

Greenhouse uses power plant's waste heat

DANVILLE — Kenneth G. Bryfogle Jr., a northeastern Pennsylvania commercial greenhouse operator, is using a unique heating system for his facilities near Danville.

Waste heat from the Montour Steam Electric Station of Pennsylvania Power & Light Co., located 10 miles north of Danville in Montour County, is used to warm Bryfogle's three-acre greenhouse complex. An underground system is used to carry warm condenser-cooling water from the plant to the greenhouse, located about a half mile away.

"The project is designed to demonstrate how energy can be saved by tapping heat that has been previously wasted," said Heinz G. Pfeiffer, PP&L's manager-Technology & Energy Assessment.

"The experiment has great potential in helping to find practical and cost-effective ways of conserving fossil fuels.

The production of electricity results in large amounts of heat being rejected through the cooling system of a generating station. This discharge heat is usually either vented to the atmosphere or discharged through cooling water.

A 20-inch diameter pipeline, buried three feet underground, transfers the warm condenser-cooling water from the plant to the greenhouse. The system uses 7,000 feet of piping to establish a loop to supply the warm water to the greenhouse and return it to the power plant.

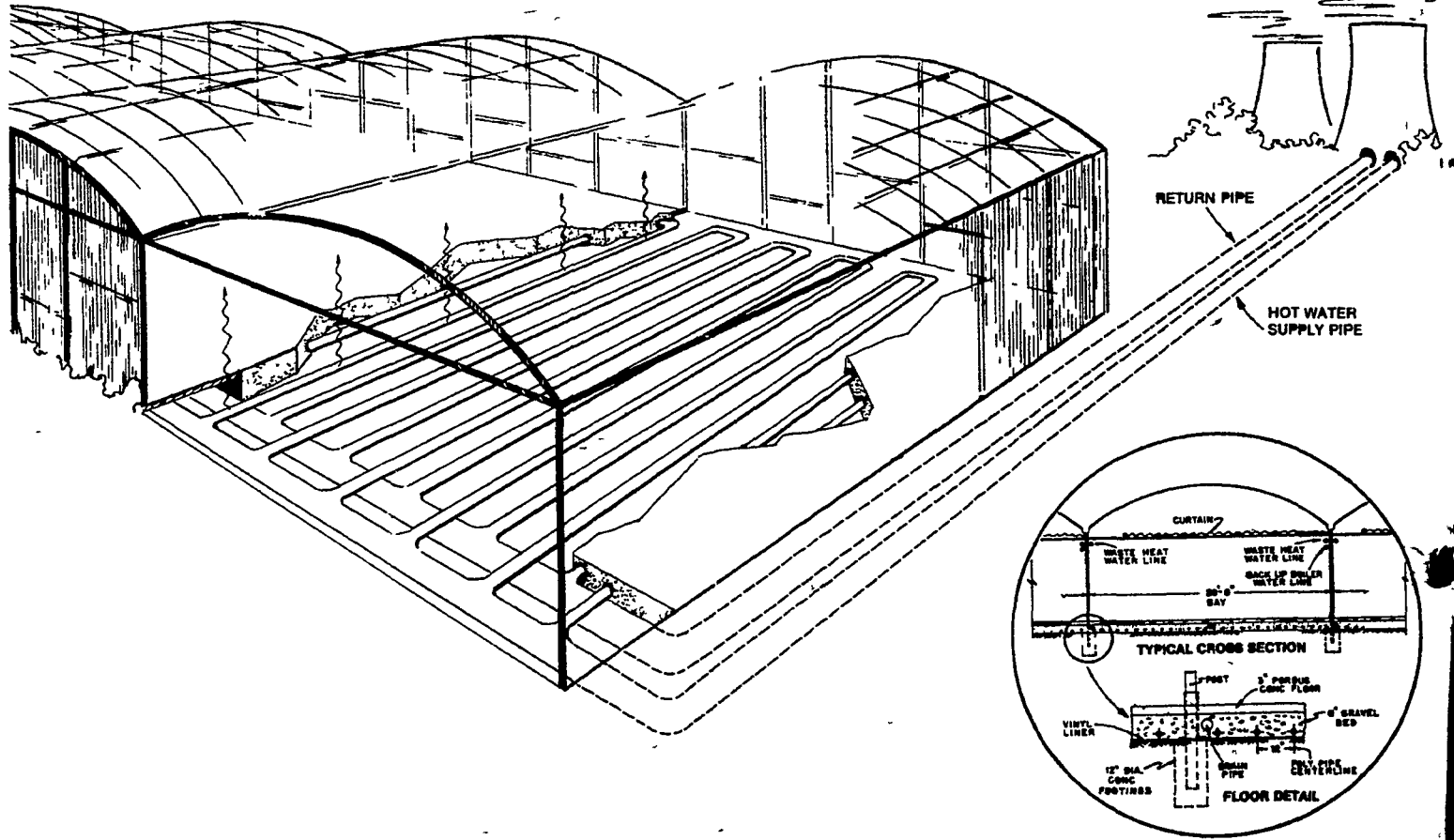


Diagram shows a unique warm floor heating system which is being used in a greenhouse complex near Danville. The greenhouse facility is heated with discharge heat from the Montour Steam Electric Station of the Pennsylvania Power & Light Co. An underground pipe system carries warm con-

denser-cooling water from the power plant to the greenhouse. The water heats the floor of the facility to about 70 degrees. Also shown are a cross section of the greenhouse and detail of the floor heating system.

