

One reason for this is that more than half of all packaging is paper, and paper is the most readily disposable of all packaging materials. The other major materials, arranged here in an ascending order of difficulty, are wood, plastics, metal, and glass. Metals and glass are roughly equal in terms of disposal difficulty.

In landfill operations, the greatest single difficulty presented by packaging materials is the resistance to degradation in the soil of certain materials. Aluminum, glass, and plastic containers are virtually indestructible and persist for decades and much longer. Even paper tends to have a long life underground. We have found some indication that paper has lived for about 60 years in the landfill and when extracted the text on it could still be read.

In incinerators, metals and glass show up as inert residue—which must be hauled away. Plastics can cause trouble when they appear in high concentrations. This can occur when industrial discards, high in plastics content, must be handled. Packaging materials do not yet contain sufficiently high percentages of these materials to disrupt operations consistently; nor will they appear in high enough concentration by the mid-1970's.

By 1976, the relative difficulties of processing packaging wastes will have increased somewhat. But this will be due to the fact that many open dumps will have been shut down—replaced by sanitary landfills and incinerators in which much more material processing has to take place. The relative dominance of materials will remain about the same. Paper will still be in the lead and will, in fact, have enlarged its share of total packaging. Plastics will have doubled in tonnage; but in 1976, they will amount to only one-fourteenth the size of paper.

REUSE OF PACKAGING MATERIALS

In an ideal system, packaging materials would never be discarded—they would be reprocessed by industry and made into new packages or other products.

We are very far from such a situation today. Of the 46 million tons of packaging materials produced in 1966, only about 4.5 million tons were recovered—mostly old corrugated boxes and returnable glass containers.*

Once packaging materials have passed through the gamut of the trash barrel and the compactor truck, they are hopelessly contaminated with organic matter, dirt, and moisture and intimately mixed with other wastes. It would be virtually impossible to separate them economically from the trash even if they were clean. The result is that we squander billions of dollars worth of materials every year—valuable fibers, metals, plastics, and glass. In 1966, materials worth \$16 million were converted into packages. This will give you an idea of the value thrown away.

This situation might be improved slightly if packaging wastes could be separated before disposal. But the American homemaker has a marked distaste for separating waste materials. On the other hand, she is an eager buyer of "disposable" packaging. Monumental efforts

*Recovered packaging materials are made up of 2.5 million tons of old corrugated boxes, 1.1 million tons of returnable glass containers, and 900,000 tons of all other materials.