

. . . planning a

refuse transfer system.

the transfer system . . .

Municipalities and Private Haulers are handling more refuse and finding fewer and farther away places to put it. Now, long refuse hauls are solved with Dempster Refuse Transfer Systems . . . a system that permits the transfer of refuse from short-range collection trucks to giant, large-capacity transport trailers. These trailers haul away tons of refuse in just one trip and carry it many miles from the city.

The benefits of a Refuse Transfer System are many. Long hauls by short-range trucks are eliminated. Crews are kept on collection routes. Travel time is cut to a minimum. More pick-ups are made. Collection crews have more productive time. And operating and maintenance costs for each truck are drastically reduced.

When?

The Refuse Transfer Station becomes a practical consideration when the length of the haul puts short-range collection equipment on excessive over-the-road hauls instead of more profitable route work.

How Big?

The size of a Refuse Transfer Station must be charted against the present population growth rate and the number and frequency of collection trucks which will be using it. A basic one-packer station can be enlarged later for Push-Pit use or conversion to a dual-packer system. The packing capacity of existing Refuse Transfer Stations can be greatly increased by adding additional transport trailers as they are needed.

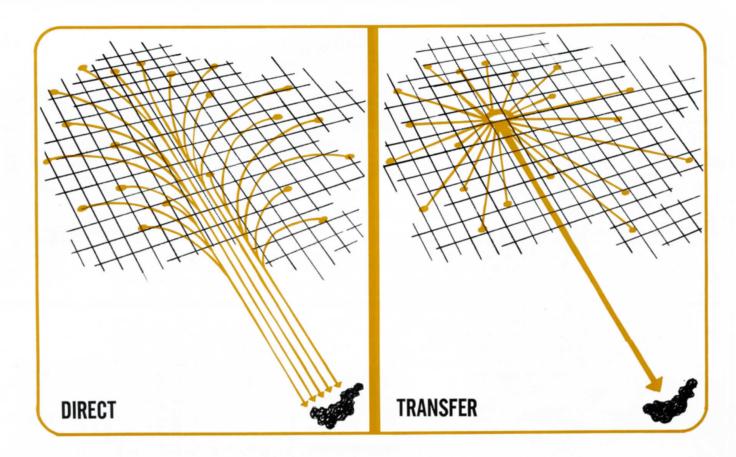
Where?

Any location central to the majority of collection routes is a good prospect. If you have a piece of property or unused facility with adequate access, a relatively big-capacity transfer station can be installed in a limited area, through proper planning.

How?

A good starting point is to call your nearby Dempster Refuse Consultant. He can tell you what other people across the country are doing to beat the long-haul problem with a Refuse Transfer Station. This is a big step and, for many, a necessary step. Call your Dempster Consultant for complete planning service.

a comparison . . .



direct haul . . .

TRUCK TIME

The direct haul system requires expensive, highly-specialized short-haul route collection trucks to make extended trips through traffic and over-the-road to distant disposal areas. Costly hourly operating rates in gas, oil, maintenance and depreciation become even more expensive when the truck is removed for protracted periods from its primary work of refuse collection and compaction.

MANPOWER

With the average compaction collection truck making an average of two trips per day to the disposal area, the non-productive, wasted time of the crew and driver become a significant cost factor in the overall refuse collection cost. If the truck is off the collection route for 1 hour twice a day, and operates with a driver and two crewmen, the daily non-productive time per truck unit is six man-hours. This, multiplied by ten, twenty or thirty trucks is a staggering expense over the course of a year.

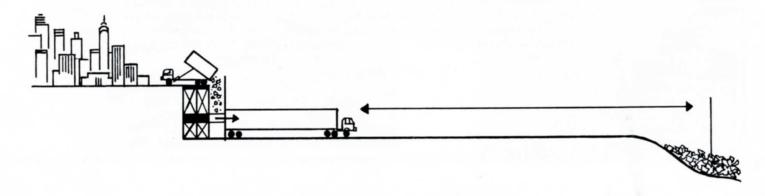
transfer system . . .

