

Assessing Your Petroleum Product Storage Facilities

Protecting Your Water Quality Through a Farm & Home Assessment



Why should you be concerned?

Aboveground and underground storage of liquid petroleum products such as motor fuel and heating fuel present a threat to public health and water quality.

According to estimates by the U.S. Environmental Protection Agency, nearly 1 out of every 4 underground petroleum storage tanks in the United States may now be leaking.

A few quarts of gasoline in the groundwater may be enough to severely pollute your drinking water supply. At low levels of contamination, fuel contaminants in water cannot be detected by smell or taste; yet the seemingly pure water may be contaminated to the point of affecting human health.

Petroleum fuels contain a number of potentially toxic compounds such as ethylene dibromide (EDB). EDB is a carcinogen (cancer causing agent) in laboratory animals, and benzene is considered a human carcinogen.

What can you do?

This worksheet has been designed to provide information on questions you have answered **Yes, or do not know** the answer to in the **Assessing Your Petroleum Product Storage Facilities** section of your "Farm and Home Water Quality Assessment." This worksheet will help you develop an Action Plan to establish practices that reduce the risks of contamination to your drinking water supply.

A Partnership Program for Voluntary Pollution Prevention

USDA Natural Resources
Conservation Service

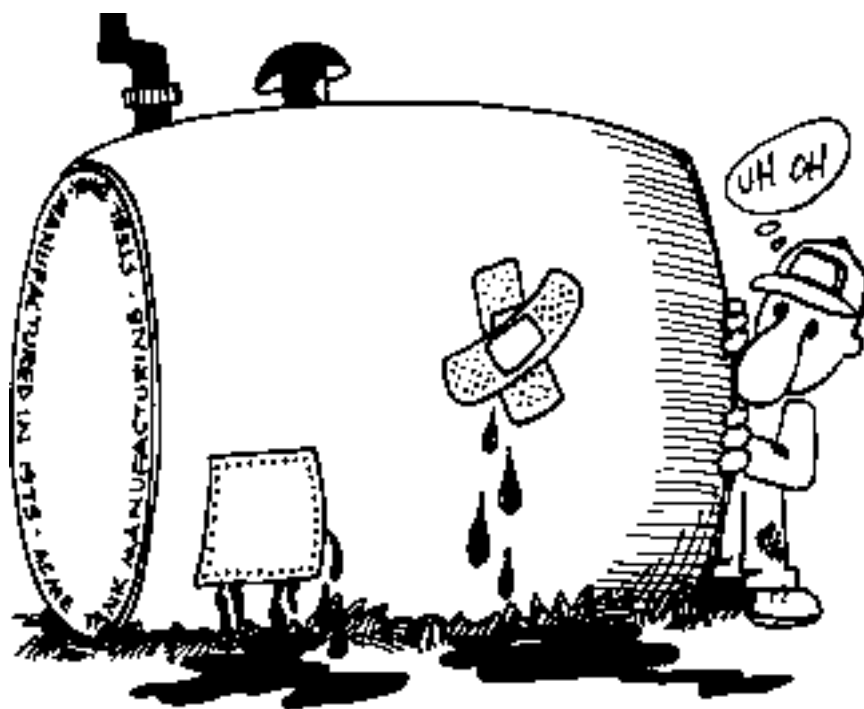
USDA Cooperative State Research,
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Protection Agency

1 Do you have a petroleum storage tank(s) on your property?

Assessment surveys from other Farm*A*Syst Programs across the country have shown petroleum storage to be the most frequent high risk identified. If you have a petroleum storage tank on your property, you need to assess your storage system to guard against contamination of soil, groundwater and surface water.