Inside the greenhouse, 3/4-inch diameter plastic pipes are embedded in gravel just beneath the porous concrete floor. The pipes, spaced about a foot apart, would

total almost 24 miles if placed end-to-end.

The warm water flows from the supply pipeline to the pipes beneath the greenhouse floor.

When the water reaches the greenhouse, it is between 95 and 115 degrees Fahrenheit. The water

(Turn to Page D15)

SCALES

LIVESTOCK SCALES
For
Hog Operations

TRUCK & PLATFORM
SCALES ALSO AVAILABLE

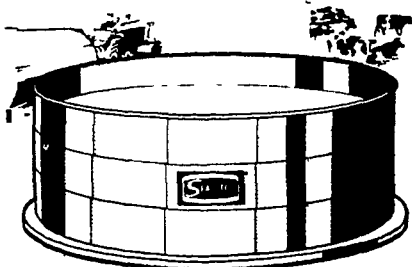
GARBER SCALE COMPANY

121 Witmer Rd.
Lancaster, Pa. 17602
Phone: 717-393-1708
ALL SCALES STATE APPROVED.



PLANNING LIQUID MANURE STORAGE?

We Will Custom Design
Your System to Meet your Needs



Grain and Forage Structures Available
For Immediate Erection

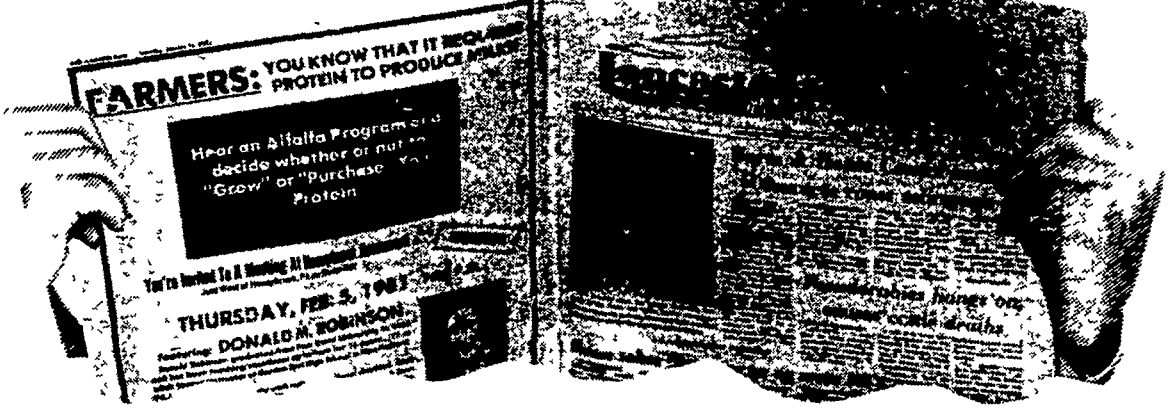
Please Clip & Mail Coupon to **PENN DUTCH FARM SYSTEMS, INC.** LF 5/2
1730 Highway 72 North, Lebanon, Pa 17042
I am interested in
 High Moisture Corn Storage
 Liquid Manure Storage
 Please add my name to your mailing list
 Haylage or Corn Silage Storage
 Replacing my old or broken bottom unloader with the Laidig

NAME _____
 ADDRESS _____
 CITY _____ STATE _____ ZIP _____
 TELEPHONE (include area code) _____
 NO. OF BEEF _____ DAIRY _____ HOGS _____

**Here's What
You Get For
Less Than
15¢ A Week!**



Bargains!



★ **OUR ADVERTISERS** use the pages of **LANCASTER FARMING** to let you know about the equipment, real estate & prospective jobs they have available. They let you know about the best buys and the latest products to make your farm more productive and efficient!

Our total farm coverage also gives you **NEWS** (including Dairy & DHIA Reports) ...**FEATURES**...**MARKET REPORTS**...**FREE MAILBOX MARKET**...and much, much more!

At **LANCASTER FARMING**, we think we do a good job of keeping you informed...and we have over 39,000 paid subscribers who think so too!



P.O. Box 366, Lititz, PA 17543
Phone
717-626-1164 or 394-3047