**Section 175.840 Abandonment-in-Place**

a) No tank or piping may be abandoned-in-place unless the permit applicant demonstrates eligibility for a waiver of the removal requirement for the tank and/or piping. The waiver shall be granted only in the following instances:

1) it would be infeasible to remove the UST due to loss of adjacent or subjacent support of nearby structures, such as railroad tracks, streets (as defined in Section 1-201 of the Illinois Vehicle Code [625 ILCS 5/1-201]), and other USTs;

2) removal is infeasible because of inaccessibility, as determined by OSFM; or

3) in unusual situations in which removal is infeasible due to other reasons, as determined by OSFM.

b) Tanks, inside the jurisdiction of the City of Chicago, which were abandoned-in-place prior to July 28, 1989 (the date of repeal of home rule by the City over USTs) in accordance with City laws, regulations or ordinances, need not be removed so long as a condition under subsection (a) allowing abandonment continues to exist.

c) Tanks abandoned prior to October 1, 1985. Tanks, outside the jurisdiction of the City of Chicago, filled with inert material, as described in subsection (d)(13), prior to October 1, 1985, need not be removed so long as a condition under subsection (a) allowing abandonment exists; however, the owners shall provide documentation of fill material and date of fill, upon request by OSFM. The documentation shall be a receipt or a written statement from the licensed or non-licensed contractor who did the fill, a statement from the inspector who inspected the tank or a written statement from anyone designated by the State Fire Marshal or the Director of the Division of Petroleum and Chemical Safety.

d) For UST or piping abandonment-in-place, the following requirements and procedures shall be followed:

1) An OSFM permit under Section 175.300 shall be obtained and the work scheduled with OSFM.

2) Except as otherwise provided in this Section, the procedures of API 1604 shall be followed for vapor freeing and inerting procedures.

3) All health and safety monitoring equipment shall be maintained according to manufacturer's specifications.

4) An exclusion zone shall be established, within which smoking is prohibited. The exclusion zone shall include all hazardous (classified) locations/areas where work related to abandonment-in-place is being conducted. The use of spark producing/non-explosion proof equipment is prohibited in the vapor hazard area prior to removal of product and sludges and attaining the LEL/oxygen levels required in subsection (d)(9).

5) Upon excavating to the top of the tank, on-site personnel shall drain product into approved drums or other approved receptacles. Any associated piping to be abandoned-in-place shall be properly secured or capped. Any piping removal shall adhere to Section 175.830. Further excavation below the top of the tank is not allowed until STSS is present and has verified that tank conditions meet the LEL/oxygen criteria of subsection (d)(9).

6) All liquids shall be removed from the tank using explosion-proof pumps or hand pumps.

7) The tank atmosphere and the excavation area shall be regularly monitored with a combustible gas indicator for flammable or combustible vapor concentration. Monitoring the UST shall be done at 3 levels in the tank: top, middle and bottom.  A confined space entry permit shall be obtained prior to tank entry and SDS must be on site.

8) Vapor freeing shall be done in accordance with API 1604, except that dry ice shall not be allowed as a method of inerting tanks. When vapor freeing the tank with compressed air or using inert gases under pressure, all devices shall be bonded to the tank and the tank shall be grounded to a separate ground. When using inert gases, the cylinder shall be equipped with a pressure gauge so that no more than 5 psi can be discharged into the tank during vapor freeing procedures. To ensure and maintain proper grounding and bonding, the connections shall be tested by the licensed contractor for continuity. This testing shall be done with equipment designed for continuity testing. When vapor freeing a tank, plastic pipes shall not be allowed as a vent tube on eductors.

9) The tank shall be regularly monitored to ensure that explosive conditions do not exist. A maximum of 5% of the LEL, or 5% or less oxygen concentration, shall be attained before the tank is considered safe for abandonment.

10) An STSS shall be on site before any tanks and piping are abandoned in place or before any hot work can proceed.

11) A sufficient number of holes or openings shall be made in the tank for abandonment-in-place procedures if existing openings are not adequate.

12) Cleaning procedures shall be in accordance with API 2015, incorporated by reference in 41 Ill. Adm. Code 174.210. Protective respiratory equipment for tank cleaning personnel shall be the type that provides positive air pressure to a full-face mask throughout the breathing cycle, in accordance with API 2015.

13) After cleaning, on-site personnel shall proceed to introduce an OSFM-approved, inert material through openings in the top of the tank to minimize any surface settling subsequent to abandonment of the tank in place. Allowed inert material shall be limited to sand, gravel, clay, bentonite or inert material mixed with portland cement to increase flowability. The portland cement concentration may not exceed 50 lbs. per cubic yard of mixed material. Tripolymer foam may only be used on compartment tanks where at least 1 compartment is not being abandoned in place and will remain in use. Any other materials must be approved by OSFM during the permit process. The procedure for filling shall be in accordance with API 1604.

14) After the tank is filled with inert material, all tank openings shall be plugged or capped unless it was necessary to cut open the tank top. The vent line shall be disconnected, capped and removed.

15) Every abandonment-in-place requires a site assessment (see 41 Ill. Adm. Code 176.330).

16) When a UST is abandoned-in-place, the owner of the UST shall keep a permanent record of the UST location, the date of abandonment-in-place and the procedure used for abandonment-in-place.

e) When a UST is allowed to be abandoned-in-place, as specified in this Section, the abandoned-in-place UST shall be removed when the condition for issuing the abandonment permit no longer exists. The removal procedures shall be followed and a removal permit is required.

f) Compliance with subsections (d)(1) through (d)(14) is the responsibility of the licensed contractor. Compliance with subsections (d)(15) through (d)(16) is the responsibility of the owner.

(Source: Amended at 48 Ill. Reg. 12838, effective August 7, 2024)