

## **OSFM Responses to Public Comment**

**NOTE:** OSFM is recommending revisions to proposed Parts 174, 175, 176 and 177 in response to public comment. Text revisions are shown by ~~strikeout~~ and underline in this responsiveness summary and are as follows:

**Black text** = proposed rule text published in the *Illinois Register* on November 20, 2009

**Underlined text** = text to be inserted in response to public comment

**Text with a line through it** = text to be stricken in response to public comment

### **I. COMMENTS FROM THE ILLINOIS PETROLEUM MARKETER'S ASSOCIATION ("IPMA") (Comments received January 4, 2010 were again repeated in comments received February 16, 2010)**

(1) **IPMA COMMENT:** Part 174. Line 148 states that a "field-installed liner" does not qualify as a double-walled tank. Are old tanks grandfathered as an exception to the rule? If older tanks are not grandfathered in, it would be a new and unnecessary cost to an owner/operator. Are they required to be replaced if they are over a certain age? Are there federal requirements covering this area? What is the impact of this change? Section 174.320 affects our members with bulk operations. At a minimum the definition should allow for other systems that are or may be approved in the future. **TEXT CITED IN COMMENT SHOWING THE CITED LINE NUMBER:**

#### **Section 174.100 Definitions**

The following definitions shall apply to 41 Ill. Adm. Code 174, 175, 176 and 177 concerning underground storage tanks and tank systems and the storage, transportation, sale and use of petroleum and other regulated substances.

"Double-walled", in reference to tanks and piping, is a factory certified container consisting of an inner wall and an outer wall with an interstitial space between the inner wall and outer wall suitable for interstitial monitoring, and is designed, constructed and installed to:

contain regulated substances released from the tank system until they are detected and removed;

prevent the release of regulated substances to the environment at any time during the operational life of the UST; and

be checked at least every 30 days for evidence of a release.

[line 148]A field-installed liner or insert does not qualify as a double-walled tank.

**Section 174.320 Locating Bulk Facilities Adjacent to a Motor Fuel Dispensing Facility; Dual Purpose USTs**

- a) Dispensing from a bulk tank into the tank of a motor vehicle is prohibited.
- b) Bulk facilities (including any bulk storage, bulk plant or bulk load-out) located adjacent to or at a motor fuel dispensing facility shall be separated..
- d) Existing Dual Purpose USTs Permitted after May 1, 2003..
- e) New Installations of and New Conversions to Dual Purpose USTs. ..

**OSFM RESPONSE:** This comment involves a prior rulemaking that, effective February 1, 2008, implemented federal requirements under the Energy Policy Act of 2005. OSFM did, however, at that time survey the USTs being installed and noted that the majority of new USTs installed (68%) were in fact double-walled systems during a one-year period surveyed. Existing single-walled systems continue to be grandfathered per the requirements as adopted in the prior rulemaking and moved over into the proposed text —the requirement only applies to new or replaced USTs. Under proposed Parts 174, 175, 176, and 177, there is no requirement to replace an existing UST that reaches a certain age unless the UST is taken out of use for more than a year, at which point USTs older than 30 years must be removed. See also the discussion for comments 22 and 23 below.

**(2) IPMA COMMENT:** Part 175 appears to take all of the OSFM’s fire prevention regulations and combines them in this UST section. Will all fire inspections now be performed by chemical safety people and not fire prevention personnel?

**OSFM RESPONSE:** No regulatory programs are being consolidated under this rulemaking. However, since approximately March 2005, all UST self-service inspections have been performed by the Division of Petroleum and Chemical Safety. The Division of Fire Prevention has not conducted any UST inspections since that time and will continue to implement its regular programs. This rulemaking merely revises the various self-service provisions and puts them all into a single Subpart that is better organized and more readable.

**(3) IPMA COMMENT:** Line 108 indicates that all new installations will have to meet the requirements for unattended motor fuel dispensing facilities. These appear to include new requirements in shut-off, notice to emergency responders, and other safety requirements. What is the purpose of this change? This will add thousands of dollars to the cost of all new installations. **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.200 General Requirements for Motor Fuel Dispensing Facilities**

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- b) [line 108] All motor fuel dispensing facilities must abide by the operating and other requirements of this Subpart B. As of the effective date of this Part, all newly installed motor fuel dispensing facilities shall meet requirements for unattended motor fuel dispensing facilities. Existing facilities may continue to operate pursuant to requirements for attended facilities under this Subpart, although those facilities may elect to comply with requirements for unattended facilities by submitting a written notification to OSFM on forms provided by OSFM (found at [www.state.il/OSFM/PetroChemSaf](http://www.state.il/OSFM/PetroChemSaf)).

**OSFM RESPONSE:** OSFM notes that the changes as originally proposed would have resulted in cost savings for some facilities. Notwithstanding, OSFM agrees that facilities should have the flexibility to determine what kind of facility they would like to have and is recommending revisions to the proposed rules accordingly. Under the proposed rules as revised, facilities must abide by the rules applicable to the particular kind of facility involved. Also, in response to public comment, OSFM concluded that the traditional self-service permit process would have to be retained. Consequently, OSFM is recommending that language from the current UST rules, governing how the self-service permit is issued, be put back into the text of the proposed UST rules. See the discussion for comment 69. We have modified paragraph (b) of the proposed text as cited in the comment to state the following (deleting most of that paragraph):

#### **Section 175.200 General Requirements for Motor Fuel Dispensing Facilities**

- b) All motor fuel dispensing facilities must abide by the operating and other requirements of this Subpart B.

Second, OSFM recommends that the current regulatory practice for unattended self-service facilities be continued. OSFM has recommended revisions that reinsert currently applicable UST rules text for the automatic notification and fire detection and fire suppression systems. The recommended language is also updated to meet the general requirements of NFPA 72, allowing facilities flexibility as to how to set up their systems for automatic notification of the fire department so long as those systems meet the requirements of NFPA 72. With that, a grandfathering provision allows existing facilities to meet the requirements of the versions of NFPA 17, NFPA 72, NFPA 70, and UL 1254 as applicable and in force at the time of installation of these systems, which avoids unnecessary expense to existing facilities regarding these systems. OSFM recommends insertion of the following pertinent language from the current UST rules, with the updates and revisions as described:

#### **Section 175.220 Unattended Self-Service Motor Fuel Dispensing Facilities and Islands**

- b) A sign shall be placed at or near each emergency shutoff switch stating that activation of the emergency shutoff switch “transmits a fire alarm to the fire department”. Resetting from an emergency electrical shutoff condition shall require manual intervention by the owner

or attendant and shall be accomplished only after the condition that caused it to be activated has been corrected.

- c) Activation of any emergency shutoff switch at the facility shall automatically transmit an alarm to local emergency fire services provider(s) by sending a signal via one of the following mechanisms, which shall meet the requirements of NFPA 72:
  - (1) Auxiliary alarm system;
  - (2) Central station alarm connection;
  - (3) Proprietary alarm receiving facility or system;
  - (4) Remote station alarm connection; or
  - (5) Where the mechanisms in (c)(1) through (c)(4) are not available, an alternate plan for notification of local emergency services meeting NFPA 70 and NFPA 72 and approved by OSFM in advance of the use.

The fire alarm system shall be installed, tested, and maintained according to NFPA 70 and NFPA 72. The alarm system must also meet the alarm system requirements of Subsections (h)(1)(C) and (h)(2)(D), including the requirement for an audible alarm when triggered.

- h) All unattended motor fuel dispensing facilities shall have installed and maintained equipment and systems that meet the requirements of subsection (h)(1) or (h)(2), although local governments may require option (h)(1) or (h)(2):
  - 1) Unattended dispensing areas for Class I, II and III liquid motor fuels utilizing this option shall be protected by an automatic fire suppression system(s) meeting the standards of UL 1254 and NFPA 17. If a fire suppression system meeting these requirements is installed, no fire extinguishers are required. In the event of a fire suppression system discharge, the fuel dispensing facility shall not be returned to service until the suppression system is recharged and fully operational in the area protected by the system. The fire suppression system shall, when activated:
    - A) Automatically activate an emergency shutoff switch that is equipped so that all fuel dispensing units would be stopped by such activation.
    - B) Sound a local alarm notification device that is audible throughout the dispensing area and meets the requirements of NFPA 72.

- C) Automatically transmit an alarm to local emergency fire services provider(s) by sending a signal via one of the following mechanisms, which shall meet the requirements of NFPA 72:
  - i) Auxiliary alarm system;
  - ii) Central station alarm connection;
  - iii) Proprietary alarm receiving facility or system;
  - iv) Remote station alarm connection; or
  - v) where the mechanisms in (C)(i) through (C)(iv) are not available, an alternate plan for notification of local emergency services meeting NFPA 70 and NFPA 72 and approved by OSFM in advance of the use.

The fire alarm system shall be installed, tested, and maintained according to NFPA 70 and NFPA 72.

- D) Include extinguishing agent discharge nozzles mounted above dispensers and at or near ground level to discharge agent underneath vehicles being fueled.
- 2) Unattended dispensing areas for Class I, II and III motor vehicle fuels electing this option shall be equipped with portable fire extinguishers and a fire detection system located under a weather enclosure canopy (unless written documentation is submitted verifying that the detection system will operate properly without such a canopy).
- A) The system shall detect a fire in the dispensing area through the use of rate compensation, rate of rise or flame sensing detectors, and the installation must meet the requirements of NFPA 72.
  - B) Activation of the system shall automatically activate an emergency shutoff switch that is equipped so that all fuel dispensing units would be stopped by such activation.
  - C) Activation of the system shall cause the sounding of a local alarm notification device audible throughout the dispensing area and meeting the requirements of NFPA 72.

- D) Activation of the system shall automatically transmit an alarm to local emergency fire services provider(s) by sending a signal via one of the following mechanisms, which shall meet the requirements of NFPA 72:
- i) Auxiliary alarm system;
  - ii) Central station alarm connection;
  - iii) Proprietary alarm receiving facility or system;
  - iv) Remote station alarm connection; or
  - v) where the mechanisms in (D)(i) through (D)(iv) are not available, an alternate plan for notification of local emergency services meeting NFPA 70 and NFPA 72 and approved by OSFM in advance of the use.

The fire alarm system shall be installed, tested, and maintained according to NFPA 70 and NFPA 72.

- E) Fire extinguishers meeting the requirements of 41 Ill. Adm. Code 174.350 shall be installed and maintained at each island and at the emergency shutoff switch. Cabinets, or other enclosures for extinguishers, shall not require breaking of glass or other acts that could injure users attempting to access the extinguishers, though doors, panels and local alarm systems may be provided for these enclosures at the owner's option.
- 3) The annual system testing required under NFPA 17 and NFPA 72 must be documented and these documents regarding this testing kept at the facility or available within 30 minutes.
- 4) In meeting the requirements of subsections (c) and (h) of this Section, facilities in existence as of the effective date of this Part shall have the option of complying with the Editions of NFPA 17, NFPA 70, NFPA 72, and UL 1254 incorporated by reference in 41 Ill. Adm. Code 174.210 or the OSFM alarm system and fire suppression and fire detection system requirements in effect at the time of their installation.

- 1) Any changes to either fire suppression or fire detection systems and related alarms require that the facility notify OSFM in writing at least 60 days in advance of such change.
- i) At least once each year the facility shall verify that the alarm notification devices required under subsections (c) and (h) of this Section are working and shall record the verification date and results on a record kept along with the other facility records.

**(4) IPMA COMMENT:** Line 157 indicates that where a dispenser is located more than 100 feet from the emergency switch at the control station, additional electrical shutoffs are required. How does this differ from the existing 170 requirement? Do we have to retrofit? Are all existing facilities grandfathered? Why not just require each site to have one E-switch located inside at the point of sale and one switch outside? Who will train the public to use the emergency switch? **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.210 Attended Self-Service Motor Fuel Dispensing Facilities and Islands**

All dispensing of Class I, II or III liquids at attended self-service motor fuel dispensing facilities and islands must be under the supervision and control of an attendant. The following requirements shall apply to attended self-service motor fuel dispensing facilities and islands:

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- d) The control station shall include an emergency shutoff switch that shall be:
  - 1) clearly identified and easily accessible to the attendant;
  - 2) interconnected so that activation of one shutoff activates all the shutoffs;
  - 3) located in a position to allow all dispensing devices to be readily visible to the attendant, or as approved by OSFM; and
  - 4) [line 157] Where the dispenser is located more than 100 feet from the emergency shutoff switch at the control station, additional electrical shutoffs are required and shall be clearly identified and easily accessible and located not closer than 20 feet nor further than 100 feet from the dispensing devices they serve, or at a location approved by OSFM.

**OSFM RESPONSE:** The cited language is a compromise position in response to many concerns voiced by the regulated community that a ban on dispensers located more than 100 feet from the control station is an unworkable rule. The proposed rule eliminates the 100-foot requirement in favor of a requirement for an additional emergency shutoff switch (“E-switch”). Particularly for smaller facilities, it is possible to meet the requirements with only one E-switch under the proposed rule, which would save costs as compared to the alternative recommended in your comment. In consideration of your comment, OSFM also felt that additional flexibility could be allowed for the placement of these emergency shutoffs and is proposing revised language for placement at attended facilities. Since these

requirements are now much simplified, existing facilities that do not already meet these requirements must retrofit and will not be grandfathered. Facilities needing to retrofit any shutoff(s) as a result of the proposed UST rules will have one year to install these and in an appropriate case may request an additional extension, which would include marinas which must have emergency shutoffs under current OSFM rules. OSFM has changed the proposed language to provide as follows on this issue for attended and other types of dispensing facilities:

#### **Section 175.210 Attended Self-Service Motor Fuel Dispensing Facilities and Islands**

- d) Conspicuously marked and easily accessible emergency shutoff switches must be provided at each facility and shall be:
  - 1) Located so that at least one emergency shutoff is at least 20 feet but not more than 100 feet from each dispenser;
  - 2) Interconnected so that activation of one shutoff activates all the shutoffs whenever more than one emergency shutoff switch is provided.
  - 3) Equipped with an additional emergency shutoff at the control station, which shall be conspicuously marked and readily accessible to the attendant, whenever the control station is less than 20 feet from any dispenser or a security booth is provided for the attendant; such emergency shutoff shall be located in a position to allow all dispensing devices to be readily visible to the attendant, or as approved by OSFM, and where a security booth is provided, the control station and emergency shutoff shall be inside the security booth.
  - 4) Compliance retrofits will be due to be completed one year after the effective date of these rules or as agreed by OSFM.

#### **Section 175.220 Unattended Self-Service Motor Fuel Dispensing Facilities and Islands**

- b) Conspicuously marked and easily accessible emergency shutoff switches must be provided at each dispensing island, in addition to the emergency shutoff switch that is required to be located at least 20 feet but not more than 100 feet from each dispenser. When more than one emergency shutoff switch is provided, all devices shall be interconnected. Stations with only one island may elect to utilize a single emergency shutoff switch located at least 20 feet but not more than 100 feet from each dispenser, or at a location approved by OSFM. A sign shall be placed at or near each emergency shutoff switch stating that activation of the emergency shutoff switch “transmits a fire alarm to the fire department”. Resetting from an emergency electrical shutoff condition shall require manual intervention by the owner or attendant and shall be accomplished only after the condition that caused it to be activated has been corrected.

## **Section 175.250 Marine Motor Fuel Dispensing Facilities**

- e) At all marinas, clearly identified emergency shutoff switches that are readily accessible in case of fire or physical damage at any dispensing unit shall be provided on each marine wharf and located at least 20 feet but not more than 100 feet from each dispenser, or at a location as approved by OSFM. The shutoffs shall be interlocked to shut off power to all pump motors from any individual location and shall be manually reset only from a master switch. Each emergency shutoff switch shall be identified by an approved sign on all-weather materials stating "MASTER ELECTRICAL SHUTOFF" in 2 inch red capital letters. Resetting from an emergency electrical shutoff condition shall require manual intervention by the owner or attendant and shall be accomplished only after the condition that caused it to be activated has been corrected. A master electrical shutoff means an emergency shutoff switch.

**(5) IPMA COMMENT:** Line 189. Who will be qualified to do the testing? **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

### **Section 175.210 Attended Self-Service Motor Fuel Dispensing Facilities and Islands**

All dispensing of Class I, II or III liquids at attended self-service motor fuel dispensing facilities and islands must be under the supervision and control of an attendant. The following requirements shall apply to attended self-service motor fuel dispensing facilities and islands:

- i) [line 189] All emergency shutoff switches and all shear valves shall be tested at least annually to ensure that they are functioning properly. Documentation of annual testing shall be kept at the motor fuel dispensing facility and available for examination by a representative of OSFM. If documentation of annual testing is not available, the facility shall be subject to demonstration of the equipment during inspection by OSFM.

**OSFM RESPONSE:** OSFM agrees that testing of shear valves could be problematic in some cases and feels that visual verification by the owner/operator or a contractor that the shut-off is in place with the dispenser mounted properly can substitute for periodic testing of the shear valve. This then eliminates the need for special qualifications and the owner/operator can simply do the periodic visual inspection. Verification that emergency shutoffs are working is simpler and so OSFM proposes that the owner or operator (or, if preferred, a contractor) merely verify that the shutoffs are working on an annual basis. The language of the proposed paragraph as revised would read as follows, which language would also apply to all emergency shutoffs at other types of facilities as well:

- h) All emergency shutoff switches shall be tested, and all shear valves visually inspected, at least annually to ensure that they are functioning properly and that the dispenser is mounted properly. Documentation of annual testing shall be kept at the motor fuel dispensing facility for two years and available for examination by a representative of OSFM. If documentation of annual testing of emergency shutoff switches is not

available, the facility shall be subject to demonstration of this equipment during inspection by OSFM.

**(6) IPMA COMMENT:** Line 239. This will affect some existing sites. Why is it necessary? **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.210 Attended Self-Service Motor Fuel Dispensing Facilities and Islands**

All dispensing of Class I, II or III liquids at attended self-service motor fuel dispensing facilities and islands must be under the supervision and control of an attendant. The following requirements shall apply to attended self-service motor fuel dispensing facilities and islands:

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- 1) [line 239] No dwelling unit or sleeping facilities of any kind for the owner, attendant or any person shall be permitted at a self-service motor fuel dispensing facility. This does not include dormitory facilities for use of drivers at truck stops, provided that the dormitories are in compliance with the applicable provisions of 41 Ill. Adm. Code 100.

**OSFM RESPONSE:** This comment addresses text that has not changed in this rulemaking. This requirement has been in OSFM UST rules for many years, which is consistent with local zoning regulations that typically prohibit residential quarters in an industrial or commercial facility. Please note that truck stop dormitory facilities in compliance with the Life Safety Code are exempted from this requirement under the text of both the current and proposed rule. The Life Safety Code is incorporated into OSFM rules at 41 Ill. Adm. Code 100.7 pursuant to OSFM's authority under the Fire Investigation Act, 425 ILCS 25/0.01 *et. seq.*

**(7) IPMA COMMENT:** Line 477. The UST permit fee is raised 50% to \$300. What is the justification for a 50% price increase? Have the costs of issuing permits increased this much? If costs have increased this much, IPMA recommends that privatizing the program be seriously considered. Also, a separate fee is required for each kind of activity (line 540). While we favor the new language starting at line 615 that exempts replacement of like-for-like equipment, starting at line 634, if an extension or amendment of any of these permits is needed, another \$300 fee must be paid. When a permit for each kind of activity is required, this can add up to a lot of money very quickly. **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.300 Permitted UST Activity**

Any UST activity or other permitted activity under this Section must comply with the following:

- a) Permit Requirements

- 1) [line 477] Prior to the onset of UST activity, a completed permit application, including fee payment of \$300 per permitted activity, shall be submitted to OSFM.

- 2) A separate fee is required for each type of activity.

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- f) [line 540] Actions Requiring a Permit. A permit is required to do any of the following to USTs:

- 1) install new underground tanks or piping;
- 2) remove tanks, piping or interstitial sensors;

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g) Actions Not Requiring a Permit.

- 1) No permit is required to do like-for-like replacements for the following:

[list of like-for-like items]

- 2) [line 615]The exceptions listed in subsection (g)(1) are the only exceptions from the permit requirement. If the equipment is not present or another type of equipment is to be used, a permit shall be required. Any pipe or flex connector work requires a permit. ..

h) [line 634]Expiration and Extension of Permits. Permits expire 6 months from the date they are issued. The applicant may apply for additional 6-month extensions. Permit extensions that circumvent newly adopted technical requirements will not be allowed. If a party submits evidence of non-cancelable contracts executed in reliance on the permit sought to be extended, or if work has commenced, a party will not be viewed as circumventing the technical requirement. Each extension request must be submitted in writing before the permit lapses and must be accompanied by a \$300 fee.

i) Amended Permits. Granted permits may be amended only once without a new application fee. For all permit amendments, each change that requires a new contractor, more than minor changes to the site plan, or another engineering review to determine acceptability will require submission of a new permit application and \$300 fee. "As-built" drawings reflecting any amendment to the site plan shall be submitted to OSFM within 10 days after the amendment. Permit amendments that circumvent newly adopted technical requirements will not be allowed.