TRUCK TIME

The centrally located refuse transfer station limits the necessary hauling miles and minutes to a minimum. After dumping their loads at the transfer station, the trucks quickly return to their collection routes and to productive work. The specialized job of making long, over-the-road hauls is handled by big-capacity transport trailers which carry the contents of several trucks on each trip to the disposal area. The transfer system drastically reduces the total truck miles traveled and increases the productive hours and work capacity of collection trucks.

MANPOWER

Collection crews, which previously spent up to six hours per day in non-productive time during the long absences of their trucks, are more productive because they have more time to devote to collection work. With down-time reduced by substantially more than 50% in most cases, the hourly savings in many applications amounts to hundreds of thousands of dollars annually.



Transfer Packer...

Heart of the Transfer Station is the heavy-duty, powerful, hydraulic transfer packer, which compacts refuse material into the attached transport trailer. It is built for many years of long arduous service with minimum maintenance.



Transport Trailer

The transport trailer receives, stores, and hauls compacted refuse. It must be light enough for economical pay loads, yet strong enough to withstand tremendous internal pressures generated by the packing operations.



Hydraulic Push-Pit*

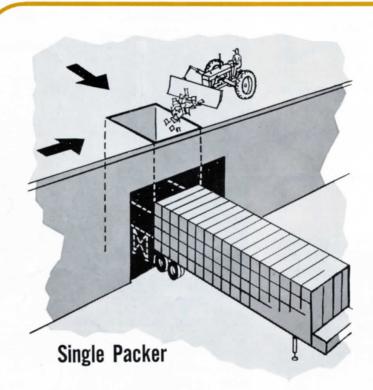
This system allows several trucks to dump simultaneously thus reducing waiting time at the Transfer Station. Refuse in the Push-Pit is hydraulically moved by the blade to the chute where it falls into the charging box of the transfer packer.



■ The Dempster Transfer Packer consists of a charging box; doubleacting packer cylinder; packer head; material shield; self-contained, removable power unit; packer control panel with pre-programmed changeover options; and an automatic transport trailer locking device. $(\mathbf{1})$ Pressure-sensed hold cycle to insure maximum density of loads ☐ Shock absorbing cushioned stroke at each end of cylinder travel Over 127,000 pounds of thrust for high-speed, dense compaction ☐ Displaces 11.02 cubic yards every 45 seconds, packs faster than material can be moved to it The Packer power unit is compact and self-contained. Controls offer manual operation or pre-programmed cycle options. Cycle change-over is a quick, easy It may be placed at a location remote from the operation. High tensile steel, rigidly reinforced, gives the Dempster Transport Trailer an extremely high strength-to-weight ratio. Maximum legal pay loads and resistance to high internal pressures generated during packing operations is assured. Available in 65 and 75 cu. yd. capacities. Body constructed of high tensile steel throughout. ☐ Ejection plate pushes material out of the trailer in one fast continuous stroke. This reduces dumping time and assures speedy return of trailer to the transfer station. ☐ Traveling cylinder-support-platform prevents deflection of telescopic cylinder. Strong side-hinged rear door is constructed of rigidly The cylinder-support-platform prevents sag in cylinder reinforced steel and is fitted with a neoprene seal. during ejection cycle, reducing drag, wear and damage to the cylinder. ■ The Dempster Push-Pit features a reinforced ejection plate, guide channels, a telescopic hydraulic cylinder, traveling cylinder-support-platform, reinforced steel floor and a remote, self-contained power unit. Push-Pit System provides a dumping area so that several trucks can unload material at one time. Temporary storage capacities vary with the requirements of the installation. □ Remote Hydraulic power unit features a 30 HP motor and a 36 GPM pump. ☐ Five-stage telescopic hydraulic cylinder delivers over 85,000 lbs. of thrust for fast clearance of heavy loads. Push-Pit and guide channels are heavily reinforced. Floor is covered by heavy 1/4" steel plate. Dumping area provides space for several collection The ejection plate travels on high density, abrasionvehicles to unload material at one time. resistant guide shoes to push refuse into the Packer hopper.

