ENVIRONMENTAL EDUCATION SERIES

TIMELY INFORMATION

Agriculture & Natural Resources

EXTENSION ENVIRONMENTAL EDUCATION, AUBURN UNIVERSITY, AL 36849-5647

Fuel Storage Tanks and Groundwater Contamination on the Farm

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The Cause for Concern

The Environmental Protection Agency has reported that leaking underground storage tanks are the number one groundwater contaminant source nationwide. In Alabama, the Department of Environmental Management regulates (issues a permit) all fuel storage tanks with a volume in excess of 1100 gallons, both above and below ground tanks. If the fuel tank(s) you use is less than 1100 gallons capacity and not regulated, you are still responsible for fuel leakage that results in groundwater contamination. Such contamination may occur to your own well or to your neighbors' well(s).

A List of Facts about Fuel Storage Tanks

*Unprotected steel tanks buried in the soil will leak; usually within 10-15 years after placement.

*The piping and fittings attached to an underground storage tank will usually leak as a result of corrosion, use of the tank, and inadequate installation, before the tank itself corrodes and leaks.

*Underground storage tanks should be checked for leaks regardless of their age.

New Tank Installation

It is currently recommended that all new farm tanks be installed above ground so that leaks can be easily detected. The best known design for farm storage tanks is to utilize self containment of at least 110% of the primary storage tank capacity, placed on an

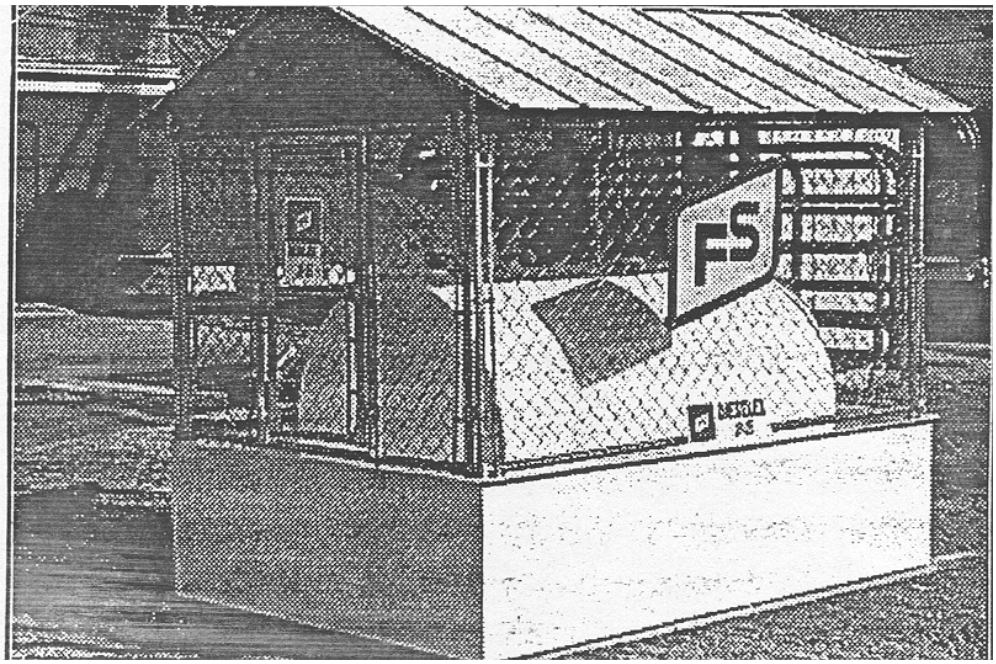
impervious concrete pad with a berm to catch spills. A metal shed should be built overhead with adequate *fencing around* the structure to prevent tampering, children, and pets from access (see figure). All fuel storage tanks should be at least 100 feet away and down slope from your well heads, and at least 50 feet from all buildings for fire protection.

Filling and Dispensing Fuel from the Tank

Fuel spills can also occur when filling the tank and dispensing fuel. You may consider the *installation of* an electronic alarm in the filling access port to prevent overfilling. An automatic shutoff device can also be installed in the dispensing nozzle to prevent spills.

The Expense of Cleaning Up Groundwater Contamination

One gallon of gasoline can contaminate thousands of gallons of drinking water. It is very expensive to clean up gasoline and diesel fuel spills once they move deep into the soil. Costs for major leaks and spills can exceed the value of the entire farm. An ounce of prevention is worth a ton of cure in fuel storage.



See your local county agent for additional information on fuel, storage tanks, including removal of underground storage tanks and onsite cleanup for minor fuel leaks.