**OSFM RESPONSE:** This is only the second permit fee increase of \$100 in the approximate 25-year history of the regulatory program and will be used to offset inflationary costs. We do not believe a private company would conduct an engineering review of this kind for \$300 or less. Regarding permit extensions and amendments, a permit can be amended once without a fee and once issued the permit is good for 6 months, which in the past has been sufficient time to execute the work on the permit. By way of illustration, in calendar year 2009, extensions represented approximately 1% of the permit fees collected that year, and fees collected for amendments were significantly less than that.

**(8) IPMA COMMENT:** Line 562. Define "hot work". **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.300 Permitted UST Activity**

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f) [line 540]Actions Requiring a Permit. A permit is required to do any of the following to USTs:

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10) perform any hot work on a UST;

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**OSFM RESPONSE:** Hot work is in fact defined in proposed Part 174 as follows:

### **Section 174.100 Definitions**

The following definitions shall apply to 41 Ill. Adm. Code 174, 175, 176 and 177 concerning underground storage tanks and tank systems and the storage, transportation, sale and use of petroleum and other regulated substances.

"Hot Work" means operations or work on a UST capable of providing a source of ignition, such as drilling, welding, cutting, burning or heating.

Although this is a new term for our UST rules, OSFM feels the term provides an excellent description of OSFM's current practice, which OSFM expects to continue without change. For example, the term would exclude tank entry via a properly bolted manway, and therefore, no permit would be required for that kind of tank entry.

**(9) IPMA COMMENT:** Line 688. A removal and upgrade permit for all piping replacements will add costs to almost all such projects. Why is this needed? **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

### **Section 175.300 Permitted UST Activity**

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k) Miscellaneous

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3) [line 688]When piping is removed from an existing trench and replaced with new piping installed in another location at a site, both a removal and upgrade permit are required. However, where piping is removed from an existing trench and replaced with new piping installed in the same trench, only an upgrade permit is required.

**OSFM RESPONSE:** Although the text is new, it merely reflects the current regulatory practice in place since at least 2007 or 2006, which was intended to save costs to industry, in that only one permit is required for smaller piping jobs.

**(10) IPMA COMMENT:** Line 854. Why is this necessary? The current procedure works well. This will unnecessarily add costs to projects. **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

## **Section 175.320 Scheduling of UST Activity**

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- c) [line 854]OSI (Date Certain) Activity. OSI activity includes removal, abandonment-in-place, and any hot work. Any additional inspection in follow-up to tank penetration via hot work, including a final lining inspection and tank precision testing, shall be scheduled as a PAI inspection. For a listing of OSI activities, see Appendix A to this Part.
- 1) For OSI activity, the contractor shall have a granted permit in his or her possession before calling OSFM between 8:30 a.m. and 3:00 p.m. on State business days to establish a mutually agreed specific date and time for the permitted activity.
  - 2) Only the contractor or an employee of the contractor (this does not include subcontractors) may schedule the work with OSFM.
  - 3) For OSI activity, the work will not be allowed to be done unless an STSS is on site.

**OSFM RESPONSE:** The procedures are not being changed, although some minor clarifying changes were proposed to the text as taken from the current rule. For example, see comments to item 8 above.

**(11) IPMA COMMENT:** Line 946 and the 4 pages following. Is this a double-wall requirement? What does this mean to existing tanks that don't meet the double-wall standard? Why require the double-wall construction at this time? Under the current regulations, there has been a significant reduction in releases. This change in tank construction should be reviewed at some point in the future when warranted. To require it now without reason will only add unnecessary costs to the industry.

**TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

## **Section 175.400 Design and Construction of USTs**

- a) [line 946] Tanks. Any newly installed or replaced underground tank shall be of double-wall construction and equipped with interstitial monitoring that meets the applicable requirements of Section 175.630(g) and 40 CFR 280.43(g) for all permits issued on February 1, 2008 and after. Any release into the interstice of any double-wall tank shall require that the interstice be cleaned under accepted engineering practices before the tank can be put back into service. (See Sections 175.300(f) and 175.630(g).) If the interstice cannot be cleaned so as to allow proper functioning of the interstitial monitoring, then the tank shall be removed within 60 days. Third-party listed, factory manufactured, jacketed tanks having an interstitial space capable of being cleaned following any contamination shall be considered as meeting the double-wall requirement.

### **Section 175.420 Piping**

- b) Installed underground piping shall be of double-wall construction and equipped with interstitial monitoring that meets the applicable requirements of Section 175.630(g) and 40 CFR 280.43(g) for all permits issued February 1, 2008 and after. ..

**OSFM RESPONSE:** The double-wall requirement was not changed in the current rulemaking. The comment refers to changes from a prior rulemaking implementing federal mandates and which became effective 2-1-08 and were justified by the fact that the majority of installs at the time were already double-walled. See also discussion for item 1 above.

**(12) IPMA COMMENT:** Line 973. There needs to be a reference to testing required of the tank system and site for soil conditions to qualify the system for use. **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

### **Section 175.400 Design and Construction of USTs**

- b) Each newly installed, replaced and existing tank shall be properly designed, constructed and installed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and third-party listed for its intended use. Any portion underground that routinely contains product shall be protected from corrosion. In addition, each tank shall meet one of the following requirements:

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- 2) The tank is constructed of steel and protected in the following manner:
  - A) Metallic tanks installed on or after April 21, 1989 shall be thoroughly coated on the outside with suitable rust-resisting dielectric material; and
  - B) [line 973] All steel tanks shall utilize a cathodic protection system designed by a corrosion expert certified by NACE in cathodic protection design or by an Illinois Licensed Professional Engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks. If an impressed current system is selected, it must also be designed to allow determination of the system's operating status by means of permanently installed lights and gauges as required in Section 175.510.

**OSFM RESPONSE:** This requirement already exists in the current and the proposed UST rules. See e.g., Proposed UST rules at subsections 175.510(a)(1) and 175.510(f)(2).

**(13) IPMA COMMENT:** Line 1053 (dispenser replacement). Is this required when a bad dispenser is replaced like-for-like? What if a dispenser is damaged in an accident? **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

#### **Section 175.410 Containment Sumps**

- d) [line 1053] When an existing dispenser is removed and replaced with another dispenser and equipment at or below the shear valve used to connect the dispenser to the UST is replaced, under-dispenser containment is required. This equipment may include flex connectors or risers or other transitional components that are beneath the dispenser and connect the dispenser to the piping.

**OSFM RESPONSE:** This text was not changed in the current rulemaking but, via a prior rulemaking effective February 1, 2008, implemented federal requirements for continued receipt of federal monies for the clean-up of UST sites under the federal Energy Policy Act of 2005. Pursuant to the earlier rulemaking effective February 1, 2008, and the federal mandates involved therein, no under-dispenser containment is required unless flex connectors, risers, or other transitional components are also being replaced. The language above expressly exempts situations where the dispenser but no other components at or below the shear valve are being replaced. In such cases, no under-dispenser containment or permit are required. See proposed rule subsections 175.410(d) and 175.300(f)(12).

**(14) IPMA COMMENT:** Line 1131. This section needs to refer to issues with upgrades and inspections by manufacturers and/or re-certification and lining of existing tanks for compatibility. It also needs to refer to section e) following for existing lined tanks. **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

#### **Section 175.415 UST Compatibility with Product Stored**

- d) [line 1131] New installations or new conversions to blended fuel (as defined in 41 Ill. Adm. Code 174.100) shall comply with the following:
- 1) OSFM will permit a blended fuel to be stored in steel tanks, or any fiberglass tanks manufactured after 1991.
  - 2) The associated piping must be steel or fiberglass piping manufactured after 1991.
  - 3) As of the effective date of this Part, a blended fuel may not be stored in a lined tank.
- e) Existing USTs Previously Converted to a Blended Fuel (as defined in 41 Ill. Adm. Code 174.100). In those instances in which a blended fuel is being stored in an existing tank

lined at any time, the lining material must be approved by OSFM based on information supplied by the manufacturer or a Licensed Professional Engineer, in accordance with the criteria identified in Section 175.500, as compatible with the blended fuel, or the owner/operator must remove the blended fuel from the tank.

**OSFM RESPONSE:** In response to your comment, OSFM has revised the text to read as follows. The rationale is provided in discussion for item 18 below.

### **Section 175.415 UST Compatibility with Product Stored**

- d) New installations or new conversions to blended fuel (as defined in 41 Ill. Adm. Code 174.100) shall comply with the following:
  - 1) OSFM will permit a blended fuel to be stored in steel tanks, or any fiberglass tanks manufactured after 1991 if certified by the manufacturer as compatible with the product stored.
  - 2) The associated piping must be steel or fiberglass piping manufactured after 1991.
  - 3) As of the effective date of this Part, a blended fuel may not be stored in a lined tank.
  
- e) Existing USTs Previously Converted to a Blended Fuel (as defined in 41 Ill. Adm. Code 174.100). In those instances in which a blended fuel is being stored in an existing tank lined at any time, the lining material must be approved by OSFM based on information supplied by the manufacturer or a Licensed Professional Engineer, in accordance with the criteria identified in Section 175.500, as compatible with the blended fuel, or the owner/operator must remove the blended fuel from the tank. New linings for compatibility purposes are allowed after January 1, 2011 but only if factory-installed on a double-walled tank. Existing field installed linings shall be allowed to remain but shall comply with the requirements of Section 175.500, including requirements for 10-year and 5-year inspections by a certified contractor.

**(15) IPMA COMMENT:** Line 1219. Typo “located.” **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

### **Section 175.420 Piping**

- d) [line 1219] All piping shall be located so as to be protected from physical damage. Pipe trenches and pipe installation shall meet manufacturer's specifications for depth, width, slope, spacing and placement of pipe. Joint adhesive and thread sealant shall meet

manufacturer's requirements for the regulated substance stored and/or transported by the pipe.

**OSFM RESPONSE:** The typo (in yellow) first appeared in the JCAR document and will be corrected.

**(16) IPMA COMMENT:** Line 1298. Will the clearance requirements change for double wall installations? **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.430 Clearance Required for USTs**

- a) [line 1298] Distance to Basements. No UST shall be less than 20 feet from any basement, cellar, pit or below-grade excavation on or off the property.
- b) Distance to Sewers. Individual tanks and piping shall be buried so that the tops of the tanks and piping are lower than the bottom level of all sewers, manholes, catch-basins, cesspools, septic tanks, septic tank clean out stations, wells or cisterns within 20 feet, on or off the property, or tanks and piping shall maintain a full clearance of 20 feet. The term "sewer" includes sanitary and storm sewer lines out of motor fuel dispensing facilities and bulk facilities. These clearances shall not be required when a sewer line is constructed throughout of petroleum resistant piping.

**OSFM RESPONSE:** We have considered your comment in light of OSFM's past practice of waiving the clearance requirements for clearances other than the distance to basements if the tank and piping being installed is double-walled with interstitial monitoring. OSFM is therefore proposing insertion of the following paragraph to that Section:

- f) Except for the 20-foot clearance distance to basements, the clearances required under this Section shall not be required where both tanks and piping are double-walled with interstitial monitoring. For these USTs, the minimum clearance shall be such as to avoid projecting loads onto underground sewers, utilities, and other structures. The clearance must also be sufficient to ensure that site activity does not undermine the UST backfill materials (for example, pea gravel base) for any UST once in place.

**(17) IPMA COMMENT:** Line 1728. Should add that in the alternative, the OSFM can require that the UST be "closed in place". **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.455 USTs Inside or Under Buildings**

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- e) [line 1728] If OSFM determines that a release from a UST under a building or structure, including any heating oil UST and pre-'74 UST, poses a current or potential threat to human health and the environment, or any UST, including any heating oil UST and pre-'74 UST, is damaged or found damaged during excavation or other site activity, OSFM may require the UST to be removed.

**OSFM RESPONSE:** Pursuant to the text of both the current and proposed UST rules, OSFM does not allow abandonment-in-place absent a special waiver based upon an engineering application showing that removal is infeasible. This is both current and historical regulatory practice. The language in this paragraph does not prohibit a facility from applying for the waiver.

**(18) IPMA COMMENT:** Does the language beginning at line 1845 prohibit the lining of tanks? See line 2057 and 2074. IPMA believes that the lining of tanks should not be prohibited after January 1, 2011. As long as current regulations exist for existing tanks, it is unnecessary and unwarranted for tank owners with single wall tanks to be singled out. If at some time in the future, all single wall tanks must be removed/replaced for scientific reasons or federal mandate, the requirement might be justified. At this time what is in place works and is being used in other states. A lined tank must be inspected within 10 years after initial lining; and, if certain deterioration is noted, does this prevent the lining from being repaired? What is the justification/necessity for the additional record-keeping requirements of the remainder of this Part? **SECOND COMMENT:** Lines 3217 and 3266. See comments to line 2057 above. **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**[line 1845]Section 175.500 Interior Lining and Lining Inspection of USTs**

- a) Tank Lining Requirements. Lining of tanks shall no longer be allowed after January 1, 2011. Existing lined tanks shall be allowed to use lining as a primary method of corrosion protection only if the tanks continue to pass the lining inspections as provided in this Section. Tanks failing to pass the lining inspection criteria will not be allowed to be touched up, repaired, totally relined or put back into use and shall be decommissioned immediately and removed within 60 days of the lining inspection.

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**[line 2057-line space]**

- 3) **[line 2058]** Internal Lining Combined with Cathodic Protection.
- A) Until January 1, 2011, a tank may be upgraded by both internal lining and cathodic protection if:
    - i) The lining is installed in accordance with the requirements of subsection (a)(2) above and Section 175.700; and
    - ii) The cathodic protection system meets the requirements of Section 175.400(b)(2)(B) through (C) and 175.510.
  - B) An interior inspection for an installation of internal lining combined with cathodic protection is required only once, provided the installation of both was completed within 90 days of each other and a structural criteria inspection was performed and documented.
- b) **[line 2074]** Within 10 years after initial lining, or total subsequent lining of a tank performed prior to the effective date of these rules, a physical internal inspection shall be performed as follows:
- 1) The procedures for tank lining in subsection (a) shall be followed while entry is made into an existing UST for internal inspection purposes.

- 2) Once a UST has been entered, a visual inspection of the lining shall be made. ..
- A) Testing shall be done to check the thickness of the shell and heads of the tank. ..
    - i) Tanks not meeting the wall thickness requirements shall be condemned and not put back into service as referenced in Section B8.1 of NLPA 631.
    - ii) No welding or cutting will be allowed inside the tank to repair holes or patch thin areas in any part of the tank.
  - B) After a lined tank passes both the visual and the tank wall thickness test, it must be tested for holidays (air pockets) in the lining material. .. Tanks needing repairs shall be condemned and not put back into service.
  - C) .. In the event that some areas pass the hardness test and other areas fail the hardness test, the tank shall be condemned and not put back into service.
  - D) The final test to verify that an existing lining still meets the manufacturer's original specifications shall determine the thickness of the coating. .. If any areas of the existing coating do not meet the 100 mils minimum thickness requirement, the tank shall be condemned and not put back into service.

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- 3) During the Operational Safety Inspection, the contractor will not be allowed to either cut a new access hole into the tank, nor break open an existing entrance patch until all the required testing equipment is on site. Also, a complete set of OSFM reporting forms (found at [www.state.il/OSFM/PetroChemSaf/LiningForms.htm](http://www.state.il/OSFM/PetroChemSaf/LiningForms.htm)) must also be onsite before the entering process may begin.

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- 5) Written documentation generated from the lining of a tank, consisting of completed OSFM forms for tank linings (found at [www.state.il/OSFM/PetroChemSaf/LiningForms.htm](http://www.state.il/OSFM/PetroChemSaf/LiningForms.htm)), shall be submitted to the OSFM no later than 10 days after the lining procedure completion.
- 6) Every 5 years after the 10 year internal inspection, the tank must be reinspected. This can be done by a physical inspection or by another method approved by OSFM. The results and data from the lining inspection, including whether the tank passed or failed, shall be submitted to OSFM within 10 days after the lining inspection.

- d) The following testing and records requirements shall apply to all tank lining and lining inspections activity:
- 1) It shall be the responsibility of the lining contractor to have a precision test performed within 3 days after the lining or lining inspection procedure completion

and before the tank is put back into use and to submit the results to OSFM within 10 days after, or within 3 days after a failed test, on forms provided by OSFM (found at [www.state.il/OSFM/PetroChemSaf/LiningStatementPrecisionTightnessTest.pdf](http://www.state.il/OSFM/PetroChemSaf/LiningStatementPrecisionTightnessTest.pdf) and at [www.state.il/OSFM/PetroChemSaf/FailedUST.pdf](http://www.state.il/OSFM/PetroChemSaf/FailedUST.pdf)). This precision test shall be performed any time a UST is entered to install a manway, install a cover plate after lining, do an internal inspection of the tank, or penetrate the tank for any lining or lining inspections purpose.

- 2) Tank owner shall file an amended Notification on OSFM forms (found at [www.state.il/OSFM/PetroChemSaf/Notify.pdf](http://www.state.il/OSFM/PetroChemSaf/Notify.pdf)) with OSFM within 30 days after the tank has been lined.
- 3) Lining inspections records shall be maintained for the life of the UST, and the most recent inspection record shall be kept on site pursuant to Section 175.650(e). The results and data from the lining inspection, including whether the tank passed or failed, shall be submitted to OSFM within 10 days after all lining inspections.

#### **Section 175.700 Repairs Allowed**

Owners and operators of USTs shall ensure that repairs will prevent releases due to structural failure or corrosion as long as the UST is used to store regulated substances. Any hole or penetration made into a tank, including, but not limited to, any bung openings or any entrance way established for interior lining inspection, shall be installed and closed as per this Section.

- a) [line 3217] Repairs to USTs shall be properly conducted in accordance with manufacturer's recommended procedures and 41 Ill. Adm. Code 174 through 176. For repairs involving tank penetration or tank entry, the vapor freeing and inerting procedures and related requirements of Sections 175.500(a) and (c) and 175.830(a) shall be followed.

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- i) [line 3266] Until January 1, 2011, storage tanks may be lined if done in compliance with the requirements of Section 175.500.

**OSFM RESPONSE:** The phasing out of tank linings as a method of corrosion protection is being proposed due to significant problems with the reliability of this method of corrosion protection. OSFM does not believe it has “singled-out” single wall tanks. Rather, the goal is to limit the number of repeated tank failures occurring with field-installed tank linings, due to the difficulty involved in field installing a reliable lining. Due to liability concerns over tank failures and given current industry trends, OSFM also anticipates fewer and fewer licensed contractors available to conduct the work of lining and lining inspections. OSFM surveyed the percent of failing linings at the contractor inspections conducted post-installation. Survey results showed that over an approximate 3½-year period, 277 out of 526 linings inspected had failed, meaning that they required repair or replacement of the lining in order to prevent a release. Of those USTs, 73 were removed, 18 were abandoned in place (due to close proximity to another UST or a structure), 136 were totally relined, and 50 were touched up. This resulted in a cumulative failure rate of 53% at every 5 or 10-year lining inspection

for these field-installed linings. Consequently, even with options such as touch-ups and total relining available, the industry is permanently closing 33% of the tanks with failing linings at every 5 or 10-year inspection, concluding they are not worth continued operation. OSFM believes that this requirement will ultimately save millions of dollars in long-term site remediation costs, as clean-up costs per facility continue to escalate. By way of comparison, the failure rate for new underground tanks over a 30-year period is less than ½ of 1%, as based on estimates from industry representatives.

Regarding recordkeeping, there is no increase in recordkeeping requirements for this UST activity. If however the comment was directed to the remainder of this Subpart E (Corrosion Protection), pursuant to federal UST rules, UST records must include records from the last 2 cathodic protection system tests by a qualified cathodic protection tester. The remainder of the recordkeeping requirements for Subpart E have not changed.

**(19) IPMA COMMENT:** Line 2488. Who will do the annual testing? **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.510 Corrosion Protection**

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- f) Operation and Maintenance of Cathodic Protection. Owners or operators of steel USTs with corrosion protection shall comply with the following requirements to ensure that releases due to corrosion are prevented for as long as the UST is used to store regulated substances:

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- 3) [line 2488] USTs with impressed current cathodic protection systems shall also be tested and inspected, prior to being put into operation and every 30 days thereafter, to ensure the equipment is running properly and the entire system must be tested annually.

