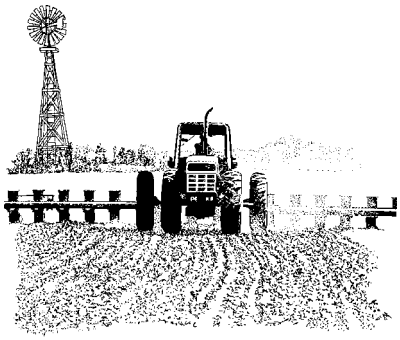
COOPERATIVE EXTENSION AZ1015

STORAGE OF PETROLEUM PRODUCTS

The University of Arizona • College of Agriculture • Tucson, Arizona 85721 **5/98**



*FARM*A*SYST*
Farm/Ranch Self-Assessment System for Arizona

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This fact sheet is taken from the Arizona Farm*A*Syst workbook. Farm*A*Syst is a voluntary groundwater pollution prevention program designed for farmers and rural residents. The goals of the program are to help rural residents: understand potential causes of groundwater contamination, identify farmstead management practices that pose risks to groundwater, and develop a plan to reduce those risks.

Liquid petroleum products such as gasoline, diesel, and kerosene must be stored safely to prevent leaks and spills. These products can pollute both underground and surface water sources. A leak of only one drop per second can release about 400 gallons of petroleum into the environment in one year. It only takes a few *quarts* of leaked fuel to severely pollute underground drinking water. Small amounts of petroleum products dissolved in water are hard to detect because they are almost impossible to smell or taste. Water that seems pure may be contaminated and adversely affect human health.

Explosions are another potential danger from stored petroleum products. Vapors from an underground leak can collect in basements, sumps, pits or other underground structures, and can explode. The explosion hazard from leaking aboveground storage tanks is even greater.

Above ground storage tanks, underground storage tanks, and piping must all be protected against corrosion when in contact with the ground. Large losses can occur from not adequately protecting even small underground pipes from corrosion. Even new tanks and piping may leak if they are not properly installed. Frequently, the only way to discover a leak before it becomes a major problem, is to keep track of the amount of fuel you use and subtract it from the amount you received. This is one method of inventory control.

What can you do?

1. Installation inspection. Make sure that petroleum product storage tanks are installed properly and protected from corrosion.

2. Leak detection. Inspect storage tanks and pipes regularly to prevent leaks.

3. Inventory control. Measure the amount of fuel used compared to the amount purchased.

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Item	Question	Yes	No
1. Tank dispenser nozzles.	**a.** All nozzles are UL approved and have latch-open devices to shut off tank when full.		
	b. Either no nozzle, or no auto shut-off when tank is full.		
2. Tank security	**a.** Tank is always secured and locked when not in use.		
	b. Tank is never secured or locked when not in use.		
3. Aboveground tanks; separation distances.	**a.** Tanks are: 50 feet from property lines, buildings, haystacks, or other combustible storage, 25 feet from any source of ignition, 20 feet from propane tanks, and 3 feet from another fuel tank.		
	b. Tanks are located at distances less than those listed above.		
4. Warning labels on tanks.	**a.** Tanks labeled with: **NO SMOKING**, **KEEP 50 FEET FROM BUILDING**, and **FLAMMABLE KEEP FIRE AND FLAME AWAY.**		
	b. Tanks have no warning labels.		

The questions listed above can help you determine whether your petroleum products storage and handling practices may pose a risk to groundwater.

Take a few minutes to complete the questions. If you answered **yes** to mostly **"a"** questions, your groundwater is probably safe from becoming polluted from your petroleum products storage and handling practices. If you answered **yes** to mostly **"b"** questions, then your groundwater may be at high risk of becoming polluted.

Worksheet number five in the Farm*A*Syst book will give you a more complete assessment of your petroleum products storage and handling practices. If you are interested in obtaining a copy of Arizona's Farm*A*Syst workbook, please contact the College of Agriculture's Publications Distribution Center, 4042 North Campbell Avenue, Tucson, Arizona 85721. The office phone number is (520) 621-1713 and the FAX number is (520)795-8508. The cost of the workbook is $5.00 plus shipping. Contact your county extension office or NRCS office if you have questions about how to use the workbook.