

Steps for Waste Reduction/Recycling Program Planning & Implementation

Organize

- **Start at the top** - Support for recycling and waste reduction, along with incentives for employee involvement, must come from the upper levels of management.
- **Appoint a coordinator** - A recycling coordinator should be appointed to carry out the activities necessary to make the program work. The coordinator could be anyone from within the organization, but should be someone who has a thorough understanding of the organization and its waste stream.
- **Consider a committee**- If the organization has a significant number of employees and/or is organized by departments or sections, it may be helpful to have a committee assist the coordinator.
- **Conduct a waste audit** - The waste audit will tell the coordinator several things: (1) what is in the waste stream; (2) how it is being handled; (3) the composition of the waste stream; (4) the weight or volume of the various components; (5) sources of the wastes; (6) the system used for in-house collection; (7) removal and disposal practices; and (8) the current costs of operating the system. Several forms that can assist in gathering data about systems operation are included in the appendix.
- **Make program decisions** - The coordinator and committee must evaluate the information gathered and develop a waste reduction plan. Companies may need to spend time on market investigations to find uses for uncommon waste materials. Several waste exchanges act as a clearinghouse for matching waste generators with waste users in order to recycle waste products by returning them to the manufacturing process.



Source Reduction

- **Operations and Equipment** - A critical analysis of process equipment and manufacturing/operations procedures may uncover areas where material is wasted. It may help to look into ways of being more efficient with the use of process materials, supplies and equipment.
- **Inventory Management** - For materials that have a finite shelf life, order only what is needed and can be used within the stated life span. For items that have a long or infinite shelf life, however, bulk purchasing may be more cost effective and will generally result in less waste.
- **Purchasing** - Consider the recyclability or reusability of materials and equipment purchased. Whenever possible, choose a recyclable or reusable alternative. Also look for products that are durable and will last through multiple uses. Repairs and replacement parts will be less expensive and less wasteful than disposable products.
- **Packaging** - The use of excess packaging results in added production costs and added disposal costs for the customer. Returnable containers or other packing materials that can be recycled or reused should be utilized whenever possible.

Recycling Considerations

A facility may be able to achieve significant disposal cost savings by recycling materials that make up a substantial portion of the waste stream. In business, the profit margin is usually the top concern. Recycling coordinators must ask what expanded recycling does for the business and the bottom line. No matter how hard we try, recycling sometimes simply costs a business too much, especially when disposal costs are low. As recycling options are examined the following should be considered:

- Does the business or institution generate a good quality of recyclable material?
- Can the material be kept clean and segregated from potential contaminants?
- Does the facility generate enough volume of the material to interest markets?
- How will materials be transported from the facility to a processor or market?
- Will the processor or market pick up materials or will the facility need to haul the materials to the market?

Establishing the Program

- **Locating a Hauler/Market** - The facility must have a market ready to accept its materials before beginning a program. This can be done directly through a broker or end user. Materials can also be marketed through a hauler.

- **The Collection System** - Collection systems for commercial recycling are not a one-size-fits-all proposition. Elements should include: space availability, equipment/container requirements, labor demands and physical layout.

- **Equipment and Supplies** - The equipment used for waste may also be used for recyclables so a facility's equipment needs may be minimal. In general, some type of container will be needed at individual workstations, larger containers will be needed at various sites throughout the facility to collect from workstations, and bulk central storage containers may be necessary to hold materials until they are collected by a hauler or delivered to a market.



Publicity and Promotion

Possibly the most critical element in developing a successful recycling program is getting the word to employees. Employees must understand the program and actively participate or the program will not reach its full potential.

A variety of means should be used to educate employees about the recycling program. Some options include brochures, posters, memos, newsletters and staff meetings.

The following information should be shared with employees:

- The importance of recycling
- Recycling procedures
- The items to be recycled
- The Recycling Coordinator's name

Implementation

Once the facility has completed the previously described steps, it is ready to begin collection. Because the program will require a change of habit for most employees, the recycling coordinator will need to monitor the program closely to ascertain employee participation levels.

Each department should have containers that are convenient to all employees. There should be sufficient containers to prevent them from overflowing, but not so many that it takes too long to fill. The number used is determined by the amount of materials a facility expects to generate.

This fact sheet was developed by the Professional Recyclers of Pennsylvania, P.O. Box 25, Bellwood, PA 16617. For more information, visit our website, www.proprecycles.org, or contact us by email at prop@proprecycles.org.