**OSFM RESPONSE:** Both the proposed text and the current OSFM rules require that a certified cathodic protection tester must do the annual testing of impressed current systems. See e.,g., proposed subsection 175.510(f)(4)(C). Pursuant to current practice as also reflected in both the current and proposed rule, the testing done every 30 days can be done by the owner/operator. In response to your comment, OSFM has also referenced the annual testing requirement in 175.510(f)(3) as well:

- 3) USTs with impressed current cathodic protection systems shall also be tested and inspected, prior to being put into operation and every 30 days thereafter, to ensure the equipment is running properly and the entire system must be tested annually by a certified cathodic protection tester

**(20) IPMA COMMENT:** Line 2795. Why is this necessary? This will be an additional cost to the owner/operator. Who will be qualified to perform this testing? **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.630 Methods of and Requirements for Release Detection for Tanks**

e) Vapor monitoring. Testing or monitoring for vapors within the soil gas of the excavation zone shall meet the following requirements:

- 5) The vapor monitors are designed and operated to detect any significant increase in concentration above the background of the regulated substance stored in the tank system, a component or components of that substance, or a tracer compound placed in the tank system; vapor monitor sensors must be permanently installed in the vapor monitor wells; a monthly inspection of the vapor monitoring system must be made and a log maintained showing the date of inspection, results and initials of the party [line 2795] doing the inspection; all vapor sensors must be tested for functionality at least once every 3 years;

**OSFM RESPONSE:** This comment addresses requirements that have not been changed as a result of this rulemaking. In order to meet federal guidelines, all electronic sensors must be tested every 3 years by a qualified tester. A vapor sensor used for monthly release detection using vapor monitoring is a modified version of an interstitial monitoring sensor, which under current practice must be tested by the appropriately certified contractor once every 3 years. However, OSFM agrees that who does the testing should be stated in the rule, and proposes that the words “by a licensed contractor” be added to the cited paragraph to clarify what kind of qualified personnel should be conducting the 3-year testing for vapor monitoring sensors, as follows:

- 5) The vapor monitors are designed and operated to detect any significant increase in concentration above the background of the regulated substance stored in the tank system, a component or components of that substance, or a tracer compound placed in the tank system; vapor monitor sensors must be permanently installed in the vapor monitor wells; a monthly inspection of the vapor monitoring system must be made and a log maintained showing the date of inspection, results and initials of the party doing the inspection; all vapor sensors must be tested for functionality by a licensed contractor at least once every 3 years;

**(21) IPMA COMMENT:** Line 3121. To require records to be made available within 30 minutes by fax is arbitrary and not impractical. Our members with multiple stores have found it more reliable to keep all such records at the head office to keep them from being lost or misplaced. Thirty minutes may not be enough time to retrieve the information. Why require such a short period of time? Twenty-four hours is a more practical and reasonable period for production of off-site records. **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.650 Release Detection and Cathodic Protection Recordkeeping**

[line 3121] UST owners or operators shall maintain records in accordance with 41 Ill. Adm. Code 176.430, demonstrating compliance with all applicable Sections of this Subpart F. Unless stated otherwise below, all records shall be maintained for at least the 3 most recent years and shall be kept on site or available within 30 minutes or less via fax, email or other transfer of information. The failure to maintain or produce the records required under this Section may result in OSFM's issuance of a red tag for the tank or tanks at issue pursuant to 41 Ill. Adm. Code 177 indicating non-compliance with the rules of OSFM and prohibiting any further deposit of regulated substances into the tank or tanks subject to a red tag. These records shall include the following:

**OSFM RESPONSE:** No change to this requirement is involved in this rulemaking. The requirement to maintain records at the site or be able to produce records within 30 minutes has been in OSFM UST rules for many years, and originated as a compromise with industry groups. In practice OSFM has found that the problem is not getting the records conveyed to the site but not having the records to begin with.

**(22) IPMA COMMENT:** Line 3396. This would place an increased burden on the UST owner/operator to maintain testing, watch dates and length of time of events, e.g., out-of-service report and return to service requests. **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

#### **Section 175.810 Temporary Closure**

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c) [line 3396] Systems that have been out of use for over one year but less than 5 years may be put back in service provided that the following additional requirements are met:

- 1) Tanks and lines shall be precision tested and proven sufficient.
- 2) Tank and line release detection is tested and proven operational.
- 3) Cathodic protection is tested and proven sufficient.
- 4) A site assessment is conducted prior to bringing the UST back into service.
- 5) All tests referenced in subsections (c)(1) through (c)(3) must be performed not more than 90 days and not less than 30 days before placing the tank back in service and submitted to OSFM at least 10 days prior to reopening so that a certification audit can be performed.

**OSFM RESPONSE:** These requirements for putting a UST back into service when out of use for more than one year have been in OSFM rules since at least 2003. These requirements are necessary to make sure a tank brought back into service is sound, though a minor change has been made. OSFM

has proposed in paragraph (a) a new requirement that the owner or operator inspect inactive USTs every 6 months and report on a form that the UST is in compliance with out of service requirements. This is intended to preserve the value of an investment in a UST facility. It is hoped it will assist owners and operators in avoiding non-compliance with out of service requirements.

**(23) IPMA COMMENT:** Line 3413. What is the basis for thirty years? **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.810 Temporary Closure**

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- d) [line 3413] Single-wall USTs over 30 years old that have been in temporary closure (formerly known as out of service) more than one year shall be removed rather than placed back into service.

**OSFM RESPONSE:** 30 years is the maximum period that manufacturers have historically warranted the useful life of underground tanks, also considering that inactive tanks are the most neglected category of tanks from a standpoint of continued maintenance, inspection and oversight. This language was also put in the rule to avoid continued use of tanks that are believed to pose the highest risk of a release. For example, older fiberglass tanks are not compatible with ethanol fuel blends. Similarly, older steel tanks typically had no corrosion protection for the first 10 or more years of operation, since the deadline to upgrade to install corrosion protection was December 1998 and the older existing tanks at the time were generally not upgraded until fairly close to the deadline. However, in consideration to IPMA's comment, OSFM felt that something could be done by way of a compromise to provide UST owners more flexibility with their inactive USTs. To do this we looked at the requirement, in OSFM rules for years, that USTs continuously inactive for 5 years must be removed after the 5-year period. OSFM is proposing the following revised text regarding the 5-year limit on continuous out of use status:

- e) If a UST is not placed back into service within 5 years from the date of last use, the tank system shall be removed within 60 days after the conclusion of the 5-year period. USTs with double-walled tanks and piping equipped with interstitial monitoring shall not be subject to the 5-year limit during the period the tank manufacturer's warranty is in place if all of the following requirements are met:
- 1) Corrosion protection has been and continues to be maintained,
  - 2) A site assessment under Section 175.330 has been performed,
  - 3) Any UST components found to be defective are replaced in the 45 days prior to any return to active use, and
  - 4) All requirements for return to use under subsection 175.810(c) and this Section are otherwise met.

**(24) IMPA COMMENT:** Line 3583. Is a site assessment currently required for a tank removal? Is this in conflict with Illinois Environmental Protection Agency Rules? This will add thousands of dollars to all tank removals unless an incident has been filed prior to the removal. **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.830 Removal of USTs**

- a) For tank removals, the following requirements and procedures shall be followed:
  - 21) [line 3583] All tank removals require a site assessment pursuant to 41 Ill. Adm. Code 176.320.

**OSFM RESPONSE:** No change in current practice is contemplated by the language involved in the comment. This requirement has been in OSFM rules for many years and is federally mandated as well. Illinois EPA has also reviewed the rules and provided comment to concur that the site assessment required here is not in conflict with its rules. Pursuant to current practice, a suspected release must first be reported by the owner or operator (or his designee) to IEMA before any work, including a site assessment, can be reimbursed from the LUST Fund. This too has been the case for many years.

**(25) IPMA COMMENT:** Line 3780. Is a hot work permit required for any tank entry? Is it a new permit? **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 175.APPENDIX A UST Activity that Cannot Proceed Without an OSFM Inspector on Site**

In addition to obtaining a permit pursuant to 41 Ill. Adm. Code 175.300, the UST activities listed in this Appendix A will require that the inspection be scheduled with OSFM as an OSI, meaning under circumstances where the work cannot proceed in the absence of having an STSS on site. (See Section 175.320, regarding scheduling of UST activity.) Proceeding without completion of the required OSFM inspection is a violation of OSFM rules.

Tank or piping removal (with the exception of piping that is repaired or replaced within the same trench)
Abandonment-in-place, tanks or piping
UST hot work (if cutting or penetration of tank shell is involved, including for tank lining or lining inspection purposes)

[line 3777—in the line space between charts]

**Section 175.APPENDIX B The Type of OSFM Permit Required for Specific Permitted UST Activities**

[line 3780—in the line space]

Pursuant to Section 175.300 and 41 Ill. Adm. Code 174.440 and 174.450, the UST activities listed in this Appendix B will require the kinds of permits listed in this chart.

<b><u>Type of UST Activity</u></b>	<b><u>Permit Required</u></b>
Installation of a complete UST with all components, or installation of just the tank	Installation permit
***	
Manway installation (no separate upgrade or entry permit for a manway is required where the original lining permit or lining inspection permit includes the installation of a manway)	Upgrade permit
UST activity requiring the cutting or penetration of the tank shell in any way (no separate hot work permit required where a lining, upgrade or other permit is being issued)	Hot work permit

**OSFM RESPONSE:** The hot work permit is the tank entry permit renamed and merely implements OSFM’s current practice. As is the case currently, the permit will not be required for tank entry through a properly installed manhole. See the definition of “hot work” in proposed Part 174.

**(26) IPMA COMMENT:** Part 176. Line 563. The site assessment requirement for removing a non-leaking tank will add thousands of dollars to the tank removal cost. The requirement may conflict with current IEPA rules and/or sites with incident numbers. The times allowed are not reasonable and should be lengthened.

**TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 176.350 Assessing the Site at Removal of, Previously Removed, or Change-in-Service of USTs**

- a) Within 24 hours after removal is completed, or prior to a change in service from a regulated product to an unregulated product, the following procedures shall be conducted.
  - 1) [line 563] The owner or operator shall perform a site assessment using the procedures and requirements of Section 176.320;

**OSFM RESPONSE:** This is federally required and has been in OSFM rules for many years. See the discussion for comment 24 above. By way of background, OSFM had previously required a 30-day hold on the scheduling of all UST removals and changes in service to ensure completion of the site assessment before removal, since there is a federal requirement that the site assessment be done before a removal or change in service is completed. US EPA has not defined or provided guidance as to when “completion” of the removal occurs as referenced in the federal rule, which provides as follows:

**§ 280.71 Permanent closure and changes-in-service.**

(a) At least 30 days before beginning either permanent closure or a change-in-service under paragraphs (b) and (c) of this section, or within another reasonable time period determined by the implementing agency, owners and operators must notify the implementing agency of their intent to permanently close or make the change-in-service, *unless* such action is in response to corrective action. The required assessment of the excavation zone under §280.72 must be performed after notifying the implementing agency but before completion of the permanent closure or a change-in-service.

40 CFR 280.71. However, OSFM believes it has discretion to implement the federal rule in a reasonable manner, and plans on continuing its current practice until such time as US EPA would provide clarification. Current regulatory practice allows samples to be taken within 24 hours of removal, with lab results evaluated thereafter.

In response to a similar comment from Illinois EPA that a site assessment cannot be completed within 24 hours, OSFM is proposing the following additional language for insertion into the proposed rules:

In the event lab results are not forthcoming within 7 days, the owner/operator shall have such additional reasonable time as is necessary to receive the results, but the total time period to confirm the presence or absence of a release and report any confirmed release shall not in any event exceed 30 days.

**(27) IPMA COMMENT:** Line 656. Several additional changes are made to recordkeeping requirements. Is this significantly more than is presently required? What is the justification for this change in the recordkeeping requirement? **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

**Section 176.430 Reporting and Recordkeeping**

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b) [line 656] Recordkeeping. Owners and operators must maintain the following information for the life of the UST (unless a shorter or longer period is provided in this subsection (b) or by the applicable Section cited or by other OSFM rule):

**OSFM RESPONSE:** The proposed text primarily clarifies the current regulatory practice, though minor revisions that will benefit owners and operators are proposed in response to your comment. First, OSFM is proposing that the records retention length be changed from 3 years to 2 years worth of records whenever doing so would not make Illinois' rule position less stringent than the applicable federal UST rule. Current rules generally require a minimum of 3 years of records, and longer periods exist where required by federal rules. The reference to records kept for the life of the UST is a fall-back for the rare instance where the records retention length has not been spelled out by rule, believed to be nonexistent in this rulemaking, but will avoid potential claims that OSFM rules are not as stringent as the federal rules, which would pose programmatic issues. Second, the time periods can be

difficult to remember because of how the federal rules have set up the various retention periods, especially for a new owner or operator. Therefore OSFM intends to prepare a summary of required records retention periods and post that on its web site after this rulemaking is finalized.

**(28) IPMA COMMENT:** Line 693 requires that all owners/operators keep required records at the UST site or available to the OSFM inspector within 30 minutes by fax, e-mail, or other transfer of information. Our members with multiple stores have found it more reliable to keep all such records at the head office to prevent them from being lost or misplaced. Thirty minutes may not be enough time to retrieve the information. IPMA requests that the documents be kept or available at the UST site or the company's head office and that the retrieval time be extended to 24 hours. See above. **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

### **Section 176.430 Reporting and Recordkeeping**

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- c) [line 693] Availability and Maintenance of Records. Owners or operators shall keep the records required in subsection (b) at the UST site or available to the OSFM inspector within 30 minutes or less via fax, email or other transfer of information. Financial responsibility records may be maintained at the owner or operator's principal place of business and shall be produced within 10 days after OSFM request.

**OSFM RESPONSE:** The text reflects the regulatory practice for many years. See the response to item 21.

**(29) IPMA COMMENT:** Part 177 contains the green tag/red tag rule. It reduces the term from three years to two years. Why the reduction? What is the rationale? IPMA favors the three year term.. **TEXT CITED IN COMMENT (SHOWING THE CITED LINE NUMBER):**

### **Section 177.130 Expiration of Certificates**

Green decals shall be issued for a two-year period. Tanks not in compliance with 41 Ill. Adm. Code 174, 175 and 176 and this Part shall be issued red tags.

**OSFM RESPONSE:** The proposed text reflects the current regulatory practice. In 2007, the inspection cycle changed from 3 years to 2 years due to repeated industry-wide noncompliance. Since that time, compliance has improved. By way of example, relative to the more critical measures (as estimated through 2009), compliance with just spill and overflow, corrosion protection, and release detection requirements alone went from 44% to 60%. US EPA has also taken note of the improvements, since the UST program is a federal program. Since we now have a 2-year inspection cycle, the green tag can only be good for 2 years.

## **II. COMMENTS FROM THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (“US EPA”)**

### **(30) US EPA COMMENT: Release Detection for Piping**

- in section 175.640a4 - it mentions that all line leak detectors must have a functionality test performed annually. However, there has been some issues with OUST and states regarding some manufactures (i.e., Veeder Root) claims that their ELLDs can self diagnose. Currently OUST has neither accepted nor rejected Veeder-Root's contention that self-testing is sufficient. This is one of the various regulatory issues that OUST aims to address. If OSFM is requiring that this annual functionality test be one which requires a physically induced release test, then OSFM may need to clarify this (i.e., what they specifically want) in their rules.

**OSFM RESPONSE:** We agree with US EPA that clarification would be helpful. OSFM is proposing the following changes to the language:

#### **Section 175.610 General Release Detection Requirements for All USTs**

- d) All leak detection equipment installed on a UST, whether required or not, shall be maintained. [Self-diagnosing release detection systems may not be used to circumvent any testing required by 41 Ill. Adm. Code 174, 175, 176, and 177.](#)

#### **Section 175.640 Methods of and Requirements for Release Detection for Piping**

Owners and operators of petroleum USTs shall provide release detection for all piping containing regulated substances. The release detection must meet the requirements specified in this Section.

- a) Pressurized piping systems shall comply with the following requirements:
- 4) Mechanical and electronic line leak detectors that alert the operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if they detect leaks of 3 gallons per hour at 10 pounds per square inch line pressure within one hour. All line leak detectors must have a functionality test performed annually. [Self-diagnosing ALLDs are not alone sufficient to meet the requirement for an annual functionality test.](#)

### **(31) US EPA COMMENT: Definitions**

- in section 174.100 “Operation” – Definition narrows it to not include mere storage. The definition requires in and out flow of product for the tank to be considered in operation. I think this could be more narrow than federal rules as we do not have such a definition. Operation is not specifically defined in federal rules, though I think we have interpreted operation to include mere storage of product beyond the de minimis amount.

**OSFM RESPONSE:** In response to the comment from US EPA, OSFM is proposing the following changes to the language:

"Operation" or "Use" in reference to underground storage tanks *means that the tank must have had input or output of petroleum, petroleum products, or hazardous substances, with the exception of hazardous wastes, during the regular course of its usage. ~~"Operation" does not include:~~*

~~*compliance with leak detection requirements as prescribed by OSFM rules and regulations (41 Ill. Adm. Code 175); or*~~

~~*the mere containment or storage of petroleum, petroleum products, or hazardous substances, with the exception of hazardous wastes. [430 ILCS 15/4].*~~

**(32) US EPA COMMENT:** Definitions

- in section 174.100 for "Underground Storage Tank System", most of the wording is similar to our federal regulations. However, under the "excluded" tanks, it list the excluded tanks but also list "tank abandoned-in-place by filling...." as excluded as well. If OSFM is excluding these "once regulated" USTs, how does this play in with our reporting measures for the STARS reports? Will these not be counted as closed UST if they are excluded? This is one issue where the IL tank universe is marginally smaller than the federal one as they are excluded from the federal definition. We have referred this to OUST and are awaiting a response from them to see if they have an issue with this.

**OSFM RESPONSE:** OSFM includes all USTs abandoned in place in the reporting to US EPA via the STARS reports.

**(33) US EPA COMMENT:** Financial Assurance

- in section 176.210, I had a concern that the amount, the coverage of \$10,000 is far short of the one Million required under 280.93. This whole FR section appears to be very generalized and could use more scrutiny. For example their "Definitions" section does not read as detailed as those found in our regulation (i.e., Bodily injury, property damages, etc.). With regard to the various mechanisms allowed (i.e., surety bond, guarantee, insurance, etc.), which appears to be limited, their rules do not cite specific or required wording format (for the various specific mechanisms) as is found under 280.96, 280.97 etc. In fact, I did not see any mention of the "State Fund" (i.e., 280.101) which is the number one, chief mechanism used by most federally regulated USTs in Illinois.

However, our ORC did not see the above as an issue as long as the SPA package (should you decided to submit an application) included the State Fund and the State Fund continues to operate. ORC did recommend that these rules crossed reference the state fund provisions.

**CLARIFIED US EPA COMMENT:**

The concern here is whether this change reduces current coverage of the IL state fund below the Federal FR requirements rather than what might happen sometime in the future re SPA. (If IL hasn't already submitted a SPA application after all these years it seems unlikely to expect that anytime soon.) Meanwhile Region 5 Regional Administrator approved the IL state fund as an FR mechanism and the conditions of that agreement remain in effect. The questions are whether this IL change 1) caps state fund coverage at an amount below the Federal FR minimum, and 2) what IL is doing administratively to assure that the Federal "first dollar" coverage requirement will be met by all Federally-regulated UST o/os in IL. Other states funds have deductibles on the understanding that some provision is made for "first dollar coverage" -- e.g., 1) the state fund pays "first dollar" if the o/o cannot/does not and deducts that amount from future reimbursements to the o/o; or, the state requires the o/o to have private FR such as insurance to pay the "first dollar" amount when a release is discovered. It's not clear to me where the IL fund is coming out on "first dollar" and on total amounts relative to the Federal FR requirements. I'm attaching a copy of Region 5's letter from your RA laying out the terms on which EPA approved the IL fund as an FR mechanism including language that says IL must require o/os to use an alternative (highlighted in the attached .pdf of R5 RA's letter of approval) mechanism to cover the amount of the state fund deductible. So the question is how IL implements/tracks its o/os' FR compliance in having alternative FR to cover the deductible amounts and which IL unit tracks o/o's compliance with this. The Region 5 RA's letter cites various types of FR mechanisms that may be used to meet the deductible amounts set by the state.

