



National Association of Commercial Building Inspectors & Thermographers™

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Underground Storage Tank Guidance for Commercial Building Inspectors

Commercial Building Inspectors can feel uneasy when reporting on a property they are inspecting that has, or had, one or more underground storage tanks (USTs) on the premises. Part of this uneasiness may stem from not knowing what needs to be done or who to refer the client to for assistance in dealing with USTs. This document has been prepared for commercial building inspectors who deal with USTs on properties in North America and would like to better understand the subject.

This information can help you and your clients by:

- Answering questions about USTs.
- Assist you in understanding the various options a seller or buyer has when an UST is on a property.
- Helping you direct a client who needs to contact the UST regulatory authority.
- Helping you direct a client who needs to find an UST technician or contractor.
- Providing you direction on where to obtain more information on USTs for your client.

This information can also help your client conduct quicker and smoother transactions.

The information provided herein is based on good tank management practices and on comments made by commercial building inspectors just like you who inspected properties containing USTs. Professional inspectors have learned over the years that by being more knowledgeable about USTs they can increase the likelihood that transactions will progress quickly and smoothly for their clients by increasing their knowledge

So... what do you need to know?

This document provides you with a framework for understanding how and why USTs are regulated in North America. The following pages contain common questions and answers about properties with USTs. (**Please note**, this document is not meant to be a comprehensive guide to UST regulations but only a “layman’s” introduction to them. A section at the end of the document lists sources of more complete information.)

What is an UST?

Commercial:

The tank must store a regulated product, such as gasoline, heating oil, or diesel fuel. An underground storage tank (UST) is a tank and any underground piping connected to the tank whose capacity is buried at least 10 percent underground. It is important to note that USTs on commercial properties are highly regulated, and it is critical for the client to become knowledgeable of the UST regulations.

Residential:

Residential or farm tanks with 1,100 gallons or less capacity are not regulated to the same degree as commercial tanks. In most cases, residential USTs with smaller capacities are only regulated if they cause a release or when they are taken out of service.

Why are USTs regulated?

USTs containing petroleum products or hazardous substances are subject to federal, state, and, sometimes, local regulations. USTs are regulated because product can leak into the soil, causing environmental pollution, health and safety issues, and may contaminate groundwater. UST systems are regulated at various degrees depending on the material stored, size of tank, type of property, and the use of the storage system.

Who is the UST regulatory authority?

The U.S. Environmental Protection Agency (EPA) has promulgated federal UST regulations; however, the federal regulations have been essentially duplicated as state regulations.

How do I deal with USTs during the property condition assessment?

Keep in mind that *any* property may contain USTs. Underground storage tanks have been found in many unusual places, and some USTs do not give visible indication of their presence below ground. Many properties that have changed use, such as fast food restaurants, were previously gasoline service stations.

Examples of where USTs are commonly found are: gasoline stations, convenience stores, residences or former residences that have been converted to commercial business that use or once used heating oil, trucking and bus terminals, railroad yards, farms, and marinas.

A walk-through of a property may uncover indications of abandoned USTs; items to look for include:

Vent pipes. Vent piping is usually found outside of structures, and is normally 2 to 8 feet tall. Vents may be made of 1-1/2 to 2-inch metal piping and in many cases have a cap that looks like a mushroom on the top of the piping.

Fill pipes. Fill piping is normally directly over the top of the UST. A fill pipe can be 2 to 4 inches in diameter. In most cases, the fill pipe will have a special cap that requires a tool for its removal or a cap with ears that locks it in place.

Dispensers. Especially at former farms or gas station sites, the old dispenser may still be standing. These units can be large like the one you would typically fill your car with, or they can be a small pipe with an electric motor and hose attached.

Abandoned piping. In many buildings that have changed their source of heat, you may find abandoned piping. This piping may be copper or metal. There are normally two pipes associated with an oil heat system, a supply line and a return line. If abandoned pipes run out through a wall, there is a good possibility there is an UST on the other side.

For commercial properties, the local or regional government environmental office is the place to begin a record search for USTs. Environmental offices normally maintain information on a large number of open and closed UST sites across the state. The environmental office may already have information on a particular property your inspecting. You need only contact the environmental office with the address or location of the property in question.

You may also contact the environmental office for residential properties; however, most will only have information on a residential property *if* there has been a release of product or the capacity of the UST requires the tank to be registered.

If the local or regional government environmental office has no record of an UST on the property, how can a property be investigated for USTs?

A way to investigate a property for USTs is to have the property owner contract to conduct an environmental site assessment (ESA) for commercial sites (or a home survey for residential properties).

