

Chapter 21 Solid, Toxic, and Hazardous Waste

This chapter explains the differences between solid, toxic, and hazardous waste. Ordinary household garbage is an example of solid waste. However, it is important to know that it is only one type of solid waste. Toxic waste is simply a form of a hazardous waste. It is necessary to know examples of each and the corresponding health effects of these substances.

The population uses several methods to dispose of waste. It is essential to understand the construction of a sanitary landfill. Other methods used to clean up wastes include bioremediation and phytoremediation. Finally, companies frequently use methods to degrade hazardous substances to harmless substances. Cost-effective approaches generally win out.

Because reducing the waste stream is covered in this chapter, recycling, reusing, and reducing waste become important concepts. It is important to be able to examine recycling in a cost/benefit approach, and be able to explain each cost and benefit. In addition, concepts in this chapter lend themselves to mathematical problem-solving. It is necessary to be well-versed in computations involving not only energy, but also wastes generated as percentages, and volume as it pertains to leachate.

Finally, this chapter presents two important pieces of federal legislation, RCRA and CERCLA.