**OSFM RESPONSE:** The language in the rulemaking does not represent a change in how the program has worked to date, though some minor recordkeeping changes are made. By way of background, Illinois has a split program in which the eligibility to access the State's Underground Storage Tank Fund ("the Fund" or "the State reimbursement fund") is determined by OSFM but the cleanup and reimbursement is handled by Illinois EPA. Federal financial responsibility is provided through this State reimbursement fund, administered by Illinois EPA and with the approval of US EPA. The role of the financial responsibility implemented in OSFM rules is instead due to a State statutory requirement, in the Gasoline Storage Act, that owners and operators provide \$10,000 per occurrence in additional coverage for corrective action and \$10,000 per occurrence in coverage for third-party liability for bodily injury or property damage. 430 ILCS 15/6.1. The requirements for access to the State reimbursement fund are also defined by State statute, in the Illinois Environmental Protection Act, at 415 ILCS 5/57.9. Maintaining the \$20,000 in coverage is not a requirement for accessing the State reimbursement fund, and the question of whether the owner has the \$20,000 in coverage is not on the eligibility application. Typically the remediation contractor overseeing the remediation submits the eligibility application on behalf of the owner. Historically the clean-ups have gone forward despite situations where the owner failed to maintain the \$20,000 in State coverage.

Therefore, in answer to US EPA's question, the State fund pays "first dollar" so that the clean-up can go forward without delay, leaving the parties to make their own arrangements for payment of the deductible and any additional expenditures after the clean-up and reimbursements are completed. In answer to the second question, OSFM is proposing the following revisions to clarify that the rule language implements a State financial responsibility requirement and, therefore, cannot affect or limit the federal responsibility that is generally required in the amount of \$1 million:

## Section 176.205 Applicability

- a) This Subpart B applies to all owners or operators of USTs in the ground as of April 1, 1995 and implements Section 6.1 of the Gasoline Storage Act, 430 ILCS 15/01 et. seq., which imposes a State law financial assurance requirement of \$20,000 per owner or operator.
- b) All owners or operators of hazardous substance USTs are excluded from regulation under this Subpart B.
- c) Although the Underground Storage Tank Fund assists certain petroleum UST owners in paying for corrective action or third-party liability (see 415 ILCS 5/57.9), for purposes of this Subpart the Underground Storage Tank Fund is not considered a mechanism for the financial responsibility compliance required under Section 6.1 of the Gasoline Storage Act as implemented by this Subpart.
- d) None of the financial responsibility mechanisms specified in Section 176.215 are required by OSFM to include a standby trust.

In response to the third question, OSFM's Division of Petroleum and Chemical Safety is the unit responsible for tracking compliance with the State financial responsibility requirement. The compliance status for each UST facility in Illinois can be found in the UST facility database, which can be searched by the public at the OSFM website.

**(34) US EPA COMMENT:** - In section 175.650 (d) - the record keeping requirements for cathodic protection, I noted that IL did not say anything about the annual testing and monthly inspections of certain cathodic protection systems here, but noted that they do require these in other areas of their regulations.

**OSFM RESPONSE:** In response to the comment from US EPA, OSFM proposes the following change to the language:

- e) At the time of a compliance inspection/audit, the following shall be verified:
  - 1) Corrosion Protection
    - A) Lining inspections records shall be maintained for the life of the UST, and the most recent inspection record shall be kept on site pursuant to Section 175.650(e).
    - B) All corrosion protection records must be maintained for the time periods required under Section 175.510.

**(35) US EPA COMMENT:** - In section 175.500, IL might want to consider just not allowing linings for purposes of meeting the corrosion protection requirements (rather than my read that they are banning linings from USTs). Linings may still be useful when it comes to compatibility and corrosion in the future. Note that this is not a regulatory issue, rather just a suggestion that they not ban linings in USTs because they could prove useful in the future as new fuels emerge.

**OSFM RESPONSE:** OSFM is proposing that all linings be factory-installed only. Our experience is that, perhaps due to variable site conditions or other factors, contractors in Illinois have had difficulty installing a reliable field-installed lining. OSFM believes that the challenges observed regarding field-installed linings for corrosion protection would also translate to any other lining that is field-installed, irrespective of the purpose for the lining.

By way of background, OSFM surveyed the permits issued in connection with internal lining inspections over an approximate 3½-year period (6-1-06 through 3-31-10), in order to get an estimated failure rate for linings at the lining inspections done initially after 10 years and every 5 years after that. Data for the survey indicated that 277 out of 526 linings inspected had failed during this time, meaning that they required repair or replacement of the lining in order to prevent a release. Of those USTs, 73 were removed, 18 were abandoned in place (due to close proximity to another UST or a structure), 136 were totally relined, and 50 were touched up. This resulted in a cumulative failure rate of 53% at every 5 or 10-year lining inspection for these field-installed linings. Moreover, even with options such as touch-ups and total relining available, the industry is permanently closing approximately 33% of the failing tanks, or 17% of all lined tanks, at every 5 or 10-year inspection, concluding they are not worth continued operation.

OSFM believes that the phasing out of all field-installed linings will ultimately save millions of dollars in long-term site remediation costs, as clean-up costs per facility continue to escalate. Also, due to liability concerns over tank failures and given current industry trends, OSFM also anticipates fewer and fewer licensed contractors available to conduct the work of lining and lining inspections. OSFM is proposing the following corresponding changes to address linings installed for purposes of compatibility:

- e) Existing USTs Previously Converted to a Blended Fuel (as defined in 41 Ill. Adm. Code 174.100). In those instances in which a blended fuel is being stored in an existing tank lined at any time, the lining material must be approved by OSFM based on information supplied by the manufacturer or a Licensed Professional Engineer, in accordance with the criteria identified in Section 175.500, as compatible with the blended fuel, or the owner/operator must remove the blended fuel from the tank. New linings for compatibility purposes are allowed after January 1, 2011 but only if factory-installed. Existing field installed linings shall be allowed to remain but shall comply with the requirements of Section 175.500, including requirements for 10-year and 5-year inspections by a certified contractor.

**(36) US EPA COMMENT:** - In section 175.810 - the only issue I saw here is that IL uses the term "product" when referring to no more than 1 inch in the bottom of the tank. Federal regulations use the term "residue" and link the 1 inch to the tank being "empty". The term "product" is used in both 175.810(a) and 175.810(b) as it relates to the no more than 1 inch in the bottom of the tank. I thought everything else looked OK in the temporary closure section.

**OSFM RESPONSE:** OSFM proposes that the language be modified to more closely match the federal UST rule language concerning when a UST is "empty" for purposes of release detection requirements for USTs temporarily closed. In response to the comment from US EPA, OSFM is proposing the following revisions:

### **Section 175.810 Temporary Closure**

- a) USTs may be put into a temporary closure status provided they meet the performance standards for new UST systems or the upgrading requirements specified in 41 Ill. Adm. Code 174 through 176 and 40 CFR 280, except that spill and overfill prevention equipment requirements do not have to be met. The USTs may continue in temporary closure status for a period of 5 years from the date of last use provided they meet the following requirements:
  - 1) The tank and product lines shall be emptied immediately upon placing the UST in a temporary closure status, ~~with no more than one inch of product remaining in the tank.~~ The UST system is empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue, or 0.3 percent by weight of the total capacity of the UST system, remain in the system. Any UST placed in a temporary closure status, formerly known as out of service status, prior to the effective date of this Part and containing more than one inch of product may be allowed to continue in temporary closure status as long as release detection is maintained during its remaining temporary closure period.
- b) Failure to maintain corrosion protection at any point during the remaining 4-year temporary closure period referenced in subsection (c) shall require the removal of the tanks. Failure to maintain release detection on any UST placed in a temporary closure status, formerly known as an out of service status, prior to the effective date of this Part and containing more than one inch of ~~product residue~~ shall require the owner/operator to provide OSFM with a site assessment and passing results for tank and line precision testing within 30 days of issuance of an NOV in order for the tanks to remain in a temporary closure status. Immediately after tank and line testing the tanks shall be emptied to one inch or less. Release detection is not required as long as all materials have been removed using commonly employed practices so that no more than 2.5

centimeters (one inch) of residue, or 0.3 percent by weight of the total capacity of the UST system, remain in the system. no more than 2.5 centimeters (one inch) of product remains in the UST.

**(37) US EPA COMMENT:** - In section 175.415(c) - Does "petroleum products only" include gasoline-ethanol or diesel-biodiesel mixtures such as E10 and B5? I understand how visually inspecting under dispenser containment looks for a release from the dispenser, but how does visual inspection work to determine compatibility for leak detection equipment? Can you pull out an in-tank ATG probe and inspect it every year? What if the o/o is using groundwater monitoring as their leak detection?

**OSFM RESPONSE:** In response to the comment from US EPA, OSFM is proposing that the language be changed to read as shown below. A recordkeeping clarification is also inserted in response to comments from industry asking that recordkeeping requirements be clarified wherever possible.

### **Section 175.415 UST Compatibility with Product Stored**

- c) In the event third party listing and certification by a Licensed Professional Engineer are both unattainable for a leak detection device or dispenser, for petroleum products only, OSFM may permit the use of the non-listed and non-certified component if a licensed installation/retrofitting contractor inspects the component on an annual or more frequent basis and, after each inspection, certifies to OSFM on forms provided by OSFM (available at [www.state.il.us/osfm/PetroChemSaf/home.htm](http://www.state.il.us/osfm/PetroChemSaf/home.htm), under "downloadable applications") that the component has been inspected and there is no visible evidence of product leakage or release or other operational problems. ~~incompatibility.~~ Copies of these certifications provided to OSFM shall be maintained at the site or available within 30 minutes for at least a 2-year period. In the event that a listed component becomes available, facilities shall have 12 months to replace non-listed components with listed components.

**(38) US EPA COMMENT:** - In section 175.415d - Warranty information provided by the two major FRP UST manufacturers indicate that single-wall FRP USTs are not warranted for use >10% ethanol until 1995 for Containment Solutions models and 2005 for Xerxes models (see attachment). Suggest re-considering 1991 date.

**OSFM RESPONSE:** In response to the comment from US EPA, OSFM is proposing that the language be changed to read as follows:

### **Section 175.415 UST Compatibility with Product Stored**

- d) New installations or new conversions to blended fuel (as defined in 41 Ill. Adm. Code 174.100) shall comply with the following:

- 1) OSFM will permit a blended fuel to be stored in steel tanks, or any fiberglass tanks manufactured after 1991 [if certified by the manufacturer as compatible with the product stored](#).
- 2) The associated piping must be steel or fiberglass piping manufactured after 1991.
- 3) As of the effective date of this Part, a blended fuel may not be stored in a lined tank.

**(39) US EPA COMMENT:** - In section 175.415(f) - What is Illinois' basis for the 21%? We've heard that the most aggressive gasoline/ethanol blend is right around 20%, so one might argue that the acceptable limit should be much lower than 21%.

**CLARIFIED US EPA COMMENT:**

I used the term "aggressive" to mean that this percentage of ethanol has been cited to be the most degrading to certain non-metals, including both elastomeric and thermoset materials. I try not to use the term "corrosive" because many people associate that with metals only. Actually, for metals, the closer you get to 100% ethanol, the greater the corrosivity. But because of the physical interactions of the non-polar petroleum molecules with the polar ethanol molecules in a ~20% ethanol - 80% gasoline blend, that particular blend is thought to be most likely to permeate into non-metals. This is from either a UL presentation or white paper (I can't remember) which I'll try to locate when I get back to the office on Friday.

To address the second part of the question, I should note that the maximum amount of ethanol that is currently allowed to be in gasoline is 10% (unless it's for FFVs). In general, a vast majority of the samples taken by DOE and EPA have been under 10%, with a very small percentage exceeding the 10% limit. ORD recently produced a report of fuel composition which shows this data (see p. 20): [http://www.epa.gov/athens/publications/reports/Weaver\\_EPA600R09037\\_Composition\\_Fuel\\_Ethanol.pdf](http://www.epa.gov/athens/publications/reports/Weaver_EPA600R09037_Composition_Fuel_Ethanol.pdf) My point being: Any fuel being marketed as "gasoline" or "gasohol" or "E10" really should never be anywhere near 20% vol ethanol.

**OSFM RESPONSE:** In response to the US EPA comment, OSFM is proposing the following change to the definition of 'Blended Fuel':

**Section 174.100 Definitions**

The following definitions shall apply to 41 Ill. Adm. Code 174, 175, 176 and 177 concerning underground storage tanks and tank systems and the storage, transportation, sale and use of petroleum and other regulated substances.

"Blended Fuel" means gasoline containing greater than ~~20%~~ 10% ethanol and petroleum diesel containing greater than 20% biodiesel.

**III. COMMENTS FROM THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**  
**("IEPA" or Illinois EPA")**

**(40) ILLINOIS EPA COMMENT** - Proposed Section 176.300 changes the 24-hour reporting requirement for suspected releases to an immediate reporting requirement. However, Section 176.300(a)(3)(B) still references the 24-hour reporting requirement.

**OSFM RESPONSE:** This involves an oversight to a cross-reference. In response to the Illinois EPA comment, OSFM is proposing that the cross-reference be changed from "the 24-hour reporting requirement under this Section" to "the immediate reporting requirement under this Section".

**(41) ILLINOIS EPA COMMENT** - Section 176.300(c) and Section 176.305 are out of chronological order. The regulations would be more clear if the steps required to investigate a suspected release came before the requirements on how to report a confirmation of the release.

**OSFM RESPONSE:** OSFM is proposing that the order be changed as suggested, along with a renumbering of the Sections to make them more consistent with the numbering style utilized elsewhere in the proposed rules. Section 176.310 as renumbered describes the investigation necessary to confirm a release and 176.320 as renumbered describes the reporting procedure for a confirmed release.

**(42) ILLINOIS EPA COMMENT** - To help address problems with multiple reportings of a single release, and the issuance of multiple incident numbers by IEMA, it would be helpful if Section 176.305 clarified that, in cases where a suspected release has already been reported to IEMA, reports under Section 176.305 should merely update the status of the earlier reported suspected release rather than be treated as a new report of a release.

**OSFM RESPONSE:** OSFM is unable to make any significant change to address this comment, since the management and tracking of multiple releases assigned to a single incident involves a program and the resources of another agency (IEMA). However, OSFM proposes two changes to address this. First, OSFM can require that facilities reporting a release mention that a prior suspected release had been called in if that is the case. OSFM is proposing that the following language be added to the pertinent section of proposed Part 176 as follows:

If known, the caller shall inform IEMA whether the same release had previously been called in as a suspected release.

Second, OSFM proposes that in some cases IEPA receive a copy of the 1-page reporting form submitted to OSFM when a site assessment is done at permanent closure of a UST (for example, when removed or abandoned in place). In such cases, OSFM proposes that IEPA receive a copy of the completed form if a suspected release on that UST was previously reported for that incident. OSFM is proposing that the following be inserted into proposed Part 176 where appropriate:

In the event a suspected release was previously called into IEMA and is being confirmed by site assessment, the pass/fail result form shall be provided to Illinois EPA in addition to the OSFM.

**(43) ILLINOIS EPA COMMENT** - Section 176.310(b) requires an owner or operator to confirm the presence or absence of a suspected release within 7 days. However, measuring for the presence of contamination in accordance with the Pollution Control Board rules referenced in Section 176.320 will take longer than 7 days.

**OSFM RESPONSE:** OSFM agrees that the time for completion of the site assessment depends upon the time frame necessary for getting lab results back from the laboratory. OSFM notes that the applicable federal requirements under 40 CFR 280.52 require facilities to “immediately investigate and confirm all suspected releases” and to complete an excavation assessment “within 7 days, or another reasonable time period specified by the implementing agency.” *Id.* OSFM believes these requirements can be met by a rule requiring that samples be taken within 24 hours of removal but allowing a reasonable time thereafter to get sample results back and confirm the presence or absence of a release. OSFM is proposing that the following language be inserted into subsection 176.310(a) as follows:

In the event lab results are not forthcoming within 7 days, the owner/operator shall have such additional reasonable time as is necessary to receive the results, but the total time period to confirm the presence or absence of a release and report any confirmed release shall not in any event exceed 45 days.

**(44) ILLINOIS EPA COMMENT** - It would be helpful in reading the rules chronologically if Section 176.310(d) was either moved to Section 176.300 or cross-referenced in Section 176.300.

**OSFM RESPONSE:** In response to the comment, OSFM is proposing that the cited paragraph be moved to 176.300.

**(45) ILLINOIS EPA COMMENT** – The procedures set forth in Section 176.320 for confirming a suspected release reference portions of the Illinois Pollution Control Board’s rules. The Board’s rules set forth actions that must be taken in response to confirmed releases. They should not be used as requirements for initial confirmation of releases. The Illinois EPA does not object to the OSFM requiring the same sampling as outlined in the Board rules to confirm a release. However, the confirmation sampling should be spelled out in OSFM rules since the Board rules are not applicable until after the release is confirmed.

There are several general provisions in the Board’s LUST rules that apply to site investigation activities conducted under the Board’s rules that you may want to consider including in the OSFM’s proposed rules for site assessment. They are the following:

- a. 35 Ill. Adm. Code 734.405 (Indicator Contaminants)

- b. 35 Ill. Adm. Code 734.415 (Data Quality)
- c. 35 Ill. Adm. Code 734.420 (Laboratory Certification)
- d. 35 Ill. Adm. Code 734.425 (Soil Borings)
- e. 35 Ill. Adm. Code 734.435 (Sealing of Soil Borings)
- f. 35 Ill. Adm. Code 734.440 (Site Map Requirements)
- g. 35 Ill. Adm. Code 734.135 (professional certifications)

These provisions, of course, would need to be amended to conform to the site assessments conducted under Board rules.

**CLARIFIED ILLINOIS EPA COMMENT:**

In response to your question about cross-referencing the early action sampling requirements from the Pollution Control Board's rules, the Agency's concerns with the cross-reference in the OSFM's original proposal are clarity and the need to reference additional related provisions. Language similar to the following would help direct owners and operators to the provisions in the Board's rules that should be followed in order to conduct site assessments that are consistent with early action sampling:

176.330(b) Owners or operators shall measure for the presence of a release where contamination is most likely to be present at the UST site by conducting sampling in the same manner and following the same procedures as required under the Board's Petroleum Underground Storage Tanks rules at 35 Ill. Adm. Code 734.210(h)(1) and (2). Samples must be analyzed for the same applicable indicator contaminants as required under 35 Ill. Adm. Code 734.405. All sampling must meet the same data quality and certification requirements as set forth in 35 Ill. Adm. Code 734.415 and 734.420. If soil borings are involved the owner or operator must follow the same requirements as set forth in 35 Ill. Adm. Code 734.425 and 734.435.

**OSFM RESPONSE:** OSFM agrees to modify the cross-references by using IEPA's suggested language as received in the above later clarification of this comment as cited above (see the underlined text).

**(46) ILLINOIS EPA COMMENT** – The Illinois EPA agrees with the concept of requiring a report to the OSFM when an owner or operator confirms that a release has not occurred. See proposed Section 176.320(c). It would be helpful if the owner or operator also notified IEMA so the status of reports of suspected releases could be updated to non-release status.

**OSFM RESPONSE:** Regarding the reporting of confirmed releases, OSFM is unable to make any significant change to address the comment involving IEMA, since the management and tracking of multiple releases assigned to a single incident involves a program and the resources of another agency (IEMA). However, some minor changes have been made in an attempt to make it easier for IEMA to do this if it chooses to. See the OSFM response for item 42 above.

**(47) ILLINOIS EPA COMMENT** – Proposed Sections 176.320(c) and (d) reference “Tier 1 remediation objectives for residential properties” as the standard for determining whether a release can be confirmed. In some cases the lowest remediation objective in 35 Ill. Adm. Code 742 is not the residential objective. The appropriate wording for referencing the lowest cleanup objectives would be “the most stringent Tier 1 remediation objectives”. Also, Section 176.320(d) references contamination “at or above” Tier 1 levels. If the intent is to match the level at which remediation is required by the Illinois EPA under 35 Ill. Adm. Code 742, the “at or” should be deleted.

**CLARIFIED ILLINOIS EPA COMMENT:**

Please note that the TACO rules are for determining the amount of cleanup that must be performed, not whether a release has or has not occurred. The definition of “release” as used in the LUST Program does not take into account the concentrations of any contaminants released. See 415 ILCS 5/57.2. Any leaking from a UST is considered a release. If contamination from a release is below the most stringent TACO standards, the IEPA can issue a No Further Remediation Letter for the reported incident.

**OSFM RESPONSE:** Regarding when to report a confirmed release, under federal UST rules, the definition of a “release” is *“any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an UST into groundwater, surface water, or subsurface soils.”* 40 CFR 280.12. Based on this definition, it would appear that OSFM rules cannot use the most stringent available clean-up standard as the trigger for calling in a release. Rather, a release must be called in for the finding of “any contamination” in soil or groundwater samples, a result compelled by federal law. OSFM proposes revisions to proposed Part 176 as necessary to implement this requirement.

