

Manheim dairyman doesn't miss daily manure hauling

BY DICK ANGLESTEIN

MANHEIM — Dairy farmer Andrew Miller Jr., R2 Manheim, didn't mind this winter's frigid temperatures or brisk, biting winds one bit.

Well, at least he didn't mind them as much as he has during previous winters.

This past winter he didn't need to coax a stubborn tractor into action every day and then climb onto the cabbles seat to haul manure onto the windswept fields.

Miller and his son, Lamar, who operate an 85-acre dairy farm

between Manheim and Mount Joy, ended their daily manure hauling routine when they included a gravity flow manure system into their recent barn and herd expansion.

"I didn't miss the daily hauling one bit," Miller said.

"It was a pleasure to come out to the barn on those cold days, knowing there was no manure that had to be hauled."

The gravity flow system became an integral part of the planning for the barn expansion, which more than doubled stall capacity



Andrew Miller Jr., right, and son, Lamar, which was constructed last year in their new look out over earthen bank holding pond, gravity flow manure system.

"It was a little more than a year ago when we started planning," Miller said.

Miller was introduced to the gravity flow concept at a manure management meeting held last year by Lancaster County Extension. The meeting featured a slide presentation and explanation of the gravity flow concept developed at Cornell University.

County dairy agent Glenn Shirk and Roger Grout, Penn State ag engineer, also visited the Miller farm and helped with the planning.

Construction was started last April and completed in August. An 80 X 55-foot barn addition contains 40 stalls. The older, original part of the barn has 37 stalls.

A gutter-cleaner is utilized to move the manure from both sections of the barn to a holding pit at the end of the new addition.

The six-foot square pit is 8 feet deep and is equipped with an exhaust fan. The fan provides at least two advantages.

"The fan in the pit pulls odors from both the barn and the milk house," Miller explained.

"Also, as it pulls the warmer air from the barn it prevents freeze-ups in the holding pit. We had no trouble with freezing during the past winter."

A 30-inch underground concrete pipe extends 120 feet from the pit to an earthen bank holding pond.

The top level of the pond is about five feet lower than the bottom of the gutter. This difference provides the necessary force for the manure to flow from the holding pit to the pond.

The pond, which was designed by ASC personnel, is 100 feet square at the top and tapers to 40-foot square

at the bottom. It is 13 feet deep.

Manure from gutters in the older section of the barn began moving into the pond in mid-July. Manure depth in the pond is presently about six and one-half feet. Total capacity is believed sufficient to accommodate 80 cows for a year.

"Excavation for the pond fitted in with the construction of the barn addition because we needed fill," Miller said.

He said total cost for the pit, pipe and pond excavation was about \$9,000.

"That's just about what a ram alone would have cost," Miller said.

When he went to the gravity flow system, Miller switched his type of bedding. He now uses wood shavings instead of straw and each stall is equipped with a mat.

(Turn to Page A24)



At the end of new barn expansion is a holding pit that receives manure from gutter cleaner. Underground 30-inch pipe moves waste by gravity some 120 feet to pond.

TOBACCO MEETING

WEDNESDAY
FEBRUARY 25, 1981

5:30 P.M.

At The Bird-In-Hand Restaurant

SUBJECTS SPEAKERS

- ★ Blue Mold . . . Jack Beideman, Ciba Geigy
- ★ Insects Dave Cody, Chevron Chemical
- ★ Weeds,
Sucker Control,
Fertilization John Yocum, Penn State Extension

ANY TOBACCO FARMERS ARE WELCOME

Call For FREE Dinner Reservations -
Must Be Made By Friday, Feb. 23



ORGANIC
PLANT FOOD CO.

OPEN
Mon.-Fri 7:30 to 4:30
Closed Sat

2313 Norman Rd., Lancaster, PA 17601
Phone: 717-397-5152

MARTIN AG FUEL SYSTEMS

Completely Automatic Continuous Flow

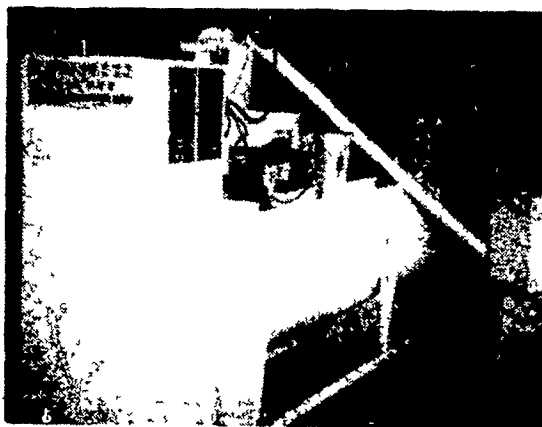
— OR —

Manually Operated Batch Equipment

Coming soon in various sizes from 10 to 4500 gallons per day.
High quality stainless steel construction, performance guaranteed.

Makes
AG-FUEL
For Cars, Trucks,
And Tractors
ONLY

60¢
a gal
Operating Cost.
Includes electricity,
fuel, enzymes, yeast
and corn at \$3.50
a bushel.



Get Up To 3 Times
More Mileage
with AG-FUEL
and a Vaporizer
Kit Installed On
Your Cars And
Trucks. Our Pinto
with 20,000 miles
on AG-FUEL Is
Getting 70
miles per gallon

AG-FUEL "The Fuel of The Future"
Is **NOT** The Same As Gasohol, it
Contains **NO** Gasoline!

AG-FUEL is a 100% All American Agricultural Fuel
which is 140 proof ethanol with a 104 octane
rating that burns clean, causes no pollution, pro-
duces more power, costs less and gives better gas
mileage

FOR MORE INFORMATION WRITE OR CALL
ENERGY SYSTEMS, INC.

520 Prescott Road
Lebanon, PA 17042
PH: (717) 866-5333

DEALERS WANTED!

Hurry! Apply NOW! We are accepting applications in organizing a network of dealers which we hope to have trained and ready to install and service both the Martin Ag-Fuel System and the vaporizer kits by the time the equipment becomes available sometime after March, 1981.