

**OFFICE OF THE STATE FIRE MARSHAL
STATE OF ILLINOIS**

Statute, Rule or Standard Policy Interpretation: **Use of Tripolymer Foam to Fill USTs for
Abandonment-in-Place**

Title: Technical Requirements for Underground Storage Tanks and the Storage,
Transportation, Sale and Use of Petroleum and Other Regulated Substances

Part: 41 Ill. Adm. Code 175

Section Number: 175.840

Section Title: Abandonment-in-Place

Policy Number: 12-TS-001

Purpose: This instruction provides guidance to ensure uniform enforcement of Part 175 rules with respect to the use of tripolymer foam to serve as fill material for USTs to be abandoned-in place in accordance with Section 175.840.

Scope: Statewide

Current Code: In accordance with 175.840(d)(14), when abandoning an UST in place, 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. Any other materials must be approved by OSFM during the permit process. The procedure for filling shall be in accordance with API 1604.

Thus, while the current rule is specific relative to the use of sand, gravel, clay or bentonite, it leaves the approval of other materials to the discretion of the OSFM.

Policy: It is the policy of the Office of the Illinois State Fire Marshal that tripolymer foam may be used as an inert material for filling of underground storage tanks to be abandoned-in-place under the following conditions:

- The abandonment-in-place procedure shall follow all requirements listed in 41 Ill. Adm. Code 175.840.
- The submitted “Abandonment-in-Place” application to the OSFM must stipulate that tripolymer foam will be used as the filler for the abandoned UST and the application shall include documentation regarding the specific tripolymer foam to be used.
- The submitted “Abandonment-in-Place” application to the OSFM must include buoyancy calculations that verify to the OSFM Division of Technical Services the methods and materials that will be used to protect against UST floatation once the tank is filled with tripolymer foam.

- An assigned onsite OSFM inspector (OSFM Storage Tank Safety Specialist) must be present to witness the complete filling of all of the underground tanks being abandoned-in-place and being filled with tripolymer foam.
- The contractor must inform the OSFM at time of scheduling the work that foam will be used in the abandonment procedures so adequate time can be scheduled for the assigned onsite inspector (OSFM Storage Tank Safety Specialist).
- The abandonment-in-place shall comply with the requirements of Section 175.840(e) [requiring that the abandoned-in-place UST shall be removed when the condition for issuing the abandonment permit no longer exists].

Other References: Petroleum Equipment Institute Recommended Practice 100 (PEI/RP-100) addresses the issue of floatation and anchorage calculations that may be of assistance to the submitting contractor relative to determining ballast needs.

Effective Date: April 2012