

UNDERGROUND STORAGE TANK REMOVAL OR ABANDONMENT

Purpose

This information sheet provides requirements for the removal or abandonment in place of underground storage tanks (UST) containing flammable or combustible liquids.

Code requirements

UST containing flammable or combustible liquids that have been removed from service for one year are considered abandoned. UST for heating oil are included. All UST that are abandoned must be removed from the ground or abandoned in place in accordance with requirements found in the 2020 Minnesota State Fire Code (MSFC) Section 5704.2.13 and 5704.2.14.

If acceptable to the local fire code official, UST considered abandoned after one year that are currently equipped with an operational electronic leak detection monitoring system are considered in service for up to five years since the tank was last used. Even with electronic leak detection, UST removed from service (last used) for a period greater than five years will require abandonment in place or removal per the MSFC. Leaking UST shall be promptly emptied, repaired and returned to service or abandoned or removed per MSFC Section 5704.2.7.10.1.

The Minnesota Pollution Control Agency (MPCA) has the authority to order leaking UST be removed. All such reports shall be referred to them. MPCA rules may apply to some abandoned UST. See MPCA website for more information on [underground storage tanks](#).

Removing UST from the ground

MSFC Section 5704.2.13.1.3 requires UST that have been out of service for a period of one year or more to be removed from the ground or abandoned in place.

Removal of UST shall be in accordance with MSFC Section 5704.2.14.1, which says:

- Flammable and combustible liquids shall be removed from the tank and connected piping.
- Piping at tank openings that is not to be used further shall be disconnected.
- Piping shall be removed from the ground.
 - Exception: Piping is allowed to be abandoned in place where the fire code official determines that removal is not practical. Abandoned piping shall be capped and safeguarded as required by the fire code official.
- Tank openings shall be capped or plugged, leaving a 1/8" to 1/4" diameter opening for pressure equalization.



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- UST shall be purged of vapor and made inert prior to removal.
- All exterior above-grade fill and vent piping shall be permanently removed.
 - Exception: Piping associated with bulk plants, terminal facilities and refineries.

Disposal

Dispose UST in accordance with federal, state and local regulations. [MSFC Section 5704.2.14.2] MPCA-certified UST contractors are required to clean and dispose of UST. Once cleaned the UST may be recycled for scrap or disposed of in a landfill. See [Minnesota Rule 7150.0410](#).

Abandonment in place

UST abandoned in place shall be safeguarded per MSFC Section 5704.2.13.1.4, which says:

- Flammable and combustible liquids shall be removed from the tank and connected piping.
- The suction, inlet, gauge, vapor return and vapor lines shall be disconnected.
- The tank shall be filled completely with an approved inert material. Acceptable materials include cement slurry and polyurethane foam (sand or water are not satisfactory materials).
 - *The exception for residential heating oil UST of 1,100 gallons or less was removed in the 2009 edition of IFC due to safety concerns of older corroding unprotected tanks. This raised the question of who becomes responsible when someone drives or falls into one of the empty voids left when the steel finally corrodes away. In order to improve the safeguarding of the public's health and safety the exception has been removed and all UST abandoned in place must be filled with an approved, inert solid material.*
- Remaining underground piping shall be capped or plugged.
- A record of tank size, location and date of abandonment shall be retained. In addition, the property owner is also responsible for notifying the MPCA and local officials (when required) as to the presence of the abandoned tank.
- All exterior above-grade fill piping shall be removed when UST are abandoned or removed.

Additional information

The State Fire Marshal Division (SFMD) does not maintain records of installed, removed or abandoned UST. It is not necessary to apply for a permit or report tank removal or abandonment to the SFMD. The local fire code official (fire marshal or fire chief) shall be notified before a tank removal or abandonment is started. Approval from the SFMD is not necessary.

The SFMD does not license or certify underground tank contractors. Contact the MPCA for a [listing of certified underground storage tank contractors](#) permitted to conduct tank removals. SFMD Inspectors do not witness or inspect underground tank removal or abandonment work.

Any questions related to this issue should be directed to the code specialist with the SFMD at 651- 201-7221 or you can email questions to fire.code@state.mn.us.



Created March 2017
Updated March 2020