

collection of refuse is related to the method of disposal. Separate garbage collection is essential if hog feeding of cooked garbage or other salvage operations are included in the methods of disposal. Combined collection of mixed refuse, including garbage, is made if the disposal is done by sanitary landfill or incinerator. Combined collection, of course, permits combined storage.

At the point of origin refuse is stored in a great variety of containers ranging from the familiar metal or plastic garbage can to paper boxes and paper or plastic bags, and from specialized containers at commercial or industrial establishments to open refuse "vaults." The storage of refuse at the source frequently leaves much to be desired.

The hauling of refuse to the disposal site is done in all kinds of vehicles. These include the private car and open trucks as well as specially designed equipment which has an enclosed liquid-tight storage body and provides for some compaction of the collected materials. Regular collection and hauling services usually are performed at least once a week where these activities are organized.

The final disposal of most of the solid wastes is still accomplished in four basic ways: open dump, sanitary landfill, incineration, and by salvage which includes composting and hog feeding. In addition, some of the garbage ground at the points of origin is disposed of through the sewage system.

The severity of the refuse disposal problem is directly related to the density in population settlement patterns. It can be solved more readily by the producer in rural areas where there is ample room for composting, burying, or burning of unwanted materials. The solution is much more difficult in urban areas.

Open dumps are smoldering, smelly places where solid wastes are just deposited—without any regulation or organization. Open dumps frequently are found at the outskirts of both rural and urban communities. To reduce the volume and to control rats, deposited wastes are sometimes burned thus causing considerable air pollution. Open dumps vary in their levels of offensiveness. Some open dumps are worked at irregular intervals with bulldozers to level and compact the refuse. This makes them slightly more tolerable than those open dumps which are not so worked and/or "cleaned up" periodically. Open dumps that are worked, are sometimes called "modified" landfills or "modified" open dumps.

The sanitary landfill method of refuse disposal requires that (1) the wastes be reduced in volume on the disposal site by compacting and/or other means, and (2) that the deposited materials be covered with a layer of earth or other inert material at the conclusion of *each day's* operation. Properly located and operated sanitary landfills produce minimal ground or surface water pollution, prevent the breeding and harborage of insects and rodents, and there is no burning of refuse.

The volume of compacted refuse or disposal capacity of each disposal site is often measured in "acre-feet." One acre foot of refuse is the equivalent of 1 acre filled to a depth of 1 foot with compacted refuse. Once completed, sanitary landfill areas can be used almost immediately for recreational purposes and parking. Depending upon the location and fill-depths, the settlement may continue for a decade or more. However, with proper compaction, and in some cases, foundation piling, the sites may be made usable for commercial and light industrial establishments.