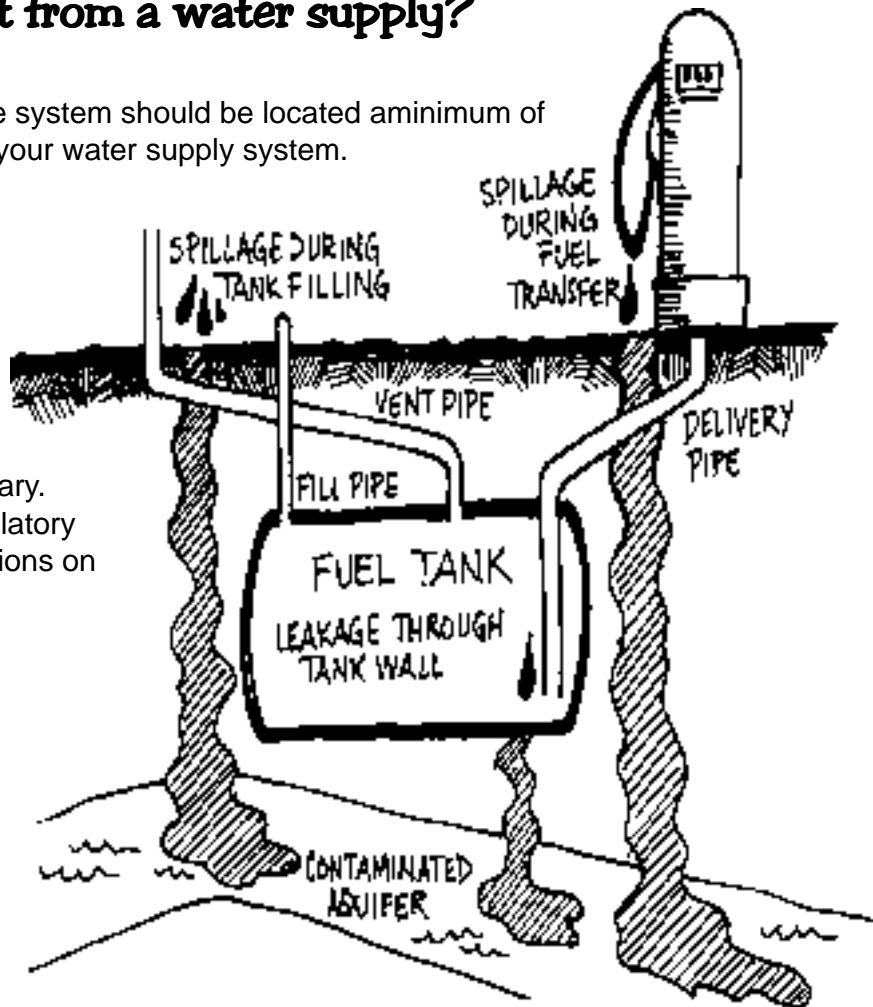
Tanks that are no longer in use should be removed from the property. Most states/territories have laws and regulations regarding the removal of buried and aboveground tanks. Consult with your local regulatory agency before you modify your current system or remove a petroleum tank.



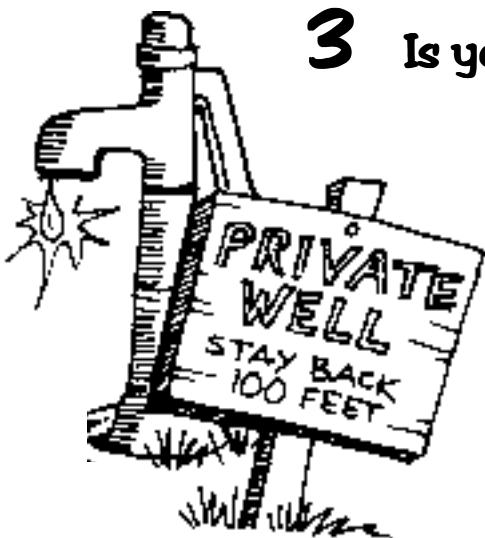
2 Is your petroleum storage tank less than 100 feet from a water supply?

Your petroleum storage system should be located a minimum of 100 feet down slope from your water supply system.

This will help protect your water supply from both leaks and spills. Your petroleum storage tanks should also be located at least 25 feet from buildings and heavy traffic areas. State laws on petroleum storage do vary. Check with your local regulatory agency for specific regulations on petroleum storage.



3 Is your storage tank(s) under ground?



Petroleum tanks that have been buried more than 15 years ago present a higher pollution risk to groundwater.

Most underground storage tanks are made out of steel and contain little or no protection to prevent corrosion. High corrosive conditions such as saline, wet, or acid soils can significantly increase the rate of corrosion of these tanks.

