc
17. Medical waste	Thermometers, syringes, medicine bottles, etc
18. Footwear	Slippers and shoes
19. Others	Rubbers, all other kinds of waste that don't fall under the categories above

Note:

[Download all the forms here.](#)