

Two Rupp Gorman irrigation pumps provided the power to move the manure along 5½ mile trail.

CHEAPER THAN HAULING WITH A TANK WAGON

Liquid Manure Flows Along 5½ Mile Trail

By Doug Sorenson

Charles Dow's liquid manure pit holds 4 million gallons, and this past summer it was full. The problem was where to spread the manure and how to get it there as cheaply as possible.

Dow's home farm is in a narrow valley with very little space for spreading. Most of his crop fields that need fertilization are several miles away across some of western Wisconsin's typical rolling hills.

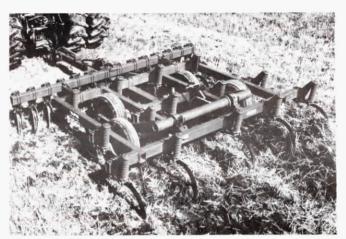
"It would take 3 to 4 months hauling around the clock with a tractor and trailer-mounted tank, and could do considerable damage to the roads. We also thought of buying a semitruck and tanker which would have taken 5 months, working 10 hours a day," says Dow.

He decided to call in a commercial company which specializes in moving liquid waste. They set up a transfer pipe system that stretched out nearly six miles to a temporary pit on another part of the farm. The 6 in aluminum irrigation pipe followed a road, crossed two creeks and climbed a hill before it reached its destination.

The pipeline included about a half mile of 6 in. rubber hose which was used to get around corners, across the creek and other difficult places. The route was approved by the Wisconsin Dept. of Natural Resources, which



Manure was pumped through 5 miles of 6 in. aluminum irrigation pipe, and about a half mile of 6 in. rubber hose.



Disc gang height on the new "conservation" chisel plow is controlled independently by an 8-in. hydraulic cylinder.

FRONT DISC GANG LIFTS HYDRAULICALLY

White Disc/Chisel First Of Its Kind

First on the market with a hydraulic lift for the chisel plow's disc gang toolbar is White Farm Equipment Co., Oak Brook, Ill.

The new 435 Conservation Chisel Plow features a gang of 22 in. spherical blades, spaced 12 in. apart, mounted on a toolbar that lifts hydraulically. This allows the driver to raise the disc gang in areas with little trash to retain the ground cover, or lower it to better cut up material in heavy trash areas.

The disc gang raises using an 8-in. cylinder. A 12 in. lift cylinder is provided for lifting the chisel plow portion of the unit.

Each disc blade is individually mounted on spring cushioned arms so that, when hitting a rock, only one of the blades will raise up instead of the whole gang.

Three ranks of chisels are spaced on the 90 in. long frame so that there is a chisel shank every 12 in. The frame is made of 4 in. by 6 in., by $\frac{1}{4}$ in. square tubing. The shovels are 3 in. "twister reversible".

Models are available with 10, 12, 14 and 16 ft. cutting widths. Cost for a 12 ft. model is right at \$6,200.

White also has introduced its largest 4-WD tractor, the 4-270 Field Boss. Powered by a 638 cu. in., 6 cylinder, turbo charged caterpillar engine, the tractor is rated at 270 engine hp. It features a 4 X 4 transmission that allows shifting "on the go", without clutching, using one shift lever. Options include a 1000 rpm pto and a 3 point hitch system with a Cat coupler.

Other new products unveiled by White include a field size 4-WD tractor—a 4-225, the two wheel drive 2-88 tractor, and a 220 series of field cultivators.

determined that it would not pollute the land and water along the route. Before pumping started, the line was tested for leaks by running water through it.

Two Rupp-Gorman irrigation pumps (225 and 285 h.p.) provided the power. The pump at the start of the line was equipped with a chopper to break up any solids that might clog the line. The second pump was a booster about two miles away.

When pumping started, five-man crews patrolled the line to be sure there were no plugs or leaks. Pumping continued around the clock until the job was finished 125 hours later.

Dow will pump out the transfer pit conventionally, or irrigate the liquid manure on a nearby field. He'll probably have the pumping company come back in two years to empty the big pit again.

Pumping all kinds of liquid wastes

is the job of this company, and it's a growing field. The company, head-quartered in Menomonie, Wis., works mostly in western Wisconsin but will go 150-200 miles. The Dow job was one of the bigger ones they have done. In fact, Al Sprader who supervised it, thinks this is the longest distance that manure has been pumped anywhere in the world.

The company moves liquid waste by pipeline, irrigation rig, and field tank. They have now become involved in pumping through a 660 ft. hose connected to a chisel plow for "on the go" direct injecting of manure into the soil. (This system was featured in the July-August, 1982 issue of Farm Show).

For more information, contact: FARM SHOW Followup, Al Sprader, Super Helpful Irrigation Technicians, Inc., Rt. 4, Downsville Wis. 54735 (ph 715 235-0783 or 664-8486).