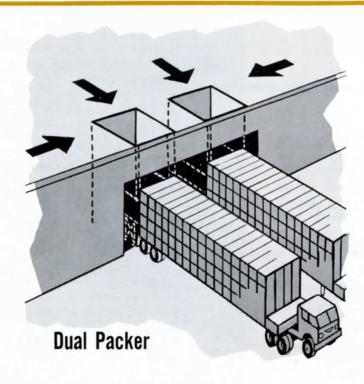
combinations available . . .

Using the basic hardware elements of the Dempster Refuse Transfer System, many capacity and loading options can be built into any given Transfer Station. The Dempster System also offers opportunities to increase the capacity of an existing station by adding Push-Pit units or extra chutes



single packer

A good, low-investment, medium-capacity transfer station can be installed by the use of one chute, one packer, one or two transport trailers and an over-the-road tractor. Refuse can be dumped directly into the chute or on the floor for handling with a rubber-tired tractor.



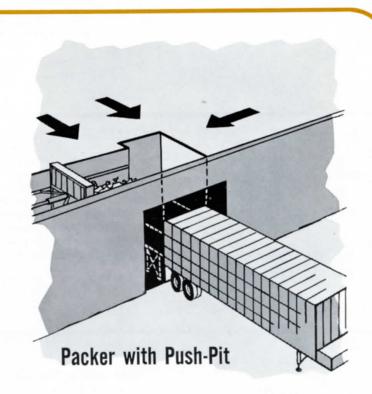
dual packer

A dual packer installation provides high-capacity trailer loading. Refuse can be dumped directly into the chutes or on the floor for handling with a rubber tire tractor. With an adequate number of Transport Trailers and tractors, this installation provides capacity limited only by facilities for unloading collection vehicles.

and packers. Because of the high-speed packing capability of the Transfer Packer, almost any installation can increase capacity by using additional Transport Trailer Units and tractors.

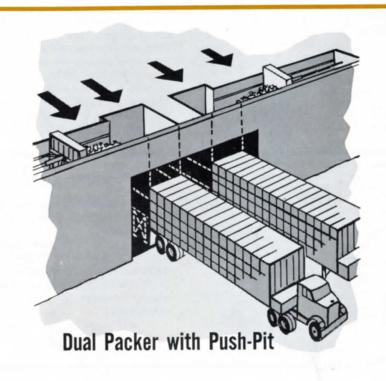
packer with push-pit . . .

The capacity of a single packer installation can be vastly increased by the addition of a hydraulically operated push-pit which provides a dumping area for handling several trucks at one time. The ejection plate moves refuse quickly to the chute where it falls into the charging box of the packer.



dual packer with two push-pit units . . .

Two packers and two Push-Pit systems offer a tremendous packing volume as well as an extremely high-speed, high capacity truck dumping capability. This combination offers the option of pit dumping in peak operational periods and direct chute dumping in periods of normal refuse input.



typical installations . . .

Philadelphia, Pa.

☐ This inexpensive installation was constructed by building a ramp of fill material and features one chute, one Dempster packer and one transport trailer. Packer and trailer are located adjacent to the bank at the end of the ramp. Dumping pattern features one-approach direct chute dumping.



Detroit, Mich.

An enclosed Transfer Station featuring one chute, one Dempster Transfer Packer Unit and five Transport Trailers. Dumping pattern features one approach to the chute for direct heavy dumping and overload dumping on the floor for (rubber tired tractor) cleanup.



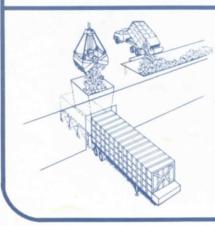
Trenton, Mich.

This unique Transfer Station is built beside an incinerator and handles constant overloads which the burning unit is unable to accommodate. When the overload develops, material is picked up by a crane-operated clamshell, whisked down a conveyor and into a chute which carries it to the charging box of the Dempster Packer. Material is compacted into a Dempster Transport Trailer. No direct truck loading access is required.



Hemstead, L. I.

☐ This enclosed transfer station is situated at an incinerator beside a refuse dumping pit . . . it features one chute, one Dempster Packer and 4 Transport Trailers. Collection trucks unload refuse in a pit, with material transfer from pit to chute handled by a crane-operated clamshell.



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