**(48) ILLINOIS EPA COMMENT** – Section 176.320(d) requires the reporting of suspected releases to IEMA. However, the site assessment activities required under Section 176.320 are to be performed in response to suspected releases. If evidence of a release is discovered during the site assessment, it would be helpful if the report to IEMA here was merely to update the earlier reporting from a suspected release to a confirmed release.

**OSFM RESPONSE:** Regarding the reporting of confirmed releases, OSFM is unable to make any significant change to address this comment, since the management and tracking of multiple releases assigned to a single incident involves a program and the resources of another agency (IEMA). However, some minor changes have been made in an attempt to make it easier for IEMA to do this if it chooses to. See the OSFM response for item 42 above.

**(49) ILLINOIS EPA COMMENT** – Section 176.320(e) references Illinois EPA rules. Corrective action requirements for UST sites are found in Pollution Control Board rules, not Illinois EPA rules. Also, No Further Remediation (NFR) Letters may be issued for UST sites under the Illinois EPA’s Site Remediation Program (35 Ill. Adm. Code 740) in addition to under the Leaking Underground Storage Tank Program (35 Ill. Adm. Code 731, 732, and 734).

**OSFM RESPONSE:** OSFM is proposing appropriate corrections to these cross-references as suggested by Illinois EPA.

**(50) ILLINOIS EPA COMMENT** – Section 176.350(a) and (b) requires site assessments in accordance with Section 176.320. As noted above, the site assessments under Section 176.320 refer to Board rules that apply in response to releases and that should not be used for initial confirmations of releases.

**OSFM RESPONSE:** Please see the OSFM response for item 45 above.

**(51) ILLINOIS EPA COMMENT** – To avoid multiple reportings of the same release to IEMA, Section 176.350(a)(2) could be clarified so that a release or suspected release is reported only if IEMA has not already been notified of a release or suspected release.

**OSFM RESPONSE:** OSFM has concerns about implementing such a position. First, federal law requires the reporting of any suspected release within 24 hours and a facility may not be able to determine at the time whether or not the suspected release is related to a prior suspected release. See 40 CFR 280.52. Second, OSFM would be concerned about a release not getting reported at all in the event that a facility was unsure as to whether the release had been previously reported. OSFM believes that harm to persons, property, and the environment could result from not reporting a release, but that reporting a release more than once merely poses an administrative inconvenience. Thus weighing the options, OSFM does not believe that reporting a release should be conditioned on knowing or confirming whether that same release has been previously reported. Notwithstanding, OSFM has proposed some minor changes that may help IEMA and Illinois EPA coordinate various incident numbers assigned to the same release. See OSFM response in item 42 above.

**(52) ILLINOIS EPA COMMENT** – Subsection 176.330(b) requires samples to be taken within 24 hours. This allowed time may be too long for some samples. For example, contaminants that are more volatile may evaporate from exposed sample locations before a sample is collected. The sampling times should be dictated by appropriate standards. For example, the Board's LUST rules require samples collected under those regulations to be collected in accordance with the USEPA's publication SW-846. See 35 Ill. Adm. Code 734.415. You may want to apply the same standards for sampling under the OSFM's rules.

**OSFM RESPONSE:** OSFM is addressing this issue in two ways. First, OSFM has agreed to utilize language suggested by Illinois EPA that is believed to ensure consistency between the excavation site assessment done at UST closure versus the excavation site assessment done under Illinois EPA rules, which will also ensure that facilities will not have later problems for reimbursement of early action investigation costs from the Underground Storage Tank Fund if the costs would otherwise be eligible for reimbursement. See the OSFM response in item 45 above. Second, OSFM is proposing a revision to proposed Part 176 that would require that any excavation site assessment done under OSFM rules adhere to appropriate standards applicable to a licensed professional engineer or licensed professional geologist, as those standards are found in the Illinois statutes applicable to these professionals that do this kind of work. See 225 ILCS 745/60(d) [Professional Geologist Licensing Act] and 225 ILCS

325/14 [Professional Engineering Practice Act of 1989]. OSFM is recommending the following revision (addition) to the rule language as proposed:

All site assessment work shall meet accepted engineering standards or accepted standards for the practice of professional geology and be conducted according to the best professional judgment and diligence of the supervising Licensed Professional Engineer or Licensed Professional Geologist, as the case may be.

**(53) ILLINOIS EPA COMMENT** – Subsection 176.330(b)(2)[sic](B) appears to require samples only if contamination appears to be present, which may result in no confirmatory sampling if there are no obvious signs of contamination. Because the sampling requirements of the site assessment are intended to be consistent with the sampling requirements of the Board’s rules at 35 Ill. Adm. Code 734.210(h), you may want to keep the language of both rules as consistent as possible. Differences between the OSFM and Board rules may result in repeat sampling being necessary under one set of rules or the other.

**OSFM RESPONSE:** In response to industry concerns that OSFM site assessment sampling might be inconsistent with the sampling required under Illinois EPA rules, OSFM worked with Illinois EPA to obtain additional input on proposed language changes. Those communications have been made a part of this record and may be obtained by anyone requesting a copy from JCAR. As finalized, OSFM agreed to utilize language suggested by Illinois EPA as cited in item 45 above, in lieu of the language referred to by the first sentence of this comment 53. OSFM believes that by working with Illinois EPA on the portions of proposed Part 176 relating to the investigation and reporting of releases, consistency between the rules of OSFM and the rules of Illinois EPA has been achieved. See also the discussion in items 45 and 52 regarding this issue. The text of Subpart C of proposed Part 176, including OSFM’s proposed revisions after comment from Illinois EPA, are shown below. The proposed text as published in the Illinois Register is shown in black text and revisions that OSFM is proposing at this time in response to public comment (including comments of Illinois EPA) are shown by strikeout and underline.

## SUBPART C: RELEASE REPORTING AND SITE ASSESSMENT

### Section 176.300 Reporting of Suspected Releases

- a) Owners or operators of USTs shall immediately report to IEMA (from Illinois, 1-800-782-7860; from outside Illinois, 217-782-7860) and follow the procedures in Sections ~~176.305(b) and (c) and~~ 176.310, 176.320(b) and (c) and 176.350 in any of the following situations:
  - 1) The discovery by owners, operators, product delivery drivers or others of released regulated substances at the UST site or in the surrounding area (such as the presence of free product or vapors in soils, basements, sewer or utility lines or nearby surface water);

- 2) Unusual operating conditions observed by owners or operators (such as the erratic behavior of product dispensing equipment, the sudden loss of product from the UST or an unexplained presence of water in the tank), unless system equipment is found to be defective but not leaking and is immediately repaired or replaced; or
- 3) Monitoring results from a release detection method required under 41 Ill. Adm. Code 175.620, 175.630 or 175.640 that indicate a release may have occurred, unless:
  - A) The monitoring device is found to be defective and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result; or
  - B) In the case of monthly inventory control, a second month of data does not confirm the initial result; however, the immediate 24-hour reporting requirement under this Section remains in effect.
- b) In addition to IEMA, the 911 call center shall immediately be called where a suspected release presents a hazard to life, for example, where observations demonstrate petroleum or hazardous substance vapors in sewers or basements, free product near utility lines, or where a sheen is present on a body of water. ~~water body.~~
- c) Once a release has been ~~identified or~~ confirmed under the procedures of Section 176.310, the reporting procedures of Section 176.320 ~~176.305~~ shall apply.
- d) Notification of Suspected Release at the Direction of STSS. The owner, operator or designated representative of the UST must notify IEMA and any other entities required under Section 176.320 ~~176.305~~ of a suspected release, when directed to do so by the storage tank safety specialist (STSS) employed by OSFM. This is to be done at the time of discovery and the incident number shall be given to the STSS prior to leaving the site.

### **Section 176.310 Release Investigation Reporting and Site Assessment**

- a) Investigation Due to Off-Site Impact. When required in writing by OSFM, owners or operators of USTs shall determine if the UST is the source of off-site impacts. These impacts include the discovery of regulated substances, such as the presence of free product or vapors in soils, basements, sewer or utility lines or nearby surface or drinking water that have been observed by OSFM or brought to its attention by another party.

- b) Release Investigations and Confirmation Steps. Unless corrective action is initiated, owners or operators shall immediately investigate and within 7 days shall confirm the presence or absence of all suspected releases of regulated substances requiring reporting, using the following procedures:
- 1) System Test. Owners and operators must conduct tests (according to the requirements for tightness testing of 41 Ill. Adm. Code 175.630(c) and 175.640(a)(5)) that determine whether a leak exists in that portion of the tank that routinely contains product, or the attached delivery piping, or both. Owners or operators shall repair, replace or upgrade the UST and begin corrective action, if the test results for the system, tank or delivery piping indicate that a leak exists;
  - 2) Further investigation is not required if the test results for the tank system and delivery piping do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a release; and
  - 3) Owners or operators shall conduct a site assessment (utilizing the requirements of Section [176.330](#) ~~176.320~~) if the test results for the system, tank and delivery piping do not indicate that a leak exists, but environmental contamination is the basis for suspecting a release. In the event lab results are not forthcoming within 7 days, the owner/operator shall have such additional reasonable time as is necessary to receive the results, but the total time period to confirm the presence or absence of a release and report any confirmed release shall not in any event exceed 30 days.
- c) Initial Site Assessment. An initial site assessment shall follow the procedures and requirements identified in Section [176.330](#), ~~176.320~~.
- 1) If the test results for the excavation zone or the UST site indicate that a release has occurred, owners or operators shall begin initial response and initial abatement procedures under Sections 176.350 and 176.320(b) and (c).
  - 2) If the test results for the excavation zone or the UST site do not indicate that a release has occurred, further investigation is not required.

### **Section 176.320 Initial Response and Reporting of Confirmed ~~and Actual~~ Releases**

Initial Response. Upon confirmation of a release of a regulated substance ~~or after a release from the UST is identified in any manner~~, owners or operators shall perform the following initial response actions:

- a) Immediately report the release.
  - 1) The release shall be reported by calling the 911 call center and then IEMA in the following situations:
    - A) Spills and overfills of petroleum products over 25 gallons and spills and overfills of hazardous substances over a reportable quantity as defined in 41 Ill. Adm. Code 174.100.
    - B) Spills, overfills or confirmed releases that present a hazard to life, for example, where observations demonstrate petroleum or hazardous substance vapors in sewers or basements, free product near utility lines, or where a sheen is present on a ~~body of water. water body.~~

All other confirmed ~~and actual~~ releases shall be reported to the local authority having jurisdiction and to IEMA. A call to the fire department in whose jurisdiction the release occurred may be done in the absence of an available 911 emergency telephone number. IEMA may be reached at 1-800-782-7860 (from inside Illinois) or 217-782-7860 (from outside Illinois). If known, the caller shall inform IEMA whether the same release had previously been called in as a suspected release.
  - 2) A release of a hazardous substance equal to or in excess of the reportable quantity shall be reported to the following entities in addition to those identified in subsection (a)(1) above:
    - A) to the Local Emergency Planning Committee (LEPC) that is likely to be affected by the release (found at [www.state.il.us/iema/disaster/LEPCContaktList.xls](http://www.state.il.us/iema/disaster/LEPCContaktList.xls)); and
    - B) the National Response Center (800/424-8802).
- b) Take immediate action to prevent any further release of the regulated substance into the environment; and
- c) Immediately identify and mitigate fire, explosion and vapor hazards.

### **Section 176.330 Procedures for Site Assessments**

- a) All site assessments and related reports must be conducted or prepared under the supervision of a Licensed Professional Engineer or Licensed Professional Geologist.

All site assessment work shall meet accepted engineering standards or accepted standards for the practice of professional geology and be conducted according to the best professional judgment and diligence of the supervising Licensed Professional Engineer or Licensed Professional Geologist, as the case may be.

- b) Owners or operators shall measure for the presence of a release where contamination is most likely to be present at the UST site by conducting sampling in the same manner and following the same procedures as required under the Board's Petroleum Underground Storage Tanks rules at 35 Ill. Adm. Code 734.210(h)(1) and (2). Samples must be analyzed for the same applicable indicator contaminants as required under 35 Ill. Adm. Code 734.405. All sampling must meet the same data quality and certification requirements as set forth in 35 Ill. Adm. Code 734.415 and 734.420. If soil borings are involved the owner or operator must follow the same requirements as set forth in 35 Ill. Adm. Code 734.425 and 734.435.~~The minimum number of samples, the sampling locations, and the measurement methods shall be determined by reference to the provisions in 35 Ill. Adm. Code 734.210 and 734.415 for early action site activity. Field observations, methods, and records for soil borings shall meet the requirements for early action in 35 Ill. Adm. Code 734.425 and 734.415.~~ For UST removals, samples shall be taken in native soil within 24 hours after removal of the tanks and piping. In selecting sample types, locations and measurement methods, owners or operators shall also consider the nature of the stored substance, the type of initial alarm or cause for suspicion, if any, the method of tank removal, the types of backfill, the depth of groundwater and other factors appropriate for identifying the presence and source of the release, ~~as specified in 35 Ill. Adm. Code 734.210. The indicator contaminants to be analyzed for, acceptable laboratory accreditation requirements, and acceptable analytical methods shall be determined by reference to the provisions in 35 Ill. Adm. Code 734.405, 734.415, and 734.420 for early action site activity.~~ The samples shall be analyzed to confirm the presence or absence of the material stored in the UST. All samples shall be analyzed by an accredited laboratory. Packaging for shipping or delivery should be done in a manner that will preserve the sample and prevent deterioration or dilution, as for example, putting samples in sealed containers in ice.
- c) Within 45 days after receipt of lab results, owners or operators must designate and provide to OSFM, on OSFM forms (entitled "site assessments results form" and found at [www.state.il.us/osfm/PetroChemSaf/home.htm](http://www.state.il.us/osfm/PetroChemSaf/home.htm), under "downloadable applications"), a pass/fail result indicating whether a release has occurred. This determination shall be based upon an evaluation of lab results to determine whether any contamination has been found. ~~comparison of the lab analysis results to threshold standards for contamination, defined as the most stringent Tier I remediation objectives for residential properties in 35 Ill. Adm. Code 742.~~ A pass result for the UST (finding no contamination ~~at or above thresholds~~ and, therefore, no need to report to IEMA) must be certified by a licensed environmental engineer or licensed environmental geologist,

competent and experienced in performing site assessments, using accepted practices for these assessments, consistent with the site characteristics and conditions. In the event a suspected release was previously called into IEMA and is being confirmed by site assessment, the pass/fail result form shall be provided to Illinois EPA in addition to the OSFM.

- d) In the event that sampling or other site observations disclose evidence of a suspected release or site assessment lab results show site contamination ~~at or above the most stringent Tier 1 remediation objectives, residential levels,~~ the owner or operator shall immediately cease site assessment work and shall immediately notify IEMA and any other required entities of a suspected release, as required by Section 176.320, 176.305, and begin corrective action ~~pursuant to 35 Ill. Adm. Code.~~
- e) Records generated from site assessments and related activity shall be kept at the site (or available within 30 minutes) and may not be discarded or destroyed unless and until a No Further Remediation (NFR) letter is issued by IEPA ~~pursuant to a completed site remediation under 35 Ill. Adm. Code~~ or until the site permanently ceases the activity involved in using the USTs and any site assessments required under ~~this Part OSFM or IEPA rules~~ are completed and show no evidence of contamination ~~at or above the most stringent Tier 1 remediation objectives, residential levels.~~ Owners or operators claiming that required records were destroyed, discarded or lost prior to the effective date of these rules or by a prior owner of the subject UST property shall conduct a new site assessment when the assessment is required by OSFM rules for continued or future use of the USTs.

### **Section 176.340 Reporting and Cleanup of Spills and Overfills**

- a) Owners or operators of USTs shall contain and immediately clean up a spill or overfill, immediately report either release to the 911 call center and then to IEMA, and begin initial response and initial abatement in accordance with Sections 176.305, 176.310, 176.320 and 176.350, 176.340, in the following situations:
  - 1) Spill or overfill of petroleum that results in a release to the environment that exceeds 25 gallons or that causes a sheen on a nearby body of water; or nearby surface water; or
  - 2) Spill or overfill of a hazardous substance that results in a release to the environment that equals or exceeds the reportable quantity (see 41 Ill. Adm. Code 174.100). Under Section 176.320, 176.305, this kind of release shall also be immediately reported to the Local Emergency Planning Committee and to the National Response Center.

- b) Owners or operators of USTs shall contain and immediately clean up a spill or overflow of petroleum that is 25 gallons or less and a spill or overflow of a hazardous substance that is less than the reportable quantity. In doing so, the owner or operator shall comply with procedures specified in Section 176.350. ~~176.340~~. If cleanup cannot be accomplished within 24 hours, owners or operators shall immediately notify IEMA and the local authority having jurisdiction of the release.

### **Section 176.350 Initial Release Abatement Measures**

Unless directed in writing to do otherwise by OSFM, owners or operators shall perform the following release abatement measures:

- a) Remove as much of the regulated substance from the UST as is necessary to prevent further release to the environment;
- b) Visually inspect any aboveground release or exposed belowground release and prevent further migration of the released substance into surrounding soils and groundwater;
- c) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the UST excavation zone and entered into subsurface structures (such as sewers or basements); and
- d) Remedy hazards posed by contaminated soils that are excavated or exposed as a result of release confirmation, site investigation, abatement or corrective action activities. If these remedies include treatment or disposal of soils, the owner or operator shall comply with applicable State and local requirements.

### **Section 176.360 Assessing the Site at Removal of, Previously Removed, or Change-in-Service of USTs**

- a) Within 24 hours after removal is completed, or prior to a change in service from a regulated product to an unregulated product, the following procedures shall be conducted.
  - 1) The owner or operator shall perform a site assessment using the procedures and requirements of Section 176.330; ~~176.320~~;
  - 2) The owner or operator, or his or her designated representative, shall immediately report a release or suspected release, based upon a visual observation by STSS or upon a site assessment showing the existence of a release ~~(failure to meet the most stringent Tier 1 remediation objectives found in 35 Ill. Adm. Code 742)~~, to IEMA and any other entities required under Section 176.320 ~~176.305~~ and secure

an incident number. If confirmation of the release is via a visual observation by STSS or otherwise confirmed while STSS is still on site, the incident number shall be provided to STSS at the conclusion of the removal and prior to the departure of STSS.

3) If contaminated soils, groundwater or free product as a liquid or vapor, resulting from a UST release is discovered, the owner or operator shall begin initial response and initial abatement procedures in accordance with Sections ~~176.305~~, 176.310, 176.320 and 176.350. ~~176.340~~.

b) When directed in writing by OSFM, the owner or operator of a UST previously removed shall assess the excavation zone (including, if so ordered, re-excavating and assessing the site where the tank had been located) in accordance with Section 176.330. ~~176.320~~.

**(54) ILLINOIS EPA COMMENT** – Subsection 176.330(e) references site assessment requirements in IEPA rules. Please note that there are no IEPA rules for UST site assessments.

**OSFM RESPONSE:** OSFM is proposing that this be corrected by changing the language as proposed from “site assessments required under OSFM or IEPA rules” to “site assessments required under this Part”.

#### **IV. COMMENTS FROM INDIVIDUAL CORPORATE ENTITIES**

**(55) COMMENT** - It is not clear if the requirements for “UST Components” to “be listed by a national third party organization as acceptable for the intended use,” is the sole additional third party requirement for the UST system as there are many others as well:

175.400(a) USTs, 175.415(b) UST Components, 175.420(a) piping, 175.420(c) pipe, valves, fittings, 175.425(b) conduit, 175.450(e)(5) hold-open latches, 175.630(d)(2) ATGs, 175.630(j) UST release detection devices, 175.640(e) piping release detection devices.

There is also a potential problem with such an all-inclusive requirement for “UST components” to be listed as some ancillary equipment may not be intended to be included.

The comment goes on to dispute the reference to the National Work Group on Leak Detection Evaluations (NWGLDE) as a ‘listing’ organization since it is a work group with disclaimers on its website that being on the list does not equal US EPA approval of the method, along with another disclaimer that NWGLDE makes no representations as to compatibility with the leak detection equipment listed with the work group.

**OSFM RESPONSE:** For listings concerning equipment compatibility only, OSFM agrees that a listing could be provided by a nationally recognized third party other than NWGLDE because of the compatibility and other disclaimers associated with the NWGLDE listings. Subsection 175.610(b), concerning general requirements for all release detection systems, should continue to retain the general requirement that all UST release detection equipment be listed by NWGLDE for performance criteria in the intended use. OSFM proposes that reference to NWGLDE be deleted from the requirement that all UST components be listed for compatibility, so that the sentence in subsection 175.415(b) [Compatibility] reads as follows:

**Section 175.415 UST Compatibility with Product Stored**

- b) All UST components shall be listed for compatibility with the product being stored by a nationally recognized independent third party organization. ..

