

# Most Wells Not Contaminated, Survey Says

ST. LOUIS, Mo.— The vast majority of rural, domestic wells in agricultural areas are free of contamination from several commonly used herbicides, according to the largest study of its kind ever completed.

Approximately 87 percent of the estimated 6 million wells in the survey area are expected to be completely free of any detectable levels of the five herbicides studied. Where herbicides are detected, the typical trace levels found are well below the health-based standard set by the U.S. Environmental Protection Agency (EPA). More than 99 percent of all wells are projected to show no herbicide levels exceeding the EPA standard for drinking water quality.

"Survey results are particularly encouraging with regard to drinking water quality. It found, for example, that the frequency and levels of occurrence in rural, domestic wells of all herbicides studied are extremely low," said Robert L. Harness, vice president of environmental and public affairs for Monsanto Agricultural Company.

The study, called the National Alachlor Well Water Survey, looked at nearly 1,430 wells in 26 states. It was designed by Monsanto Agricultural Company and Research Triangle Institute (RTI), with active participation by and approval of EPA. RTI is a non-profit, independent research organization located in Research Triangle Park, NC.

As part of the re-registration standard for alachlor, the EPA required Monsanto to obtain better estimates of alachlor occurrence in rural wells in counties where the product is used, said Harness.

"In addition to alachlor, a corn and soybean herbicide manufactured and marketed by Monsanto under various brand names, the survey tested for four other herbicides: atrazine, metolachlor, cyanazine, and simazine. Water samples also were tested for nitrate levels," Harness said.

Among the 6 million wells, which serve approximately 20 million people in the survey area, each well had a chance of being randomly selected for testing. The survey, which required two years to complete at a cost of more than

\$4 million, has been submitted to the EPA for its review.

Based on survey data, less than one-tenth of 1 percent of all wells are projected to have herbicide occurrence in excess of EPA's proposed maximum contaminant level (MCL) or health advisory level for that product. These health-based levels reflect lifetime consumption and provide for a significant margin of safety.

Concentration of all five herbicides were measured by a sophisticated analytical technique capable of detecting herbicide levels as low as 2 parts per 100 billion. This level of detection is equivalent to isolating 1 second in 1,600 years.

"Survey findings reconfirm the fact that alachlor is seldom found

in drinking water. More than 99 percent of rural wells are expected to be completely free of detectable levels of alachlor. Only an estimated 0.02 percent of wells are expected to be above the proposed MCL of 2 parts per billion (ppb)," Harness said.

If drinking water consistently contained alachlor at the 2 ppb level, a 150-pound person would have to drink 20,000 gallons of water every day for 70 years to reach the lowest amount which caused a toxic effect in some laboratory animals, he noted.

The survey found, as have other studies, that nitrate occurrence is common in rural, domestic wells, with 52 percent of wells in the survey area expected to have detectable levels of nitrates. A

majority of these, however, have levels less than 3 parts per million (ppm), which is generally regarded as a naturally occurring nitrate level present in some water supplies. About 5 percent of wells are projected to exceed the MCL of 10 ppm.

In addition to occurring naturally in the water supply, nitrates can enter ground water through nitrogen fertilizers, livestock wastes, and other agricultural or non-agricultural sources.

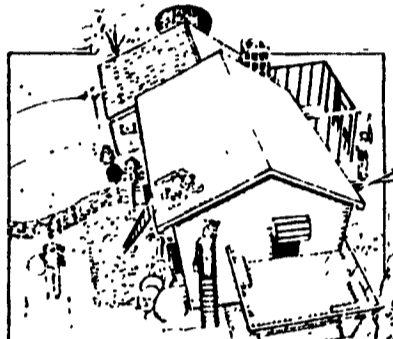
"An important conclusion to be drawn from this survey is that the herbicides studied are not threatening rural well-water supplies. At the same time, we understand when people are concerned by any detectable levels of herbicides in water sources," said

Harness. "All water supplies contain trace levels of various substances -- both natural and synthetic. Detection of these substances, however, doesn't necessarily mean there is a cause for alarm or concern. Frequently it reflects an advancement in our scientific ability to detect a substance we could not find before. With that ability to detect increasingly smaller concentrations of a substance goes a responsibility for ensuring that these trace levels don't represent an unreasonable risk to human health or the environment."

