



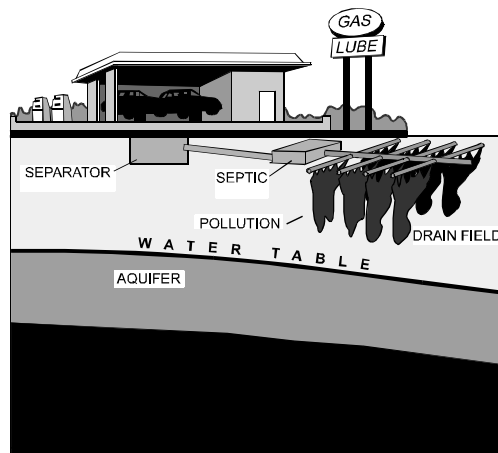
Minnesota
Pollution
Control
Agency

Metro, North
and South
Districts,
Community and
Area Wide
Program

Holding Tanks for Liquid Wastes

UICP/8-03/July 1999

Underground disposal of commercial and industrial wastewater can cause serious soil and ground-water contamination if not carefully controlled. On-site sewage treatment systems are designed to treat household wastewater and do not provide adequate treatment for the types of contaminants found in commercial and industrial facilities. This series of fact sheets provides an overview of the regulations and restrictions concerning the management, treatment and disposal of industrial wastewater in underground sewage systems in Minnesota. Because of the potential for wastewater to contaminate soil and ground water, the policies and regulations regarding underground disposal systems are strict.



A plumbing system that allows pollutants to enter ground water and soil can cause serious environmental problems.

Is it hazardous?

Businesses are responsible for evaluating the waste they generate to determine if it is hazardous or not. This does not necessarily mean laboratory testing. In some cases, a brief description of the waste and how it is generated is sufficient.

If the wastes are hazardous, they must be handled and disposed of according to Minnesota's hazardous waste rules. If the wastes are non-hazardous, the waste generator should work with the Minnesota Pollution Control Agency (MPCA) to determine an appropriate way to store and dispose of the wastes.

Holding tanks

Some non-hazardous liquid waste can be treated effectively at off-site treatment facilities. One way to handle such wastes is to temporarily store them in a holding tank until they can be taken to a wastewater treatment facility. If an owner or operator chooses this option, they will need to decide what kind of tank is required and how will it be regulated by the MPCA.

Tank requirements

The MPCA suggests the following requirements for holding tanks that will contain non-hazardous wastes:

- Tanks should be outdoors, either above ground or below. They should be protected from freezing.





- Tanks should be made from a leak-proof material, such as fiberglass or concrete.
- Tanks should be installed by a certified tank installer. If tanks are to hold petroleum or petroleum wastes, the installer needs to have a certification for petroleum tanks. For tanks that may contain sewage, the installer should have a certification for on-site sewage tanks.
- A double-walled tank is not required, but is especially recommended if the initial cost of a double-walled tank is close to the cost of a single-walled tank. Annual water-tightness tests are recommended for single-walled tanks.

The volume of the tank should be at least five times the maximum amount of wastewater that will be produced in a day.

- If a vented and water-sealed flammable waste trap is installed in the line before wastewater enters the tank, venting for the tank is not required. If you

