



CAN ABOVEGROUND STORAGE TANKS CONTAMINATE MY DRINKING WATER?

A spill of only one gallon of oil can contaminate a million gallons of water. A single pint of oil released into a lake or wetland can cover one acre of surface water and seriously damage aquatic habitat. Storage tank spills can contaminate drinking water supplies and take years for ecosystems to recover. All spills pose a threat to human health and the environment, require remediation which may extend beyond property boundaries, and result in substantial cleanup costs. 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.

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.



WHY DO STORAGE TANKS POSE A THREAT TO DRINKING WATER SUPPLIES?

Mismanaged aboveground storage tanks pose a serious threat to drinking water supplies because they have the ability to breakdown geologic barriers which protect aquifers from contamination. In addition, gasoline, diesel and fuel

oil all have the ability to move very quickly through surface layers and into groundwater.



STORAGE TANKS CONTAIN SOME OF THE FOLLOWING COMPOUNDS

Petroleum fuels contain a number of potentially toxic compounds, including common solvents, such as benzene, toluene and xylene, and additives, such as ethylene dibromide (EDB) and organic lead compounds. EDB is a carcinogen (cancer-causer) in laboratory animals, and benzene is considered a human carcinogen.



SIMPLE STEPS YOU CAN DO TO PROTECT YOUR DRINKING WATER

- Aboveground storage tanks should have a secondary containment area in case of a spill. The containment area surrounding the tank should be able to handle 110% of the contents of the largest tank plus freeboard for precipitation.
 - Seal all floors, containment areas, and sump pump pits with an appropriate coating (e.g., petroleum resistant coating).
 - After precipitation events all discharge collected within the secondary containment areas should be inspected for petroleum or chemicals prior to being dispensed.
- Equipment should be fueled on a concrete pad which has secondary containment.
 - Routinely monitor all aboveground storage tanks to ensure they are not leaking. Check the level of fuel in the tank before you withdraw fuel to ensure the level in the tank has not changed since your last use.
 - Inspect tanks periodically to ensure they are in good condition. Areas to inspect include the foundations, secondary containment areas, connections, coatings, tank walls, and the piping system.
 - Aboveground storage tanks should have corrosion protection for the tank. Options include elevating tanks, resting tanks on concrete slabs etc...
 - Follow all MN Pollution Control Agency requirements and recommended practices.



- TIP -

While not a preventative measure for drinking water protection, preventing evaporation from storage tanks has economic and air quality benefits. A roof structure covering a 10,000 gallon tank will conserve 600 to 1,000 gallons of gasoline per year, which would have escaped by evaporation without the shade cover.

FOR ADDITIONAL INFORMATION visit <http://www.pca.state.mn.us/programs/tanks.html>, or contact MPCA's Customer Assistance Center at 800-646-6247, or the MPCA Information Line at 800-657-3864.