

# Recycling

## Re-Using Our World's Solid Wastes

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### 3 INTRODUCTION – MOUNTAINS OF TRASH, DUMPING, AND RECYCLING

The habit of throwing things away has created a huge garbage and rubbish disposal problem. And the mountain keeps growing. If people continue to throw things away at their present rate, the mountain of trash will double by 1987.

Over the centuries societies have developed several ways to dispose of trash and garbage. But none of these methods can cope with the enormous amount of rubbish produced today. City dumps, one of the oldest forms of waste disposal, are still the most common. About 85 percent of the garbage and trash collected in the United States is simply thrown into open dumps. Dumps are unpleasant to look at, create bad odors, poison water supplies, and cause disease

4 other animals that carry disease-causing germs. **And, as dumps keep growing, cities find they are running out of dumping space.**

Garbage, paper, and cloth left in a dump for a long period of time will decay, break down, and be absorbed by the earth. Tin cans eventually rust and break up too, **but the complete process takes about 100 years. Nature would take 400 years to break down aluminum cans left in dump heaps. Meanwhile the dump heaps get bigger and bigger as the population continues to produce more and more wastes.**

**Glass and plastic products present the worst dumping problems. Even over long periods of time, nature hardly affects them at all. Archaeologists have unearthed glass that was still in perfect condition after being buried more than 4000 years in the trash heaps of past civilizations.**

**Enclosed burning, or incineration, solves some of the problems of dumping. It quickly reduces the volume of trash and garbage, but it still does not do away with nonburnables, such as aluminum and glass.** The trash that does not burn must still be dumped somewhere. Some incinerators leave as much as 500 pounds of ash and nonburnables after burning one ton of garbage and rubbish. Incineration also pollutes the air with bad odors and with smoke and ashes that escape during burning. In some cases, the chemicals in the smoke can actually be poisonous to people's lungs, causing lung cancer and tuberculosis.

Dumping refuse into oceans and rivers is another form of waste disposal that pollutes our resources. Sometimes the rubbish simply floats back to shore, where it must be disposed of again. Other times it floats out to sea, forms stinking islands of pollution, and kills the fish, other animals, and plants that live in the ocean. A 20-square-mile area in the Atlantic Ocean has been so ruined by garbage and rubbish that marine life can no longer survive there.

6 In some other areas, the fish do survive, but they carry poison in their bodies. If people eat these fish they may be poisoned too.

These methods of getting rid of waste not only cause pollution problems, **they cost too much money. Every year, communities in the United States spend almost \$5,000,000,000 to collect and dispose of solid wastes. Only schools and highways take a larger share of city budgets.**

### 7 WHAT IS RECYCLING?

Recycling simply means re-using things instead of throwing them away. Some things are still in perfect condition when they are recycled. Other things may have worn out in their original use, **but they can be used to make something new.**

**The things we use can be recycled in so many ways that it would be impossible to list them all. Some of the ways of recycling things have not even been thought of yet. Every day individuals, communities, and industries find new ways to re-use materials that, only a few years ago or even a few days ago, they may have thought useless.**

**Factories also use old bottles and old cans to make completely different materials. For example, they might use crushed glass as an ingredient in asphalt used to build a highway. Or they might use melted-down tin cans to make steel for new automobiles.** Scientists constantly experiment to find new ways of using materials that people throw away.

### 10 YOU, RECYCLING, AND YOUR COMMUNITY

Today, communities, industries, and families are interested in the paper recycling process. They are interested in glass recycling, metal recycling, and any other process that can prevent our great junk heaps from growing bigger. When you take part in recycling, either in your home or in a community project, you are helping solve the problems caused by dumps, incinerators, and the dumping of garbage and rubbish into oceans. By recycling you are also helping to save your natural resources. Every ton of paper that is recycled saves 17 trees from being cut down for new paper. Every piece of glass or metal that is recycled saves the earth from being stripped for the minerals that are used in new glass and metal.