OSFM also proposes that the general requirement that all UST components be listed for their performance in the intended use, found in Part 176, be amended to cross-reference the compatibility listing requirement in Part 175, as follows:

**Section 176.420 Requirement that UST Components Be Third Party Listed**

- b) In addition to the requirement that all UST components be third party listed for their performance in the intended use, all UST components must also be third party listed as compatible with the product to be stored under 41 Ill. Adm. Code 175.415. This would include third party listing requirements for components used with alternative or blended fuels and product compatibility requirements for hazardous substance USTs, see 41 Ill. Adm. Code 175.415 and 175.620.

**(56) COMMENT:** The requirements for interstitial monitoring under Section 175.630(g) seems to apply to all UST sites. The regulation as proposed, implies that USTs permitted after 2-1-08 must have interstitial spaces. What does this mean for existing single-walled USTs? This would be a major change in the IL UST regulatory program.

**OSFM RESPONSE:** The cited language involves requirements from a prior rulemaking that became effective February 1, 2008 and were not changed in this rulemaking. Those requirements, as put into the text of this rulemaking, continue the practice that existing single-walled USTs are grandfathered and do not require a change in monitoring systems unless the tank or more than half or 20 feet of a piping run are replaced. Likewise, both the current and proposed rule also allow the facility to choose which kind of release detection the facility will use so long as the method chosen meets regulatory design and performance standards.

**(57) COMMENT:** Beyond the delivery prohibition, it is not entirely clear where the proposed amendments reside in the proposed amended regulations that, “Implements newly enacted federal requirements for USTs” in either 175 or 176.

**OSFM RESPONSE:** This language in the rulemaking notices was intended to cover the fact that OSFM made conforming language changes relative to various federal mandates and federal interpretations in recent years. For example, conforming changes were made relative to new Stage II vapor recovery requirements, the double-wall requirement as it relates to hazardous substance USTs and partial UST replacements, and US EPA interpretations relating to ALLDs. As elsewhere stated in the notices and in this responsiveness summary, clarifications were also made concerning federally required items such as site assessments for tank removals and the requirement to remove an inactive UST after one year where corrosion protection has not been maintained. Similarly, updates were made in proposed Part 177 because the red tag/green tag time frame is currently 2 years but the outdated rule (Sect. 171.180) references 3 years. This too is a federal mandated portion of the UST program.

**(58) COMMENT:** Adding “911” to the notification process seems appropriate where “a suspected release presents a hazard to life” but “a sheen ... on a water body” under many interpretations could be a sheen on a puddle of water. Perhaps the OSFM should further define a “water body”.

**OSFM RESPONSE:** OSFM proposes that the applicable Part 176 references regarding the reporting of a sheen on water refer to a sheen on “a water body”, in order to clarify that no call to 911 would be required for a sheen on a puddle of water. See also the discussion for comment 62 below.

**(59) COMMENT:** The Section covering “Compliance Certification for USTs (177) seems to cover the new federal UST requirements regarding delivery prohibition for USTs that are not compliant. While portions of this Section refer to the “UST facilities”, it is not entirely clear that the requirement for compliance covers the entire operational portions of the UST system which would include piping, sumps and monitoring systems.

**OSFM RESPONSE:** Regarding the definition of a “UST”, the official numbered JCAR document reflecting what was put out for public comment did not contain OSFM’s final proposed language as filed with the Illinois Secretary of State for publication in the Illinois Register. As submitted by OSFM, the proposed definition of a “UST”, as contained in 41 Ill. Adm. Code 174.100 and made applicable to Part 177, meant the total underground storage tank system including all ancillary equipment and connected piping. This issue will be worked out with JCAR and all references to “UST” changed as necessary to clarify this issue. Because the definitions in Part 174 are made applicable to proposed Parts 175, 176, and 177, clarifying the definition will then clarify this issue.

**(60) COMMENT:** We noticed that Section 176.220(b), Proof of Financial Responsibility, has been revised to require written proof from the appropriate financial institution on at least an annual basis. The corresponding previous rule, Section 170.740(b), only required documentation from the institution, not on an annual basis. Requiring financial institutions to provide written proof on an

annual basis for a mechanism that has not changed presents an unnecessary burden on both the UST owner and the financial institution.

In addition, Section 176.220(d) requires copies of proof of all forms of financial responsibility be sent to the OSFM on an annual basis. The corresponding previous rule did not require the submittal of all forms of financial responsibility to the OSFM. In addition, US EPA Underground Storage Tank regulations contained in 40 CFR Part 280.111 do not require annual submittal of proof of financial responsibility to the OSFM. This is an excessive paperwork burden to be placed on the UST owners, especially small businesses. Since OSFM inspects USTs on an annual basis, proof of financial responsibility can be requested and verified at that time.

In addition, we suggest that for any forms that are required to be submitted or revised on an annual basis, that the OSFM specify a date when the forms are due. For example, US EPA requires under 40 CFR Part 280.111 that for companies using a financial test or guarantee, that a copy of the chief financial officer's letter based on year-end financial statements for the most recent financial reporting year be on file no later than 120 days after the close of the reporting year.

**OSFM RESPONSE:** OSFM agrees that that recordkeeping can be simplified so that annual proof from the financial institution is not required. Instead, OSFM proposes that those using a CD or designated savings account as their chosen method of financial responsibility merely maintain documentation "that is at all times current as reflected by the identical records on file with the financial institution".

Similarly, instead of requiring that proof of all forms of financial responsibility be sent to OSFM on an annual basis, OSFM believes the current regulatory practice can be followed instead. This practice involves two procedures. First, the facility must check a box on a form and mail that to OSFM to indicate what their chosen method of financial responsibility will be for the coming year. OSFM proposes that the language be replaced with a proposed reference that facilities send in an "annual notification indicating the financial responsibility mechanism chosen". Second, for facilities that have chosen to be self-insured for that year, pursuant to federal requirements, a letter from the owner/operator's Chief Financial Officer shall attest that the required coverage is available and must attach a summary of or other proof by a certified public accountant concerning the content of financial statements for the most recent reporting year. OSFM proposes revisions in accord with this change. Note that Section 176.240(b)(2) already provides that the summary of updated annual financial statements as referenced is due 120 days after the close of the financial reporting year.

**(61) COMMENT:** Midwest Generation is also concerned that the Notice of Proposed Rules describing the subjects and issues involved did not identify the reporting requirements and only states, "UST installations and upgrades have various reporting and permitting requirements as described in new Parts 174, 175 and 176 (41 Ill. Adm. Code)". Since those sections are rewritten from previous sections, it is not readily apparent that there are new requirements. Our concern is that affected persons may not be aware of a new reporting requirement and may be in noncompliance after the rule is

finalized. Midwest Generation respectfully asks that the OSFM identify all of the new reporting requirements in their Notice of Proposed Rule and consider the changes suggested in the above paragraph.

**OSFM RESPONSE:** Recordkeeping requirements that are new to the UST rules are minimal. All recordkeeping requirements provided in the proposed rules are clearly identified and have clear deadlines. As an example of a new item, a site assessment now requires a one-page pass/fail check off sheet that must be mailed to OSFM within 45 days of receipt of lab results. See proposed Section 176.320(c). OSFM plans on developing a summary of reporting and recordkeeping requirements in OSFM rules, which will be posted on its website. See also the discussion for comments 21, 27, 71, and 99.

**(62) COMMENT:** Concerns with the requirement to call 911 for spills and overfills of petroleum products over 25 gallons. Sometimes a release may be discovered during repair or removal of a tank system. A call to 911 may trigger an emergency response, including mobilization to the site by the local fire department, that for a petroleum release doesn't require an emergency response and that in some instances the local fire department is not prepared to take action on. Such a response will divert local fire department resources away from other responsibilities such as fighting fires, and may as a result jeopardize the safety of others in the community. If the intent is to provide notification to the local fire department, many fire departments may only want notification through either a follow-up call, or to be copied on any written correspondence provided of the incident to IEMA. Notification of the 911 call center also will not result in the same outcome in different communities. In some communities the 911 number is used for emergency calls, while in other communities it is used for non-emergency calls.

**OSFM RESPONSE:** OSFM contacted various representatives of the Illinois fire service, including both urban and rural fire departments, and representatives of the 911 call centers and related emergency communications networks. OSFM also had the Illinois Emergency Management Agency review the proposed rule text prior to 1<sup>st</sup> notice. None of these representatives felt that the calls to 911 that would be triggered would divert resources in such a way as to negatively impact the effectiveness of emergency services and operations.

**(63) COMMENT:** In 1999 a law was passed that did not allow the Office of the State Fire Marshal to prohibit mobile fueling "in a county with 3,000,000 or more inhabitants or a county contiguous to a county with 3,000,000 or more inhabitants. ... The Fire Marshal has the authority to expand mobile fueling to the whole state if they so desired but I would request that they expand it to additional areas of the expanding Chicago metropolitan area which would include Cook, Lake McHenry, Kane, DuPage, Will, Kankakee, Grundy, Kendall, DeKalb, Boone, Ogle, and Winnebago counties. As time has passed the need for mobile fueling has grown outside this restricted area. ... This is a safe practice that is legal all around the country and there is no reason to keep it restricted to this small geographical area. In addition to allowing companies a cost effective way to operate their business it will also generate additional revenues to the Fire Marshal's Office.

**OSFM RESPONSE:** The mobile fueling text as proposed in Section 174.420(a) follows the statutory limitations for mobile fueling (of fleet vehicles from tanker trucks) in Illinois under the Gasoline Storage Act. Expansion of mobile fueling beyond the categories allowed by statute cannot be done without a statutory change. OSFM is not planning any statutory changes regarding mobile fueling, but private parties are always free to pursue a statutory change on their own.

**(64) COMMENT:** This section [174.440] restricts the length of the delivery hose used for Mobile Fueling to 50 feet. I do not see any reason for this restriction. The most common length for a delivery hose is 125 feet and deliveries to construction sites and home heating oil tanks have been made with longer hoses without incident for many decades. I would ask that you lift the restriction of the hose length or increase it to 125 feet.

**OSFM RESPONSE:** OSFM does not doubt that longer hoses are in fact used outside regulated mobile fueling programs, for example, as suggested by the comment, the fueling of home heating oil tanks. However, regarding the mobile fueling program itself as administered by OSFM, OSFM does not feel that using hose lengths beyond 50 feet would be a wise practice. Increased pressures are required to move the product through a longer hose, and the volume of product in the hose at any one time is greater the longer the hose length. Both of these factors point to more frequent and larger spills associated with the use of longer hoses. OSFM believes that these reasons provide at least part of the rationale for the 50-foot hose length limit imposed by NFPA 385, the most widely used national standard in the industry. OSFM has been unable to find sufficient justification for rejecting this widely adopted national standard, for which the mobile fueling industry was also largely involved in developing.

**(65) COMMENT:** With regard to precision tank and line testing, the regulation requires the passing of a certification exam that is based on test methods that are obsolete and no longer in use in the industry. Most of the tightness testing methods have advanced beyond the questions on the exam. We would like you to consider language added to also accept State Approved Manufacturer Certifications for tightness testing. This would assure that in the future regulations and certification requirements would keep pace with technology and would remain relevant. Proposed Language: Persons conducting precision testing of tanks and piping, cathodic protection testing, and testing of other UST equipment shall either be ICC certified in the appropriate module and be licensed by OSFM pursuant to 41 Ill. Adm. Code 172 or be certified by the manufacturer of the testing equipment being used by passing a State Approved Manufacturer Certification exam.

**OSFM RESPONSE:** The proposed language as filed for public comment involved in this rulemaking is consistent with 41 Ill. Adm. Code 172, which is the primary text on this issue and is not being revised at this time. However, OSFM does plan on updating that rule text via a rulemaking to be filed at some time in the next 2 years. Therefore, OSFM is unable to consider the comment at this time, but will retain this comment for the Part 172 rulemaking to be filed in the future. Meanwhile, ICC has

advised that its Committee has already met to update the module exam for tightness testing methods and plans to implement the revised exam by not later than July 1, 2010.

**(66) COMMENT:** This comment is too lengthy to quote in a responsiveness summary, though the entire letter and the exhibits are made a part of this record. The comment describes that its field-installed spray-on product for existing USTs is UL-listed, approved for use in Florida and California to upgrade existing USTs, although its use is subject to contingencies in those states as indicated by the exhibits (for example, cathodic protection is required on the outside wall, the product is only allowed for existing tanks installed prior to June 1992 in one case, etc.). The product claims include a statement that the product is compatible with 1-100% alcohols, methanol, and ULSD. As to specifics, the comment requests the following language revisions:

REQUESTED TO BE ADDED TO THE DEFINITION OF INTERNAL LINING: The term also includes lining performed for the purpose of protecting an existing fiberglass or steel tank from fuels that are incompatible with the original tank materials. This lining must be performed using products or materials recognized by UL as being "All Fuels" compatible, and thus, compatible with products stored.

REQUESTED TO BE ADDED TO THE TANK DESIGN SECTION:

**Section 175.400 Design and Construction of USTs**

- b) Each newly installed, replaced and existing tank shall be properly designed, constructed and installed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and third-party listed for its intended use. Any portion underground that routinely contains product shall be protected from corrosion. In addition, each tank shall meet one of the following requirements:
  - 1) The tank is constructed of fiberglass-reinforced plastic.
  - 2) The tank is constructed of steel and protected in the following manner..
  - 5) The tank is installed with an internal secondary containment system that is listed by Underwriters Laboratories, meets the definition of secondary containment, and meets the requirements for recertification in paragraph c) below.
- c) Before the installation of any tank, its construction and corrosion protection shall be submitted to OSFM, in writing, and is subject to written approval by OSFM.

REQUESTED TO BE ADDED TO THE INTERIOR LINING SECTION:

**Section 175.500 Interior Lining and Lining Inspection of USTs**

- a) Tank Lining Requirements. With the exception of the provisions specified in paragraph e) below, the internal lining Lining-of tanks shall no longer be allowed for single-wall corrosion-protected tanks after January 1, 2011. Existing double-wall tanks may be

repaired in accordance with manufacturer's specifications or with internal lining in accordance with Section 175.500. Existing lined tanks shall be allowed to use lining as a primary method of corrosion protection only if the tanks continue to pass the lining inspections as provided in this Section. Tanks failing to pass the lining inspection criteria will not be allowed to be touched up, repaired, totally relined or put back into use and shall be decommissioned immediately and removed within 60 days of the lining inspection.

- e) Internal lining can be installed within existing double-wall underground storage tanks as a repair, or for protecting the existing fiberglass or steel surfaces from fuels that are or may not be compatible with the storage tank system. Internal lining can be installed within existing single-wall underground storage tanks for protecting the existing fiberglass or steel surfaces from fuels that are or may not be compatible with the storage tank system. The installation of internal lining in accordance with this paragraph shall be performed in accordance with all of the provisions of Section 175.500 with the exception of the January 2011 deadline.

The comment further states that the product meets the proposed rules definitions for “secondary containment” and for “re-certified tank”, due to the warranty, engineering professionals, and installation procedures. The comment also states that the product is compatible with all fuels, analogous to the UL 1316 standard for fiberglass USTs. The comment goes on to state that internal lining should be allowed as a repair for existing double-wall USTs and to provide approved internal coatings for both double-wall and single-wall USTs, particularly in the case of fiberglass single-wall tanks.

**OSFM RESPONSE:** OSFM feels that the product can be used in the factory without any revisions to the proposed rule text as suggested, although industry users are cautioned that this can only be applied to double-walled tanks in order to meet the federal mandates as implemented in Illinois effective February 1, 2008. As to uses for existing underground tanks, the installation of new field-installed linings will be banned after January 1, 2011, although existing field-installed linings may remain if they continue to pass the internal lining inspections. The high failure rate for field-installed linings at internal inspections (53%) suggests that there are significant reliability problems with field-installed linings. See the discussion for comments 18 and 35. As a side note, the commentator's opinion that spray-on materials can meet the federal mandate points out that the current language regarding recertified tanks may have some ambiguity. Therefore, OSFM proposes that subsection 175.400(c) as proposed be revised to also reference a requirement that recertified tanks meet new tank design requirements, including the requirement to be double-walled with interstitial monitoring.

**(67) COMMENT:** This comment is identical to comment number 66, although the exhibits varied slightly. The comment was received from a corporation affiliated with the corporation providing comment number 66. The full comment and exhibits thereto are included in the rulemaking record.

**OSFM RESPONSE:** See the OSFM response to comment number 66.

**(68) COMMENT:** This comment was from a salesman affiliated with the corporate entities involved in comments 66 and 67 and primarily asks to meet with OSFM in light of its upcoming rulemaking, which OSFM declined to do in light of prohibitions on ex parte meetings and conversations during the pendency of formal rulemaking proceedings. The full comment and exhibits thereto are included in the rulemaking record.

**OSFM RESPONSE:** See the OSFM response to comment number 66.

## **V. COMMENTS FROM INDIVIDUAL COMMENTORS**

**(69) COMMENT:** Several individual comments asked whether the self-service permit would remain or would the facility green tag issuance process now include review of compliance with all self-service requirements. These comments also asked whether violations of self-service requirements would subject the owner/operator to getting USTs red-tagged.

**OSFM RESPONSE:** Upon re-review of this issue, OSFM feels that the traditional self-service permit will have to be retained and the language related to this permit re-inserted from the current UST rules. Practical limitations prevent the green tag from substituting for the self-service permit as envisioned at the time of 1<sup>st</sup> notice. Consistent with what OSFM views as the intent of the red tag program that all directly related UST equipment be maintained, OSFM recommends that the failure to maintain the following UST equipment should subject a UST to being red tagged: (1) dispensers, hoses, and breakaways; (2) electrical equipment directly tied to the UST (3) emergency shutoffs (4) and shear valves. Although most of these items would have been enforced through the red tag in the past, to the extent these categories slightly enlarge the range of UST equipment subject to the red tag, the failure to maintain these kinds of additional equipment has great potential to cause a release. Therefore, OSFM believes this minor change implements the intent of the red tag program. OSFM recommends that the following language be inserted into the self-service provisions:

Failure to remain in compliance with UST rules may result in OSFM's issuance of a red tag or revocation of a facility operating permit (green decal) for the tanks or facility at issue, prohibiting any further operation of the facility or further deposit of regulated substances into any tank subject to a red tag. Maintenance of dispensers, hoses, emergency breakaways, electrical equipment directly tied to the UST, and emergency shutoffs and shear valves, are examples of required items subject to red tag for noncompliance.

Also, OSFM is recommending that language from the current UST rules, governing how the self-service permit is issued, be put back into the text of the proposed UST rules. These pieces of text would be as follows:

### **Section 175.200 General Requirements for Motor Fuel Dispensing Facilities**

d) Applications for a Motor Fuel Dispensing Facility Permit

- 1) No construction of a motor fuel dispensing facility or modification of an existing motor fuel dispensing facility shall be commenced until applications and plans are given written approval in the form of a review letter by the OSFM.
- 2) The applications shall be those prescribed by the OSFM and plans must be submitted in triplicate for each motor fuel dispensing facility showing compliance with applicable OSFM rules. Such plans shall be drawn to scale, and shall at a minimum, include the following:
  - A) Lot lines and dimensions.
  - B) Building lines and dimensions.
  - C) Location and size of tanks and pump island.
  - D) Location of control station (if applicable).
  - E) Type, make, model and location of dispensing devices or equipment.
  - F) Fire extinguisher locations.
  - G) Clearances from dispensing devices to property lines and buildings both on and off the property.
- 3) After examining the submitted application and plans the OSFM shall issue a review letter valid for a period of six months. Submission of incomplete or illegible applications and/or plans shall be cause for denial of applications.
- 4) Motor fuel dispensing facility work of the following kinds requires application and plan submittal to the OSFM prior to commencing the work:
  - A) a station being newly constructed.
  - B) a station being established in a building that previously contained a different occupancy.
  - C) making substantial modifications to an existing facility. Substantial modification would include, but not be limited to:
    - i. Installation of new dispensing islands or dispensers in new locations
    - ii. Relocation of an emergency shut off switch
  - D) Changing from one facility category to another, as those categories are listed in Sections 175.210 through 175.250. The requirement to obtain a permit for the change will still apply even if only part of the facility is being changed (for example only one dispenser island), or if the facility plans to operate under a different category for only a portion of a 24-hour period.
  - E) Construction or relocation of buildings on the property, even if they are not the “primary” motor fuel dispensing facility station control buildings.
- 5) Motor fuel dispensing facility work of the following kinds does not require application and plan submittal to the OSFM prior to commencing the work. This type of work or modifications will be inspected by the OSFM when the facility is due for permit renewal:
  - A) Like-for-like replacement of existing equipment (e.g., replacement of existing dispensing cabinets or components not involving the shear valve or items below the shear valve; changing existing dispensing nozzles, hoses or fittings; replacing an existing emergency shut off switch in its current location).
  - B) Replacing (or installing additional) collision protection posts or guardrails
  - C) Changing or replacing warning or instructional signs
  - D) Replacing or adding to the complement of portable fire extinguishers

- 6) In addition to the requirement for a motor fuel dispensing permit pursuant to this Subpart before any dispensing can occur, work affecting UST components or equipment shall also require a separate Section 171.400 permit to be obtained via the submittal of separate applications to the OSFM pursuant to that Section.

e) Issuance and Renewal of Motor Fuel Dispensing Facility Permits

- 2) A motor fuel dispensing facility permit or permit renewal will be issued by the OSFM after an on-site inspection has been conducted by the OSFM to verify compliance with all applicable OSFM rules.
- 3) No motor fuel dispensing facility shall open for business until inspected and approved by the OSFM, and until the OSFM issues a motor fuel dispensing facility permit, which must be prominently displayed at all times at such motor fuel dispensing facility.
- 4) Motor fuel dispensing facility permits shall be issued on a biennial basis. These permits shall expire on December 31<sup>st</sup> of the year shown on the permit.
- 5) Any name or ownership change shall require separate notification to OSFM within 30 days.

