

2 **Conducting an Assessment**

The first step in developing any kind of waste reduction program in the workplace is to identify what wastes are generated and where they are generated. You can do this by conducting a waste assessment. A waste assessment can take many forms, targeting various parts of your operation and different waste streams.

Begin your waste assessment by conducting a walk-through of the facility, paying special attention to waste generating practices that you might not otherwise notice during routine activities. This review provides an actual, visual assessment of the



processes and practices that generate waste. The second step is to examine facility records to provide concrete data on which to base waste reduction progress.

The following sections provide greater detail on these initial steps toward reducing waste. Remember that waste can include solid wastes, hazardous or toxic wastes from industrial processes or from cleaning activities, energy waste, water waste, and air emissions.

Conduct a Facility Walk-Through

During a facility walk-through, the goal is to observe the major activities within your facility, the waste streams generated by each activity, and how these wastes are managed. From this information, identify target waste materials and the related activities that can be streamlined to prevent waste.

During a typical walk-through:

- Identify waste-generating activities and equipment;
- Observe the types and relative amounts of waste generated;
- Collect information on waste generating activities through discussions with employees;
- Detect inefficiencies in operations or in the way products and wastes move through the system;
- Observe the layout and operations of various areas;
- Assess existing space and equipment that can be used for storing and processing recyclables and compostables; and
- Assess current waste prevention and recycling efforts.

During the walk-through, follow the general materials flow of your business or operation. For example, begin in the purchasing department, followed by loading docks where materials are received, then handling, storage and use. Finally, look at disposal activities. This method should provide a full picture of the materials used and discarded at your facility, and the wastes generated along the way.

If you are working toward your Green Star Air Quality Award, remember that air emissions are wastes too and should be included in your assessment. Air emissions are generated by equipment and industrial processes, vehicles, furnaces, and parking lots (dust from winter sanding), just to name a few sources.

Since directly measuring quantities of air emissions is complex, use indirect measures. These measures include tracking vehicle trip miles for company and employee vehicles, assessing the number of employee and company vehicles that are plugged in at home and at work, monitoring utility usage (electricity and natural gas), monitoring fuel usage by company vehicles, tracking the quantity and grade of traction sand used in parking lots, and noting the method and frequency of parking lot cleaning.

To help with your waste assessment, see Appendices A and B for the Green Star Waste Reduction Assessment Worksheet and the Air Emissions Assessment Worksheet. You can use these worksheets to identify and document the wastes generated during each activity, indicating the largest contributors to the waste stream. You do not need to know the exact percentage that each item contributes to the waste stream, but it is important to determine, in general, which components contribute relatively more or less waste.

Examine facility records

Based on your observations during the walk-through, determine your target materials or wastes. These are wastes generated in large quantities and/or those easily reduced. Once you have identified the specific target materials or wastes, and the processes that generate them, you can look at your facility records. Facility records can provide background information about the facility operations, such as quantitative data about purchasing activities, waste hauling, and other vital information. Facility records also can confirm information gathered during the walk-through, and provide a baseline for tracking and measuring waste prevention progress.

The types of records useful for quantifying waste and identifying waste management and purchasing opportunities include:

- Purchasing, inventory, maintenance, and operating logs;
- Supply and equipment invoices;
- Equipment service and repair contracts and invoices;
- Utility bills (gas, electric, water, sewer); and
- Waste hauling (solid and hazardous) and recycling records and contracts.

Based on the information you gathered, start identifying opportunities for reducing the wastes and altering the waste generating practices you targeted.