Most states have regulations regarding the removal of buried tanks. Consult your state regulatory agency on procedures and assistance in the removal of a buried tank.

4 Do you lack protection against leaks or spills from your petroleum storage tanks (i.e., no catch basin or concrete spill pad)?

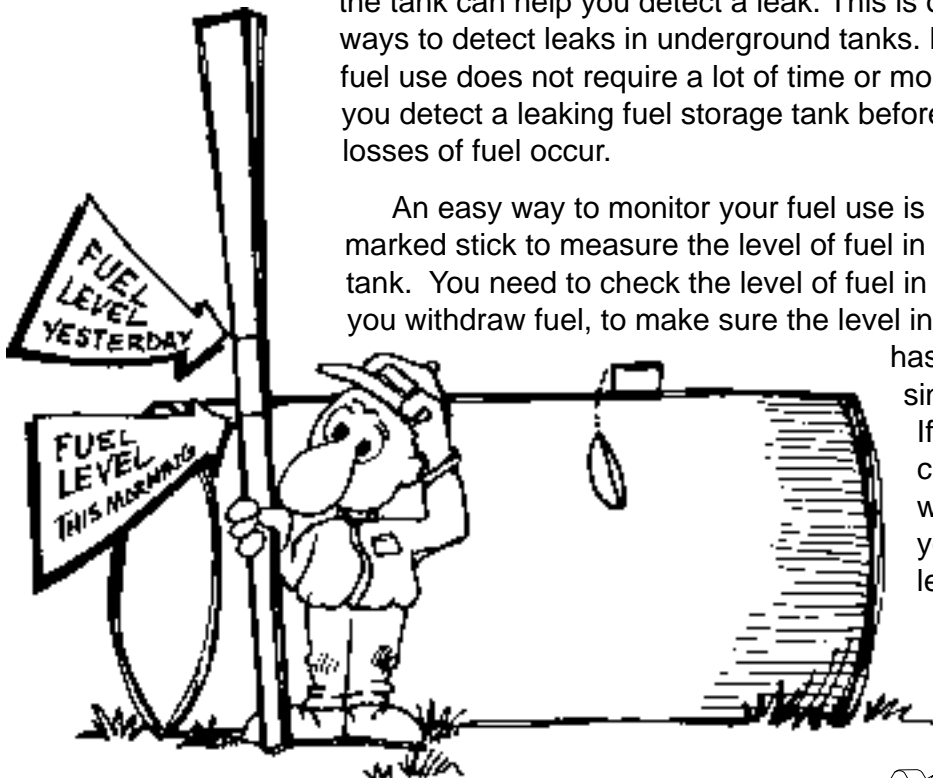
Whether you have underground or aboveground storage you need to develop a system that guards against leaks and spills. Equipment should be fueled on a concrete pad that has secondary containment.

All facilities should be secured from children, pets, and vandalism. Underground tanks should be protected against corrosion. Aboveground tanks should be made of high quality steel and have a secondary containment system that holds 125% of the total volume stored. Tanks that are used or designed for underground storage should not be used for aboveground storage.

5 Do you need to develop a method of recordkeeping to keep track of petroleum use?

Develop a monitoring system to keep accurate records of fuel delivery and usage. Regularly monitoring your fuel use and comparing it to the measured amount of fuel in the tank can help you detect a leak. This is one of the easiest ways to detect leaks in underground tanks. Monitoring your fuel use does not require a lot of time or money and can help you detect a leaking fuel storage tank before significant losses of fuel occur.

An easy way to monitor your fuel use is to have a pre-marked stick to measure the level of fuel in your storage tank. You need to check the level of fuel in the tank before you withdraw fuel, to make sure the level in the storage tank has not changed since your last use. If the level changes between withdrawals, then your tank may be leaking.



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If you answered "Yes" to the following questions.	What to do	Who to call	Other References	What you did
Question 1,5	Develop a regular maintenance program to check tanks for leaks, damage, etc. Install adequate spill and leak protection.	Local or State regulatory agency.		
	Monitor fuel usage.			
Question 2	Plan to move your tank.	Local or State regulatory agency.		
Question 3	Change to aboveground storage.	Local or State regulatory agency.		
Question 4	Construct secondary containment system.	Local or State regulatory agency.		

