



## **Underground Storage Tank Factsheet**

### **What are Underground Storage Tanks?**

Underground storage tanks (known as USTs) are large containers placed underground to hold large quantities of liquids or gases. USTs are typically constructed of Steel, Aluminum, Fiberglass or a combination of materials. They may be either single-wall or double-wall construction. A double-walled UST is a storage tank that has an inner wall and outer wall with a gap (interstitial space) between the walls to allow for secondary containment.

USTs also typically have piping and a pump station to move the tank contents to where they are used. About 95% of all USTs store petroleum products like gasoline or oil. Tanks may hold industrial chemicals, pesticides, or even food products.

### **Why Underground Storage Tanks are a Concern**

USTs are closely regulated because leaking tanks have the potential to contaminate the soil or ground water. A spill of only three gallons of gasoline can ruin drinking water for a small town. Fifty percent of the nation's population, and 100 percent in virtually all rural areas, rely on groundwater for drinking water.

According to Missouri Department of Natural Resources (MDNR) records, in Greene County alone, there are 174 sites which have underground storage tanks (UST) currently regulated by federal law. There have been over 300 sites with known petroleum releases. At present there are approximately 60 active UST sites which have not yet received closure by MDNR.

In the United States, as many as 200,000 sites have been adversely impacted by petroleum leaking from USTs. These properties have the potential to be a threat to public health and, in some cases, are a blight on neighborhoods.

### **Why Have Some Tanks Leaked?**

Until the mid-1980s, most USTs were made of bare steel, which is likely to corrode over time allowing the contents to leak. Many tanks and connected piping exposed to ground water have rusted through, allowing the contents to seep out. Since 1998, tanks are required to be constructed of materials that do not rust or lined with rust proof materials to help prevent leaks.

Faulty installation or inadequate operation and maintenance procedures also can cause USTs to release their contents into the soil or groundwater.

## **Underground Tank Locations and Contents**

Tanks containing petroleum products and other substances are placed typically placed underground to maximum space and/or lessen the risk of explosion. Unfortunately, this placement makes it difficult to detect leaks. The most common places to find USTs are:

- **Gas Stations:** This is the most common place to find tanks. USTs at gas stations contain varying grades of gasoline and diesel fuel stored in USTs. However, fewer than 10% of all tanks contain diesel fuel.
- **Service Stations:** Automotive service stations or oil change businesses frequently collect used oil in above or below ground tanks before proper disposal or recycling.
- **Former Gasoline and Service Stations:** The City of Springfield has identified 225 sites that are either former or abandoned gas station locations. These sites were often shut down and any tanks present were left in place.
- **Airports and Truck Fleet Refueling Facilities:** Most airports and truck fleet refueling facilities have USTs that hold jet fuel, hydraulic fuel, gasoline or diesel fuel.
- **Dry Cleaners:** Most dry cleaning facilities use hazardous chemicals to clean clothes. The most commonly used chemical, perchloroethylene, is often stored in USTs.
- **Homes:** Before natural gas was widely available, many homes and other buildings burned oil to produce heat. Heating oil was stored in tanks usually located in basements above the floor, or buried in the yard. Most of these tanks have been removed from service, but others remain in the ground unused. These tanks are not regulated, but also pose a risk to water supplies if they leak.

## **How Might Tank Leaks Affect You?**

- Vapors in homes or workplaces
- Contaminate drinking water
- Contaminate soil and ground water
- Contaminate recreational water bodies
- May decrease property values

Contact us for more information or visit the [Tanks and Compliance Unit](#) website.