Lenders often require a environmental site assessment before they make a loan on certain types of commercial properties. Some contractors and inspectors offer services using metal detectors and ground penetrating radar to identify suspected USTs.

What about possible contamination from a leaking UST?

The question of possible contamination from a leaking tank (past or present) will almost certainly come up in any transaction involving commercial property that has or had USTs. If the environmental office has records on a property, these records can shed light on this question (for either the seller or the buyer). A thorough site assessment of the property should provide the UST owner and prospective buyer with details on any contamination found.

Any past or newly discovered contamination must be disclosed to a potential buyer in most areas. Newly discovered contamination or leakage during a property condition assessment or environmental site assessment must be reported to the client, seller and realtor for immediate action in reporting to government environmental authorities to determine if remedial action is warranted.

Many State laws, require that any contamination discovered from leaks from a storage tank system must be reported by the current commercial property owners/occupants to government environmental authorities within two (2) hours after its discovery for immediate action.

What if it is decided to close or decommission an UST?

Often, either a potential buyer or the lending institution will want an UST to be properly closed or decommissioned before a property transfer occurs. There are specific requirements the tank owner must follow for the proper decommissioning of an UST; Most state regulations require the following basic actions when closing an UST.

All USTs:

- 1) Majority of states require a state-certified UST remover or technician must be used to perform the tank closure or decommission. (A list of companies that perform this work is available from most state regulatory authorities.)
- 2) Prior to closure or decommission, the UST must be emptied of liquids and accumulated sludge. These actions need to be carried out by trained personnel who carefully follow standard safety practices. Often times at commercial sites, after the tank has been properly emptied, states mandate they be removed. However, states may give a site specific variance to allow closure/decommission in-place.

Commercial Properties:

- 1) **Most state regulators must be notified in writing before the UST is closed/decommissioned.** Many states require the monitoring of the tank closure/decommissioning activities.
- 2) **Determine if spills or leaks from the UST have contaminated the surrounding environment.** The results of soil vapor or groundwater monitoring can be used to show that the site is not contaminated. Otherwise, a site assessment needs to be completed (if it hasn't already been done). When a government inspector is on site, they will assist evaluating the site for contamination. If contamination is found, sampling and corrective action to clean up the site, as determined by regulatory, will have to be taken.

Residential Heating Oil

A state-certified UST technician or remover must normally perform the closure/decommissioning. Most states do not require prior notification if the removal is elective and there are no indications of product loss. Closing/decommissioning the tank in-place is also acceptable when the closure/decommission is elective and there are no indications of product loss. Prior notification is required if the removal is related to a suspected release, product loss, or system test failure. Soil sampling is not required for a system that is not suspected of a release, product loss, or system test failure. A visual assessment of the tank system and backfill is acceptable. The tank owner should keep records of the closure activities. At any time during closure activities product loss is discovered, government authorities must be notified in accordance with spill reporting regulations.

What if an UST will remain in operation?

Any contamination from past or present leaking USTs on the property must be addressed by the Responsible Party in cooperation with, and to the satisfaction of, state regulators.

If the UST will be kept in operation after the sale, potential buyers may want to know if it is in compliance with local, state and federal UST regulations. There are three different sets of UST regulations, depending on the product stored in the UST: (1) For USTs storing motor fuel, used oil,

or bulk heating oil; (2) for USTs storing heating oil for on-site consumptive use; and (3) Residential USTs.

Underground Storage Tank Removal from Commercial Facilities and Properties

A QUICK REFERENCE STEP BY STEP GUIDE

Underground Storage Tank (UST) removal can be divided into two categories: non-leaking and leaking.

Prior to removing an underground storage tank, tests should be made, with the proper authorities present, to determine whether a tank has been leaking or the surrounding soil has been contaminated.

Steps in safely removing liquid underground storage tanks:

- Notify regulatory authority
- Contracting/scheduling
- Excavate to the top of the tank.
- Disconnect all piping, gauges, and other fixtures.
- Open all tank vents and access ports.
- Remove all liquids and/or sludge.
- Purge the tank with an inert gas. (normally CO₂ for explosive gases)
- Provide access to the inside of the tank and clean out the interior using proper personal equipment (PPE).
- Excavate soil surrounding the tank using proper PPE for on-site personnel.
- Pull and properly dispose of the tank.
- Clean up the site of all contaminated material.
- Install new tanks or close the excavation.

If Leaks are found - these additional steps may be required:

- Report to regulatory authority
- Take health and safety precautions
- Assess risk and potential liabilities
- Determine the extent of contamination
- Preliminary Hydro-geologic Study
- Recover product if possible
- Remove and dispose contaminated soil
- Clean groundwater, monitor soil and groundwater
- Fully documented events to regulatory authority