Reporting, verification, and administrative procedures are now being finalized. Complete program details will be announced in the near future, he said.

## W&J WALTER & JACKSON, INC. *Let Your Dreams Come True At...*

- ◆ Millwork
- ◆ Trusses
- ◆ Owens Corning Roofing
- ◆ Design and Plan Services
- ◆ Anderson Windows
- ◆ Paneling & Ceiling Material
- ◆ Wheeling Channel Drain
- ◆ Cedar Siding



- ◆ Lumber
- ◆ Pole Barns
- ◆ Insulations
- ◆ Stanley Doors
- ◆ Glen Gery Brick
- ◆ Treated Yellow Pine
- ◆ Aristocrat Kitchens
- ◆ Aluminum & Vinyl Siding
- ◆ Metered Concrete

RESIDENTIAL • COMMERCIAL • AGRICULTURAL

SERVING THE AREAS BUILDING NEEDS SINCE 1872



**WE DELIVER**  
From All Locations

E. GAY ST., CHRISTIANA, PA 17509  
215-593-5195 / 857-2613

18 N. HESS ST., QUARRYVILLE  
717-786-2171

FARMERSVILLE RD., HINKLETOWN, PA  
717-354-4911

Mon.-Fri.  
6:30-5 p.m.  
Sat.  
6:30-Noon

### HARDY

"Outside" Wood Furnace

Easily Connects To Forced Air/Hot Water Systems

**Perfect For**

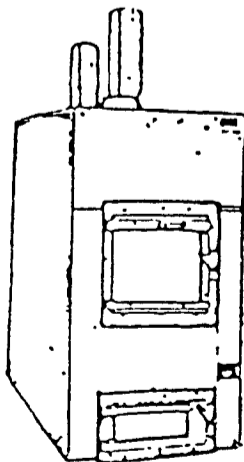
- New Homes
- Existing Homes
- Swimming Pools
- Greenhouse • Barn
- Milkhouse • Office
- Business Places

**SAVES MONEY** — Heats your home and domestic hot water (save to 25% of electric bill). No need for building or chimney.

**SAFE** — Furnace sits outside — eliminates fire danger and flue fire forever.

**CLEAN** — No smoke, wood, ashes, dust in the home.

**CONVENIENT** — Load furnace every 10-12 hours — burns logs up to 16" in diameter, 30" in length.



All Stainless Steel  
Thermostat Controlled  
U.L. Approved

**ATTENTION FARMERS**

Save \$50.00 to \$100.00 on heating and hot water costs at barn and milkhouse.

For More Information Call  
24 Hr. Service  
U.L. Approved

Clyde K. Alderfer  
Sales & Service  
Box 246 - R.D. #1  
Mt Pleasant Mills, PA 17853  
Phone: 539-8456



**PLANT FOOD COMPANY, INC.**

**QUALITY LIQUID FERTILIZER**

9-18-9, 6-24-6, 16-4-4, 5-15-15+, 3-18-18, 10-20-10, 10-10-10, 0-15-20, plus others on request.

**OUR CUSTOMERS BUY OUR PRODUCTS BECAUSE OF —**

- Ease of Handling • Convenience • Easy Storage
- Soil Reports • Tank Program • Delivery
- More Analyses to Choose From

Your friends at Hi-Score thank you for supporting us over many years and ask for your continued support. Our plans are to keep bringing you new and better products and honest service.

We invite you to visit us at Ag Progress Days, Located On West 5th Street

**Hi-Score Plant Food Co., Inc.**

3175 Oregon Pike  
Lancaster, PA 17604

P.O. Box 7775  
Tele: 717-656-4191