

3.3 HOW TO CONDUCT A WASTE CHARACTERIZATION AUDIT

The waste characterization portion of the audit consists of sampling the waste stream and then sorting and weighing the different materials in the samples in order to get a snapshot of the composition of the solid waste produced by the facility. Notify the janitorial staff and schedule the audit ahead of time. You should need no more than two or three people to conduct the audit.

The bagged waste should be taken to an area where there is room to spread a plastic sheet on the floor (or a large table) for sorting. The material is then sorted and weighed by type (food waste, cardboard, styrofoam, paper, etc.) and the results recorded on copies of Worksheet A.

The bagged waste should consist of all of the waste generated over exactly a 24 hour time period. Therefore, it will be helpful to enlist the assistance of janitorial and/or building maintenance staff. They could, for example, see that all of the waste from the previous day is collected and held for your audit.

Each bag or container of waste constituting the sample should be identified with respect to its source, if possible. This could be helpful in targeting problem areas later on. (e.g., paper from administration, food wastes from the cafeteria). So if waste is sorted off site, make sure you label bags or containers.

Take a copy of Worksheet A and fill in the information at the top. Count the total number of bags of waste and weigh each one. This will give you the weight for one day's worth of trash.



Next, choose several bags to use for your samples. A good sample will constitute 25% to 30% of the total amount of waste. (So if you have a total of 12 bags of waste, choose 3 or 4 to use for your sample.) Weigh one bag or container, record the weight, and then place it on the tarp. Tear the top of the bag open. You can then separate the materials into the categories on Worksheet A using buckets lined with trash bags. You don't need to use all categories, only the ones that you are interested in measuring. If needed, you can add new categories in the blank spaces provided. If possible, sort and weigh all of the materials from one bag before going on to the next. This will allow you to

complete one worksheet before starting another and will minimize the chances for error.

Once the first bag is sorted, weigh the different categories of materials, (taking into account the weight of the bucket). Enter the weights into the appropriate box on the worksheet. Note that all of the material found in the bag should be included in one of the categories – so that the weight of the entire bag is roughly equal to the combined weights of the categories. When completed, re-bag and dispose of the materials. Once you are finished with the audit, look back at the materials you found in your waste and think about the options for reducing or eliminating each of them. Place check marks in corresponding boxes labeled reduce, reuse, and recycle. You can reference this when putting together your waste reduction plan.

Equipment Needed

- 5-gallon buckets or other comparable containers
- Tarp or plastic sheet for spreading and sorting waste
- Several copies of Worksheet A
- Clip Board
- Extra trash bags to line buckets and to re-bag sorted waste
- Bathroom or other comparable type of scale
- Close toed shoes
- Latex gloves