

small self-haul facility to approximately \$5,000 per ton of capacity for a large truck transfer facility. Operational costs are associated with on-site labor, maintenance, utilities and hauling. Operating costs can range from \$15 per ton to \$8 per ton respectively for the facilities discussed. Based on round trip transfer times of 60 minutes, these costs will increase as haul distances increase.

C. Summary

Table 2-7 lists the advantages and disadvantages of the storage and transfer options for recyclables. The planning unit should consider the size and number of storage and transfer facilities, as well as the location of the facilities so as to minimize transportation costs and maximize the efficiency of the collection process. Siting is also very important in terms of minimizing noise from transfer operations. The overall plan dictates the size, location, and number of storage and transfer facilities that the planning unit will operate. Future capacity needs should also be considered in sizing storage structures.

V. Materials Recovery Facilities/Intermediate Processing Facilities

As discussed in this chapter, the materials recovery facility (MRF) or intermediate processing facility (IPF) does not separate recyclables from the waste stream, but further separates or processes source-separated recyclables in order to meet the quality control requirements of a particular buyer or end-user. The term MRF is used within this text, but may be referred to as an "IPF" as well.

A. Description/System Design

MRFs are designed and operated to sort, clean and densify source separated recyclables by manual and mechanical means for subsequent transport and sale. They may utilize sophisticated separation and processing equipment to separate the waste stream into several fractions, including ferrous metals, glass, aluminum, plastics, paper, an organic or light fraction, and residue. A MRF will usually contain a building with a paved receiving area, lights, heat, plumbing and adequate space for processing and storage. The facility is staffed to operate equipment and help sort and process materials. The processing facility also may contain a drive-on scale for billing purposes, a tipping floor, front-end loaders in order to feed the recyclables or raw waste onto conveyor belts and assorted processing machinery (described below). Additionally, machinery may be used to receive and convey recyclables.

A distinction is made from other types of facilities, especially refuse-derived fuel plants and composting plants that process raw municipal waste and separate out significant quantities of recyclables such as glass, metal, and other unprocessable materials prior to processing. This fraction of the waste can be recycled, but, because it is not source-separated, is not as clean or as easily marketed as source-separated material, unless the system employs a washing stage. Such facilities will use processing equipment similar to that used in a MRF to separate out glass, metal and other materials that cannot be incinerated or composted.