**(70) COMMENT:** Quite a number of individual comments disagreed with elimination of the requirement for installing two observation wells for each new UST installed, pointing out that these observation wells had historically served as ready withdrawal points for excess water prior to UST work or in the event of local high water problems and also for removal of free product following a release from the UST. The observation wells are also an extra line of defense for discovery of releases and can provide a helpful observation point when malfunctioning release detection equipment is being investigated. The commentators pointed out that not requiring these at UST installation will actually increase costs for industry in most cases, because the costs to install these wells are marginal but the cost of breaking concrete to install them later would be much greater. Having to remove water from the tank bed prior to conducting repairs or other work for existing USTs is actually quite common. Finally, in the event that a tank pad had to be removed in a low area or during wet conditions, the tank could float and then fail, releasing large volumes of product.

**OSFM RESPONSE:** OSFM agrees with these comments. OSFM proposes that the language in the current tank design section be inserted as follows:

There shall be a minimum of two manufactured slotted or perforated observation wells of at least 4" diameter installed in each new tank field of tanks larger than 1,000 gallons and one well for 1,000 gallon tanks or less and shall have two wells for fields with more than one tank. They shall be placed at opposite ends or opposite corners 1 foot below the invert elevation of the lowest UST. Lids shall be securely protected against unauthorized activities. Only one well will be required if groundwater flow direction can be proven and such proof is supplied at the time of permitting and the well is then installed in the downstream location.

**(71) COMMENT:** - OSFM received comments that the general requirement to keep UST records at the facility for 3 years seemed unnecessary, since the audit inspection cycle is 2 years and, therefore,

results in repeated review of the earliest year of records at the next inspection. Comments also pointed out that having an extra year of records adds to the challenge of faxing or producing the records within 30 minutes as required in cases where records cannot be kept on site.

**OSFM RESPONSE:** OSFM will shorten the records retention time from three to two years whenever allowed under federal law. State UST rules must be at least as stringent as the federal UST rules, thereby limiting OSFM's ability to do this in some cases. For further information on recordkeeping, see the discussion for comments 21, 27, 71, and 99.

**(72) COMMENT:** Two comments suggested that certain bus fueling sites may have received written OSFM approval to operate indoor dispensing after 1985. Therefore, UST rules language allowing indoor dispensing only where approved by OSFM prior to 1985 may not accurately reflect historical OSFM approvals involving bus company garages of various kinds.

**OSFM RESPONSE:** After conducting a limited file review, OSFM was able to find a few municipal bus garages for which indoor dispensing had been approved after 1985. It was discovered that several facilities received approval 1-2 years after 1985 and one facility received approval by letter dated November 29, 1993. OSFM proposes that revisions to the language provide that facilities with indoor dispensing given prior written OSFM approval for indoor dispensing through November 29, 1993 be grandfathered as follows:

"Motor Fuel Dispensing Facility Located Inside a Building" means that portion of a motor fuel dispensing facility having obtained written permission by OSFM ~~prior to 1985~~ to be located within the perimeter of a building or building structure that also contains other occupancies. The term also includes detached buildings separated by at least 20 feet from other buildings and used exclusively for dispensing of motor fuels in compliance with NFPA 30A, incorporated by reference in Section 174.210.

- 3) Indoor dispensing shall otherwise be allowed only if approved by OSFM in writing prior to November 29, 1993 ~~October 1, 1985~~ and if the following requirements are met:

**(73) COMMENT:** Several comments suggested that there should be some responsibility for the driver delivering fuel to monitor the fuel delivery so as to avoid a release.

**OSFM RESPONSE:** OSFM agrees there is a shared responsibility to avoid releases on the part of the fuel deliverer, as reflected by current UST rules. Some fuel deliveries take place in the middle of the night when facility staff are absent. OSFM proposes that the following revision be made in this regard:

### **Section 174.310 Bulk Loading and Unloading for Railroad Tank Cars and Tank Vehicles**

- a) Any kind of loading or unloading activity, either to or from railroad tank cars and tank vehicles, or any other kind of loading or unloading into or out of USTs, shall require compliance with Section 174.300 and the following minimum requirements.
- 9) Owners, ~~or~~ operators and delivery personnel shall ensure that releases due to spilling or overfilling do not occur and that all transfer operations are monitored constantly to prevent overfilling and spilling.

**(74) COMMENT:** - Several comments pointed out that there are fleet (particularly trucking) facilities that have USTs larger than 30,000 gallons, but that the proposed rules restrict all fleets to USTs of 30,000 gallons or less.

**OSFM RESPONSE:** OSFM believes that size limits currently applicable to USTs at service stations should continue to exclude fleets and industrial facilities that do not conduct any retail sales of regulated products. Accordingly, OSFM proposes revisions that would exclude these facilities from the 30,000-gallon limit, although mixed or hybrid facilities having direct or indirect connection to dispensers for retail sales would still be subject to the limit. (See, for example, Dual Purpose USTs in proposed Section 174.320)

#### **Section 174.400 Dispensing Requirements at Motor Fuel Dispensing Facilities**

- b) With the exception of industrial or fleet facilities with no connection to any UST from which regulated products are sold at retail, the ~~The~~ capacity of any UST installed at a motor fuel dispensing facility shall not exceed 30,000 gallons.

#### **Section 175.450 Pumps, Dispensers and Other Product Transfer Equipment**

- e) Dispensers. All dispensers shall be required to comply with the following:
  - 3) Size Limits. With the exception of industrial or fleet facilities with no connection to any UST from which regulated products are sold at retail, dispensers ~~Dispensers~~ shall not be connected, directly or indirectly, to any tank that is over 30,000 gallons capacity.

**(75) COMMENT:** - One comment suggested that having an emergency shutoff 20 to 100 feet from each dispenser might be difficult to meet at gas stations with high traffic.

**OSFM RESPONSE:** OSFM believes that an extra shutoff at the next island over will be sufficient to meet the requirements for a given island. That is, any shutoff that is anywhere within the 20-100 foot distance will meet the requirement, whether it is at the control station, on an opposite island, or some other location. Additional shutoffs would then be required for islands further out than 100 feet. Given this, OSFM believes there is no need to revise the proposed UST rules on this point. The text of the

proposed rule as revised would allow facilities additional time to come into compliance with any changes in emergency shutoff requirements that might affect them. See the discussion for comment 4.

**(76) COMMENT:** One comment stated that for marine dispensing facilities, the proposed rule language is confusing in that the sign must refer to a “Master Electrical Shutoff” while the rule language itself refers to “emergency shutoff switches”. The difference in language originates from the grandfathering approach used for signage at existing marine facilities, whereby OSFM wishes to allow older facilities to use the term in the present UST rules.

**OSFM RESPONSE:** OSFM believes a simple statement in the paragraph, clarifying that these terms mean the same thing, will take care of this issue: “A master electrical shutoff means an emergency shutoff switch.” OSFM also believes that facilities should have the option to elect which term to use, which would allow phase in of the new term but not require replacement of all existing emergency shutoff identifiers. OSFM recommends that the language as revised for marinas read as follows:

Each emergency shutoff switch shall be identified by an approved sign on all-weather materials stating "MASTER ELECTRICAL SHUTOFF" or “EMERGENCY SHUTOFF SWITCH” in 2 inch red capital letters.

**(77) COMMENT:** One comment noted that current OSFM rules require a kerosene dispenser to be on its own island while the proposed rules changed this to a required separation distance of 20 feet, and then asked whether this change would apply to existing dispensers.

**OSFM RESPONSE:** OSFM believes existing kerosene dispensers in compliance with current UST rules, that is, on separate islands but less than 20 feet apart, should be grandfathered as follows:

### **Section 175.260 Miscellaneous General Operating Requirements**

- f) Kerosene dispensers installed after April 1, 1995 shall not be located on the same island. After the effective date of these rules, such dispensers shall not be located as, or within 20 feet of, any petroleum or hazardous substance dispensers. Labeling of kerosene dispensers shall comply with the Space Heating Safety Act [425 ILCS 65]..

**(78) COMMENT:** - One commentator expressed concern over a piping removal being categorized as a UST upgrade rather than a UST removal if in the same trench (under paragraph (k)(3) of the permits Section (175.300(k)(3)). Pointing out that this has the effect of substituting a contractor certified and experienced in the removal (decommissioning) of contaminated product piping with one potentially certified and experienced in new installations only, the commentator suggested that such upgrade contractors might also fail to have the proper safety equipment, such as explosive meters.

**OSFM RESPONSE:** OSFM does not agree that every small piping removal justifies a mandatory OSFM inspection before work may proceed, but does agree that such removal work be done by

personnel certified in the removal (decommissioning) module. This will ensure that persons experienced in working with contaminated piping are the persons doing this kind of work. See the discussion for comment 81. OSFM proposes the following revisions:

**Section 175.300 Permitted UST Activity**

Any UST activity or other permitted activity under this Section must comply with the following:

- k) Miscellaneous
  - 3) When piping is removed from an existing trench and replaced with new piping installed in another location at a site, both a removal and upgrade permit are required. However, where piping is removed from an existing trench and replaced with new piping installed in the same trench, only an upgrade permit is required, [although at least one employee certified in the decommissioning module shall be required for the work.](#)

**Section 175.APPENDIX B The Type of OSFM Permit Required for Specific Permitted UST Activities**

Pursuant to Section 175.300 and 41 Ill. Adm. Code 174.440 and 174.450, the UST activities listed in this Appendix B will require the kinds of permits listed in this chart.

<b><u>Type of UST Activity</u></b>	<b><u>Permit Required</u></b>
Removal of underground piping when the piping is replaced or repaired all within the same trench	Upgrade permit ( <a href="#">requires at least one employee certified in the decommissioning module</a> )

**(79) COMMENT:** - One commentator asked how cleaning a tank interstice following a release would be handled.

**OSFM RESPONSE:** This can be handled like tank precision testing, for which no permit is required but must nonetheless be scheduled with OSFM in advance. The work would require the same contractor certification and licensure and the OSFM inspection would verify the completion and success of the cleaning. OSFM proposes the following revisions to clarify this procedure:

**Section 175.400 Design and Construction of USTs**

- a) Tanks. Any newly installed or replaced underground tank shall be of double-wall construction and equipped with interstitial monitoring that meets the applicable requirements of Section 175.630(g) and 40 CFR 280.43(g) for all permits issued on February 1, 2008 and after. Any release into the interstice of any double-wall tank shall require that the interstice be cleaned under accepted engineering practices before the tank can be put back into service. [Although such work does not require a permit, the work must be scheduled with OSFM under Section 175.320 and the work must be done by a contractor that meets the licensing and certification requirements for a tank precision tester under 41 Ill. Adm. Code 176.470 and Part 172.](#) (See [also](#) Sections

~~175.300(f) and~~ 175.630(g)) If the interstice cannot be cleaned so as to allow proper functioning of the interstitial monitoring, then the tank shall be removed within 60 days. Third-party listed, factory manufactured, jacketed tanks having an interstitial space capable of being cleaned following any contamination shall be considered as meeting the double-wall requirement.

### **Section 175.420 Piping**

- b) Installed underground piping shall be of double-wall construction and equipped with interstitial monitoring. . . Any release into the interstice of any double-wall piping shall require that the interstice be cleaned under accepted engineering practices, ~~under an OSFM permit~~, before the piping run can be put back into service. Although such work does not require a permit, the work must be scheduled with OSFM under Section 175.320 and the work must be done by a contractor that meets the licensing and certification requirements for a tank precision tester under 41 Ill. Adm. Code 176.470 and Part 172. (See ~~also~~ Sections ~~175.300(f) and~~ 175.640.) If the interstice cannot be cleaned so as to allow proper functioning of the interstitial monitoring, then the piping shall be replaced. European suction systems are exempt from the requirement for having double-wall product piping, as well as from the requirement for having interstitial monitoring.

### **Section 175.320 Scheduling of UST Activity**

- d) PAI (Time and Date Certain) Activity. PAI permitted activity includes. . . Although tank and line tightness testing, ~~and~~ cathodic protecting testing, and the cleaning of tank and line interstitial spaces following a release are not permitted activities, they must still be scheduled with OSFM pursuant to subsection (d)(2). For a listing of OSI activities, see Appendix A.

### **Section 175.300 Permitted UST Activity**

Any UST activity or other permitted activity under this Section must comply with the following:

- f) Actions Requiring a Permit. A permit is required to do any of the following to USTs:

~~15) — cleaning of interstitial spaces of tanks or piping after a release;~~

~~15)46)~~ connection of a new or existing bulk load-out to a new or existing UST at a motor fuel dispensing facility.

### **Section 175.APPENDIX B The Type of OSFM Permit Required for Specific Permitted UST Activities**

Pursuant to Section 175.300 and 41 Ill. Adm. Code 174.440 and 174.450, the UST activities listed in this Appendix B will require the kinds of permits listed in this chart.

<u>Type of UST Activity</u>	<u>Permit Required</u>
Installation of a complete UST with all components, or installation of just the tank	Installation permit
<del>Cleaning of interstitial spaces of tanks or piping following a release</del>	<del>Repair permit</del>

**(80) COMMENT:** - Several individual comments objected to the deletion of references to OSHA requirements in various sections, raising safety concerns.

**OSFM RESPONSE:** These changes were done to avoid duplication of general references to OSHA requirements that apply to all UST work being done. Notwithstanding, OSFM proposes that certain references regarding confined space entry be put back into the text as follows:

**Section 175.830 Removal of USTs**

- a) For tank removals, the following requirements and procedures shall be followed:
  - 8) Regularly monitor the tank atmosphere and the excavation area with a combustible gas indicator for flammable or combustible vapor concentration until the tank is removed from both the excavation and the site. 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 MSDS sheets must be on site.](#)

**Section 175.840 Abandonment-in-Place**

- d) For UST abandonment-in-place, the following requirements and procedures shall be followed:
  - 8) 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 MSDS sheets must be on site.](#)

**(81) COMMENT:** - One individual commentator observed that he has witnessed tank entry and spark-generating UST work occurring while gasoline vapors are being discharged at adjacent USTs as a result of fuel deliveries being made. He suggested that the proposed rule address this for lining and other UST work.

**OSFM RESPONSE:** OSFM notes a recent explosion resulting in a worker’s loss of a limb while the worker was using a circle saw on a UST at a facility in another state, and notes that these risks of explosion or fire likewise apply to work done while fuel deliveries are going on. OSFM proposes the following revisions to the proposed rules:

### **Section 174.310 Bulk Loading and Unloading for Railroad Tank Cars and Tank Vehicles**

a) Any kind of loading or unloading activity, either to or from railroad tank cars and tank vehicles, or any other kind of loading or unloading into or out of USTs, shall require compliance with Section 174.300 and the following minimum requirements.

7) No fuel deliveries shall be made while tank entry work is going on at the same UST facility unless the facility can demonstrate that

A) the fill port to be fueled is not connected to the UST being worked on,

B) no other connection directly or indirectly exists between the UST being worked on and the UST receiving the fuel, and

C) the conditions for delivery are safe, including the distance between the UST being worked on and the UST receiving fuel.

78) Smoking on or about any tank truck while loading or unloading any flammable or combustible liquid is forbidden. Extreme care shall be taken during unloading operations to avoid deliveries where spark generating equipment is being operated nearby, to avoid other practices involving a risk of fire, and to keep fire away, and to prevent persons in the vicinity from smoking, lighting matches or carrying any flame or lighted cigar, pipe or cigarette.

**(82) COMMENT:** - Proposed rules require that an underground tank removed without an OSFM permit shall be placed back into the excavation and covered with backfill until it can be properly removed. Chances are pretty good that the illegally removed UST was not properly vapor freed and cleaned prior to the removal. If the UST will be required to be placed back into the excavation and covered up it also needs to be vented.

**OSFM RESPONSE:** The primary rationale for requiring that an illegally removed tank be put back into the excavation is one of safety. OSFM would not want a tank transported in an explosive state, and if the tank were to explode, an explosion in the excavation is less dangerous than one on top of the ground. Likewise, safety is the rationale for also requiring that the tank be vented until decommissioning can take place through proper means using properly trained personnel. OSFM recommends the following revision:

### **Section 175.830 Removal of USTs**

a) For tank removals, the following requirements and procedures shall be followed:

22) Any tank being removed without an OSFM permit will be required to be put back in the excavation and vented to 12 feet above grade if it has not been removed from the site and covered with backfill until a permit and licensed contractor can remove it properly.

**(83) COMMENT:** - One comment suggested that it would not be a good idea for shear valves to be tested annually because the shear valves might easily be damaged as a result of the testing process, even when tested by properly qualified personnel. The comment also asked who would be qualified to conduct such testing of the shear valves.

**OSFM RESPONSE:** OSFM agrees to change the shear valve requirement from being tested to being visually inspected. The owner/operator can check to see if the dispenser and shear valve appear to be in a correct position. See also the discussion for comment number 5. OSFM recommends the following revisions to the proposed text:

- h) All emergency shutoff switches shall be tested, and all shear valves visually inspected, ~~shall be tested~~ at least annually to ensure that they are functioning properly and that the dispenser is mounted properly. Documentation of annual testing shall be kept at the motor fuel dispensing facility for two years and available for examination by a representative of OSFM. If documentation of annual testing of emergency shutoff switches is not available, the facility shall be subject to demonstration of this the equipment during inspection by OSFM.

**(84) COMMENT:** Applying a standard that requires the dispensing area to be “readily visible” or imposing a closed-circuit camera requirement where the self-service attendant’s view of the dispenser is “permanently obstructed” is difficult to interpret. The commentator suggested that OSFM provide additional guidance on this issue.

**OSFM RESPONSE:** The “readily visible” standard implements the current OSFM practice. OSFM plans to develop a flyer showing examples of when the standard is and is not met and post that on its web site after this rulemaking is concluded. OSFM observes that additional flexibility could be provided. In particular, OSFM observes that attendants often do not pay any attention to what is going on outside other than to activate the dispensers. Given this, and to provide owners with additional flexibility in complying with these requirements, OSFM recommends that a closer emergency shut-off for fuel dispensers be an alternative in lieu of the camera requirement, which would offer additional protections. OSFM recommends the following revisions to the language:

**Section 175.210 Attended Self-Service Motor Fuel Dispensing Facilities and Islands**

- g) All dispensing units shall be readily visible from the control station without assistive devices. However, as an alternative, in the event that the attendant's view of a dispenser is permanently obstructed, or if a dispenser is located so that activity at the dispenser is not readily visible, closed-circuit cameras that provide a view of each side of the dispensing unit and project an image on a screen at least 6 inches in diagonal located at the control station may be used. The cameras shall be allowed to sweep to provide a view of multiple dispensing locations, but must provide a view on the screen of each dispensing unit at least every 30 seconds. In lieu of the closed-circuit camera, the facility may elect to have an emergency electrical shutoff switch that shall be located at least 20 and not more than 50 feet from the dispenser that has a permanently obstructed

view. Using an emergency shutoff switch in lieu of the closed-circuit camera pursuant to this subsection (g) must be approved in advance by OSFM. If a closed-circuit camera or viewing screen is inoperable and cannot provide surveillance of dispensing units to the attendant at the control station, and an emergency electrical shutoff switch has not been approved by OSFM and provided in lieu of the camera as provided in this subsection (g), self-service dispensing of fuel at these dispensers is prohibited.

**(85) COMMENT:** A number of comments pointed out that existing facilities often do not meet the height requirement that warning signs be 4 ½ to 6 feet above the ground and asked if existing facilities would be grandfathered or would they have to be relocated.