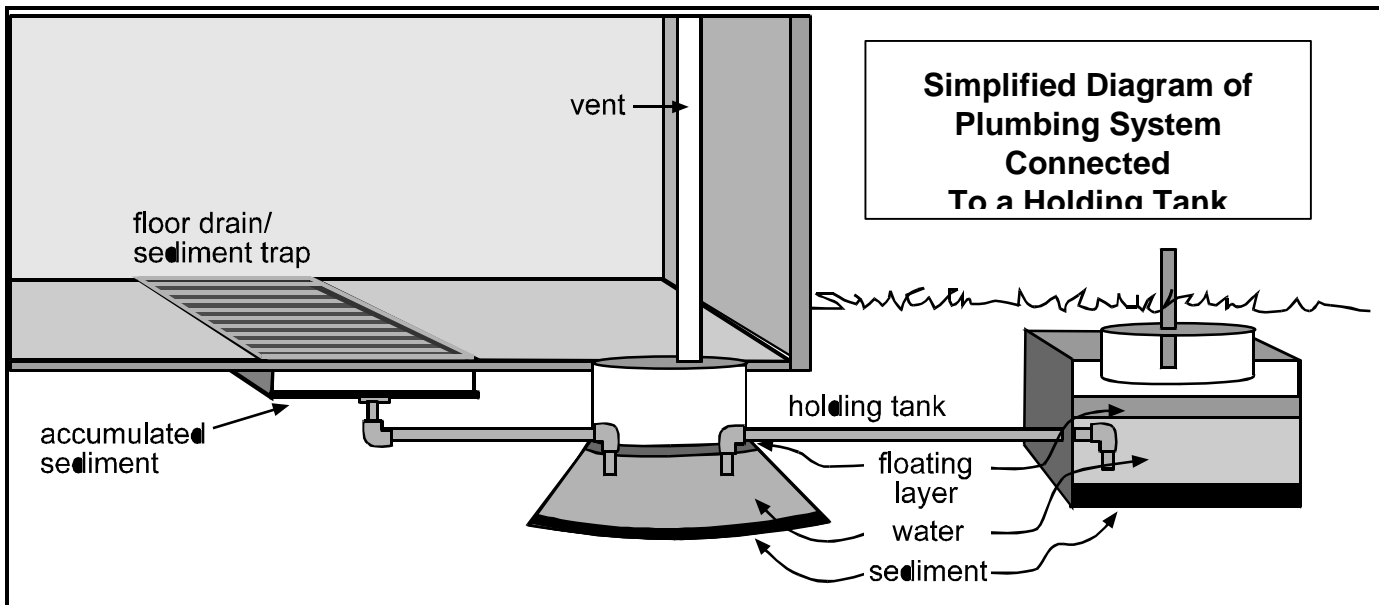
are installing a new holding tank, no flammable waste trap is needed as long as the tank is vented and has a water seal to prevent vapors from re-entering the buildings.

- Flammable waste traps cannot be used as holding tanks.
- A warning system should be installed that alerts users when the tank is 75 percent of its total capacity.

Holding tank owners must have a contract for disposal and treatment of the wastewater.

Recoverable petroleum products

If recoverable amounts of petroleum products enter a holding tank—either accidentally or intentionally—they must be recovered within 24 hours. If they are not, the tank falls into the category of a petroleum tank and must meet all requirements of the state's Above Ground Storage Tank rules and Underground Storage Tank rules.



Holding Tanks Must Be:

- outdoors.
- accessible in all weather.
- vented with a waterseal or a flammable waste trap.
- leakproof and made of a material compatible with the wastes being stored.
- large enough to hold at least five times the maximum amount of wastewater that will be produced in a day.
- equipped with an alarm that will warn owner/operator when tank is three-quarters full.



Contacts for more information

Hazardous waste management and disposal

Call the MPCA at (651) 296-6300 or toll-free at (800) 657-3864.

Disposal of contained wastes

Refer to fact sheet 8-02 or the old Hazardous Waste Division Fact Sheet #4.18 (April 1998).

To find out more about the MPCA's Underground Disposal Control Program, please read the other fact sheets in this series, or contact Jackie Deneen, MPCA, at (651) 296-5695 (voice); (651) 282-5332 (TTY); or call toll-free at (800) 657-3864 (voice/TTY).

Additional information may also be available through the MPCA's subdistrict offices:

Brainerd	(218) 828-2492
Detroit Lakes	(218) 847-1519
Duluth	(218) 723-4660
Mankato	(507) 389-5235
Marshall	(507) 537-7146
Rochester	(507) 285-7343

MPCA Website: <http://www.pca.state.mn.us>