



### **CAN UNDERGROUND STORAGE TANKS CONTAMINATE MY DRINKING WATER?**

Storage of liquid petroleum products, such as motor fuel and heating fuel, as well as other hazardous substances which are stored in underground storage tanks present a threat to public health and the environment. Nearly one out of every four underground storage tanks in the United States may be leaking, according to the U.S. Environmental Protection Agency. If an underground tank is more than 20 years old, and not protected against corrosion, the potential for it to leak increases dramatically. Newer tanks and

pipng can leak, too, especially if they weren't installed properly.

A small gasoline leak of one drop per second can result in the release of about 400 gallons of gasoline into the groundwater in one year. Even a few quarts of gasoline may be enough to severely pollute a 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. Preventing tank spills and leaks is especially important because of how rapidly gasoline, diesel and fuel oil can move through surface layers and into groundwater.



The City of \_\_\_\_\_ is working cooperatively with storage tank owners to implement preventive measures to help protect the drinking water of storage tank owners and the City's residents.



### **HOW DO UNDERGROUND STORAGE TANKS LEAK?**

Major causes for Underground Storage Tanks (USTs) releases include:

- holes due to corrosion,
- improper installation, and
- spills and overfills when filling tanks.



### WHAT CAN YOU DO TO PROTECT DRINKING WATER SUPPLIES?

The Minnesota Pollution Control Agency (MPCA) requires all regulated underground storage tank (UST) systems to comply with specific requirements. This brochure is designed to highlight the four main requirements for managing USTs. The four requirements include (1) tank leak detection, (2) line (pipe) leak detection, (3) corrosion testing, and (4) record keeping.

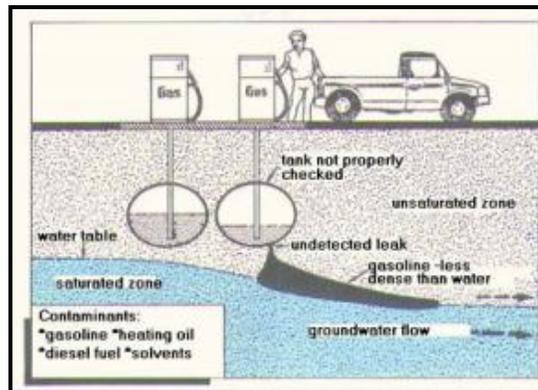
If your UST(s) do not have leak detection, you can be cited for violations and fined. Leak detection violations can also keep you from

getting reimbursement for cleanup costs. Without leak detection, you risk discovering a leak only after it becomes an environmental problem and major financial burden.

### TANK LEAK DETECTION

There are four main tank leak detection methods that can be used.

- 1) Automatic tank gauging
- 2) Monthly Statistical Inventory Reconciliation (SIR)
- 3) Inventory Control (can only be done 10 years after corrosion protection has been installed on the tank)
- 4) Interstitial monitoring (Double-walled tanks only)



### LINE LEAK DETECTION

There are four main line leak detection methods.

- 1) Annual line tightness tests and annual function checks on mechanical line leak detectors.
- 2) Sump alarms
- 3) Electronic line leak detectors.
- 4) Statistical Inventory Reconciliation

### CORROSION TESTING

Any metal piping or tanks that are not double-walled must have a corrosion protection test every three years. This test must be performed according to MPCA rules.

### RECORD KEEPING

You must keep records on file to prove that you are in compliance with all testing requirements.

### ADDITIONAL INFORMATION

More detailed information can be found by visiting <http://www.pca.state.mn.us/cleanup/ust.html> or by calling MPCA's Customer Assistance Center at 800-646-6247, or the MPCA Information Line at 800-657-3864.