**OSFM RESPONSE:** OSFM observes that current UST rules impose a warning sign height requirement for some types of facilities but not for others. Upon review, since all signs must be “clearly visible” and also have signage print at least 7/8-inch high, existing warning signs can be grandfathered without compromising safety. OSFM recommends that where the height requirement is not met for existing facilities, that the height can be approved by OSFM in the alternative, where, for example, the height requirement is not feasible or where moving the signs would not result in any significant increased visibility for the signage. OSFM proposes that a revision to these height requirements require that the signs be:

mounted not less than 4 feet nor more than 6 ½ feet from the bottom of the sign to the ground, or at a height as approved by OSFM.

**(86) COMMENT:** Several comments asked what the maintenance and testing requirements would be for various systems at unattended self-service facilities, including emergency shutoffs and systems for fire detection and fire suppression and automatic notification of the local fire department.

**OSFM RESPONSE:** OSFM recommends that testing of emergency shutoff switches should be consistent throughout the rules, regardless of the type of facility, and therefore recommends that the requirements are clarified as necessary to make this clear. See the proposed revision for emergency shutoff testing as noted in comments 5 and 83.

Testing of automatic notification, fire detection, and fire suppression systems is to be done by having the owner or operator simply verify on an annual basis that the system is working, and conduct any necessary repairs identified during testing. The owner is free to conduct these verifications, although the owner can also hire a contractor to do this if desired. For the text concerning these verifications, see the discussion for comment 5 above.

**(87) COMMENT:** One comment asked whether the emergency shut off switches should only be able to be reset by a facility employee using a key or other secure device. The comment cited safety concerns over allowing the public to reset the switch before the emergency causing the pumps to be shut off had been corrected.

**OSFM RESPONSE:** OSFM agrees with the comment and notes that the described protection is found only in the proposed rules for attended self-service facilities. OSFM recommends that the requirement that an emergency shutoff only be reset by a facility employee using a key or other secure device be made applicable to other kinds of dispensing facilities, using the following language:

Resetting from an emergency electrical shutoff condition shall require manual intervention by the owner or attendant. Resetting the emergency shutoff switch shall be accomplished only after the condition that caused it to be activated has been corrected.

**(88) COMMENT:** Noting that under the rules as proposed, fleet facilities must abide by requirements for unattended facilities including detailed warning signs, the comment asked whether fleet facilities, which are new to the self-service program, would now have to install the warning signs for unattended.

**OSFM RESPONSE:** OSFM agrees with the concern in light of the fact that these facilities do not conduct retail sales of fuels to the public and that dispensing is done by fleet facility employees. OSFM recommends that fleet facilities be exempted from certain requirements for unattended self-service dispensing by the public, specifically requirements for installing detailed warning signs and for installing either a fire detection or a fire suppression system. This position avoids the more significant requirements in terms of cost in light of the fact that only facility employees are doing the dispensing and fuels are not being sold to the general public. However, it retains the other requirements, for example, requirements for having an emergency shutoff located 20-100 feet from each dispenser with a sign identifying the emergency shutoff switch. In this way, safety is not compromised and yet a cost savings is achieved in implementing the rule.

**(89) COMMENT:** One comment suggested that the language regarding tank entry requirements in the tank lining section wrongly implied that workers should only enter a tank with 5% or less oxygen concentration.

**OSFM RESPONSE:** A tank decommissioning standard, to be met before spark-generating equipment can be used and involving a maximum of 5% of the lower explosive limits (LEL) or 5% or less oxygen concentration, is stated elsewhere in the section. Because the requirement is stated elsewhere in the Section it can simply be deleted from the tank entry precautions as listed and OSFM recommends that revision.

**(90) COMMENT:** One comment pointed out that tank entry safety precautions for tank lining failed to mention safety requirements involving use of a tripod, which provides a mechanism to immediately pull out a worker overcome by the vapors inside.

**OSFM RESPONSE:** OSFM agrees with this comment and recommends that language concerning a tripod and related equipment be inserted into the reference involving the use of a full face enclosure

and safety harness. The use of the tripod and related equipment is considered the standard practice in the industry at present. OSFM recommends that language be revised to read as follows:

At all times, personnel entering the tank shall be equipped with positive pressure air supplied equipment with full face enclosure and safety harness connected to a safety line held by an attendant located outside the tank and using a tripod with a mechanical winch adequate to lift the person and equipment working inside the tank.

**(91) COMMENT:** One comment asked whether a pressure gauge for inert gas could be made to work at the temperatures involved in using liquid nitrogen, which is commonly used to inert tanks during vapor freeing procedures immediately prior to tank entry work.

**OSFM RESPONSE:** Upon review, it is believed that pressure gauges are not available that can work at the temperatures involved when liquid nitrogen is being used to vapor free the tank. Therefore, OSFM recommends that the use of liquid nitrogen in this context be exempted from the requirement for having and using a pressure gauge during the process of vapor freeing the tank. All other methods of vapor freeing the tank can remain subject to the requirement for a pressure gauge.

**(92) COMMENT:** One comment asked whether welding on the inside of the tank could be used to cut out and move existing striker plates.

**OSFM RESPONSE:** The striker plate is placed below the fill port and other tank access ports to prevent metal or other objects from cracking or compromising the tank wall below such entry points when work is being done. Any welding to move such striker plates tends to compromise the tank wall integrity at those points. Since the plates are typically located at the bottom of the tank, a release could then easily occur. This makes those points more susceptible to corrosion and to tank failure. Since striker plates can easily be glued in place, there is no justification for weakening the tank wall integrity in this way. However, OSFM believes this issue exists not just for lining but for all tank repairs. OSFM recommends the following revisions to the rules as proposed, as shown by strike out and underline:

#### **Section 175.500 Interior Lining and Lining Inspection of USTs**

- A) Testing shall be done to check the thickness of the shell and heads of the tank. The average metal thickness shall be at least 75% of the original tank metal thickness. Ultrasonic testing shall be done in accordance with Chapter B7 of NLPA Standard 631.
- ii) No welding or cutting will be allowed inside the tank ~~to repair holes or patch thin areas in any part of the tank.~~

#### **Section 175.700 Repairs Allowed**

- a) Repairs to USTs shall be properly conducted in accordance with manufacturer's recommended procedures and 41 Ill. Adm. Code 174 through 176. For repairs involving

tank penetration or tank entry, the vapor freeing and inerting procedures and related requirements of Sections 175.500(a) and (c) and 175.830(a) shall be followed. No welding or cutting will be allowed inside the tank in conducting repairs.

**(93) COMMENT:** One comment pointed out that the language as proposed failed to expressly state what must be done where cathodic protection fails to meet testing standards under the Cathodic Protection Section. The comment stated that the proposed rules should provide that the particular cathodic protection system must be upgraded if cathodic protection readings fall below minus 850 MV (millivolts) upon testing.

**OSFM RESPONSE:** OSFM agrees with this comment and recommends that the following language be added to the tail end of the lead-in for subsection 175.510(f)(2)(B): “Cathodic protection shall be repaired or replaced if it fails to meet the standards provided in this subsection (f)(2)(B).”

**(94) COMMENT:** One comment stated that OSFM should be on site for tank entry and cleaning of tanks prior to a change-in-service.

**OSFM RESPONSE:** OSFM does not at this time regulate tank entry for cleaning through a properly installed manhole and has no plans to expand its regulatory program to do that in the future. This activity is regulated by OSHA at this time. To the extent that the change-in-service section as proposed implies that OSFM would be inspecting these tank cleanings, OSFM recommends that the language as proposed be revised:

#### **Section 175.820 Change-in-Service of USTs**

- d) ~~Cleaning of tanks for any change-in-service shall require compliance with the vapor freeing and inerting procedures and related requirements of Sections 175.500(a) and (c) and 175.830(a) including compliance with API 2015. For all activity related to a change-in-service, ~~In addition,~~ the equipment must be compatible with the product being stored and notification of change-in-service must be provided on OSFM approved forms (found at [www.state.il/OSFM/PetroChemSaf/Notify.pdf](http://www.state.il/OSFM/PetroChemSaf/Notify.pdf)) to OSFM not less than 30 days prior to the change-in-service.~~

**(95) COMMENT:** One comment suggested that UST notifications show the proper street address of the UST facility and owner, which would assist with receipt of notices since post office boxes can change.

**OSFM RESPONSE:** OSFM agrees with this comment. Having the full street address will provide better information on the exact location of the USTs, which would assist with questions about UST ownership or when a prospective buyer is looking at the facility. Typically the address on the notification form is what is entered by OSFM into the UST database made available to the public.

OSFM recommends that the following language be inserted into subsection 176.440(c), regarding the content of UST notifications:

The owner shall provide the proper street address for the owner and for each facility.

**(96) COMMENT:** One comment asked about the proposed language in Part 177 concerning OSFM issuance of the certification of compliance with OSFM rules so that a facility may begin or continue dispensing and other active operations. The comment asked why shouldn't the language also reference that exemptions to the ban on placing fuel in a tank prior to issuance of the certification include not only fuel placed for tank ballast but also fuel placed for the purposes of tank tightness testing. This testing is required to bring inactive USTs back into use.

**OSFM RESPONSE:** OSFM agrees with this comment, and points out that the two exemptions are noted elsewhere in the proposed rules but should both be stated in Section 177.105. OSFM recommends that the following revision be made:

#### **Section 177.105 Deposit Prohibited**

- b) Effect of Red Tag. Beginning December 22, 1998, no person shall deposit or arrange for or allow another person to deposit petroleum, petroleum product, hazardous substances or regulated substances into any UST that displays evidence that the UST is not in compliance with the applicable rules of OSFM. A depositor may make one deposit of a regulated substance to a newly installed or newly lined tank to provide ballast, or to conduct tank or line tightness testing if approved by OSFM. That regulated substance shall not be sold or dispensed until the required decal is obtained.

**(97) COMMENT:** One comment questioned whether the current OSFM practice regarding fill caps would change as a result of proposed language stating that fill caps on fill pipes have to be locked at all times.

**OSFM RESPONSE:** OSFM observes that the mandatory locking of fill caps at all times could pose problems with truck stops and fleets that frequently have fuel deliveries when facility staff are not around. Such a requirement may also pose inspection problems for OSFM at facilities that are closed or where facility staff are not present and facility owners cannot be reached through reasonable efforts, but tank liquid levels must be measured to ascertain the status of release detection compliance obligations. OSFM recommends the following revision to the language as proposed:

#### **Section 175.445 Fill Pipes**

- c) For new and existing facilities, each fill pipe shall be closed by a gasketed screw cap or other tight fitting gasketed cap of a type that can be locked. ~~The cap shall be locked at~~

~~all times when a filling or gauging process is not being performed.~~ It is the responsibility of the owner/operator to maintain the security of the UST.

**(98) COMMENT:** One comment asked how might dispensing hoses be required to be taken out of service when observations by OSFM inspections staff note defective conditions which require that the hose be taken out of service under subsection 175.450(e)(4) as proposed. In particular, would the OSFM staff bag the hose nozzle for nonuse at the time of inspection or might some other procedure apply?

**OSFM RESPONSE:** By way of background, the proposed rule criteria for when a hose is defective are taken directly from *Hose Technical Bulletin (IP-11-8)*(2000 Edition, Rubber Manufacturer's Association). This publication is the industry standard. The publication does not provide a schedule for how quickly a hose must be taken out of service once a defect is found, though it does provide that "any hose that is suspect shall be removed from service". *Id.* at p. 7. Diesel hoses in particular stain easily and may appear to have leaked even when newly installed. Such stains can be the result of installing the new hose.

Based upon the foregoing, OSFM believes that a hose nozzle should be bagged by the owner/operator only when the hose is determined to be "actively leaking". This could be at any time, including during an OSFM inspection. All other defects must then be corrected within the compliance period (60 days under the revised text, see comment 108 below). OSFM recommends the following revisions to the proposed language on this point:

**Section 175.450 Pumps, Dispensers and Other Product Transfer Equipment**

- e) Dispensers. All dispensers shall be required to comply with the following:
  - 4) Hoses and Reels. Mechanical retractable devices are required on dispenser hoses in excess of 18 feet in length. Hose length on mechanical retractors shall not exceed 50 feet without written approval of OSFM. Detection of any of the following conditions indicates permanent damage and shall require that the hose be replaced (with the nozzle immediately bagged if any portion of the hose or nozzle is actively leaking): immediately removed from service:
    - A) hose cuts, abrasions or cracks in the hose cover that penetrates to the reinforcement;
    - B) blisters or loose cover;
    - C) soft spots in the hose, particularly adjacent to the coupling;
    - D) indication of coupling slippage or irregular coupling alignment; or
    - E) flattened or kinked hose resulting in permanent deformation.

**(99) COMMENT:** One comment asked about Section 175.650, concerning Release Detection and Cathodic Protection Recordkeeping, stating that the 3<sup>rd</sup> sentence in the lead-in provides that the failure to maintain or produce the records required under that section may result in the OSFM's issuance of a red tag for the tank or tanks at issue. The comment asked whether this procedure would be an immediate red tag of the tanks during the certification audit (2-year) inspection, or would the compliance process be allowed to take place prior to red tagging the tank, allowing 30 days for compliance.

**OSFM RESPONSE:** OSFM recommends that the language clearly reflect the current OSFM regulatory practice, which allows a facility time to conduct the required testing and then produce the records in order to avoid having the UST red-tagged for noncompliance with OSFM rules. Under the proposed revisions as suggested by OSFM (see comment 108 below), this would involve giving the facility 60 days to conduct the testing and have the records reflecting the results of the testing at the facility upon re-inspection at the end of the 60 days. OSFM recommends that the language as proposed be revised as follows:

**Section 175.650 Release Detection and Cathodic Protection Recordkeeping**

UST owners or operators shall maintain records in accordance with 41 Ill. Adm. Code 176.430, demonstrating compliance with all applicable Sections of this Subpart F. Unless stated otherwise below, all records shall be maintained for at least the ~~2~~<sup>3</sup>-most recent years and shall be kept on site or available within 30 minutes or less via fax, email or other transfer of information. The failure to maintain or produce the records required under this Section may result in OSFM's issuance of a red tag for the tank or tanks at issue pursuant to 41 Ill. Adm. Code 177 indicating non-compliance with the rules of OSFM and prohibiting any further deposit of regulated substances into the tank or tanks subject to a red tag in the event that testing with corresponding documentation is not forthcoming within 30 days.

**(100) COMMENT:** Several comments noted that requirements for portable fire extinguishers in Parts 174 and 175 now include compliance with NFPA 10 under the proposed rules. These comments asked what NFPA 10 requires as to minimum requirements for size, type, number required, placement locations, required signs, testing, and the like, and suggested that all of these pieces of information should be provided in the proposed rule text.

**OSFM RESPONSE:** OSFM plans on developing a guidance flyer or chart summarizing the requirements of NFPA 10 in an easy to use format to be posted on its web site and available for hand-out during facility inspections by OSFM. OSFM does not see the need to revise the rules as proposed on this point, as the comment merely reflects an informational need and not a problem with the rule text or regulatory position involved.

**(101) COMMENT:** One comment asked OSFM to define what items would be shut off by the emergency shutoff switches when activated in the event of an emergency.

**OSFM RESPONSE:** The Part 174 definitions, made applicable to the other proposed UST rule provisions in Section 174.100, provide a definition of an emergency shutoff switch that precisely defines what items are to be shut off when the switch is activated.

**(102) COMMENT:** Several comments suggested special or enhanced enforcement procedures for violations of the self-service requirements at motor fuel dispensing facilities, including issuance of tickets and additional fines for violations.

**OSFM RESPONSE:** Other than clarifying that the red tag procedure can apply to self-service requirements involving items that are directly connected to the UST (see comment 69 above), OSFM does not plan on providing for additional enforcement procedures or fines at this time. Formal enforcement procedures exist under the Gasoline Storage Act and are applicable to self-service violations, and allow for referral of unresolved violations to the Office of the Attorney General for further enforcement action after opportunity for a hearing.

**(103) COMMENT:** One comment asked whether a “stick-on” sign meets the proposed rule language requiring that warning signs at attended self-service motor fuel dispensing facilities be made of “all-weather rigid material” (subsection 175.210(n)).

**OSFM RESPONSE:** OSFM proposes that the proposed rule language be revised to merely require that the signs, for all types of self-service facilities, simply be made of all-weather material. The requirement that the signs be “rigid” is not necessary in light of the requirement that the signs be “clearly visible to all self-service customers”.

**(104) COMMENT:** Several comments suggested various changes to the wording of the warning signs required at motor fuel dispensing facilities, including warnings advising customers not to leave the vehicle unattended while fueling and regarding static electricity risks related to reentering while fueling. One comment also suggested that full-service station warning signs be expanded to warn that while fueling the engine be shut off and there be no smoking, as is the case for attended and unattended self-service signs.

**OSFM RESPONSE:** OSFM does not plan on requiring changes to required warning signs at this time. The current language warns appropriately and implementing changes would require substantial resources of both OSFM and the regulated community without a significant increase in safety. OSFM also believes that expanded signage is not required for full-service islands and facilities given that dispensing is not done by the public but only by the attendant.

**(105) COMMENT:** One comment suggested clarification of the location of the emergency switch at the control station for attended facilities, whether the control station and that switch must be inside or outside the convenience store or other shelter typically provided for attendants.

**OSFM RESPONSE:** By way of background, current UST rules require that there be an emergency shutoff at the control station and that each emergency shutoff be interconnected with the other shutoffs so that activation of any one shutoff terminates power to all dispensing units and pumps. In addition, current rules also utilize a rule adopted from NFPA 30A, the most common standard in the industry, that each dispenser must have an emergency shutoff switch located more than 20 feet and not greater than 100 feet away, although there is a potential conflict in the current rules as to whether the 20-foot requirement applies to attended facilities. (See 41 Ill. Adm. Code 170.428(g) and 170.150(d)(12)).

OSFM has begun to receive various requests concerning alternate designs for motor fuel dispensing facilities. OSFM agrees that additional flexibility in station design can be offered to facilities without compromising safety, subject to certain limitations. First, the use of some kind of security booth for attendants is a common current facility design. When a security booth exists, typically the attendant remains in that security booth and, therefore, should not be made to exit up to 2 sets of doors before the emergency shutoff switch can be activated in the event of an emergency. OSFM feels that safety concerns require that the switch be inside the attendant's security booth where such booth is provided. Second, OSFM has observed a small but growing number of situations where the control station and booth for the attendant has been placed adjacent to the dispenser. In these situations and others where the 20-foot rule cannot be met, the NFPA standard and general fire protection principles counsel that an additional emergency shutoff be installed at a control station or other location that is easily accessible to the attendant and at least 20 feet away from the facility. In this way the emergency shutoff can still be reached in the event of a fire at the dispenser. Outside of these two situations, OSFM believes it should be up to the individual facilities to place the shutoff so long as the 20-100 foot rule is met and the shutoff is easily accessible to the attendant. In sum, in answer to the question, under the proposed rule as revised and subject to the 2 exceptional scenarios described herein, the shutoff can be outside or inside. In addition, so long as the shutoff is within the 20-100 feet of the dispenser and easily accessible to the attendant as required, the emergency shutoff can be at some location other than at the control station. OSFM proposes that the language on emergency shutoffs at attended self-service facilities be revised to state as follows:

**Section 175.210 Attended Self-Service Motor Fuel Dispensing Facilities and Islands**

- b) Every self-service motor fuel dispensing facility shall maintain a control station in a location readily accessible to the attendant. Separate fueling areas more than 100 feet apart and designated by signage so indicating may have separate control stations if each separate fueling area complies with this Subpart B and 41 Ill. Adm. Code 174, 175, and 176.
  
- d) Conspicuously marked and easily accessible emergency shutoff switches must be provided at each facility and shall be:
  - 1) Located so that at least one emergency shutoff is at least 20 feet but not more than 100 feet from each dispenser;

- 2) Interconnected so that activation of one shutoff activates all the shutoffs whenever more than one emergency shutoff switch is provided.
- 3) Equipped with an additional emergency shutoff at the control station, which shall be conspicuously marked and readily accessible to the attendant, whenever the control station is less than 20 feet from any dispenser or a security booth is provided for the attendant; such emergency shutoff shall be located in a position to allow all dispensing devices to be readily visible to the attendant, or as approved by OSFM, and where a security booth is provided, the control station and emergency shutoff shall be inside the security booth.
- 4) Compliance retrofits will be due to be completed one year after the effective date of these rules or as agreed by OSFM.

**(106) COMMENT:** One comment suggested that overfill prevention equipment should be tested yearly, noting that other UST equipment must be tested typically annually where the equipment's functionality cannot be verified merely by a visual inspection.

**OSFM RESPONSE:** OSFM believes that there is potential for damage to these systems even when tested by a certified contractor, given their design and operation. US EPA is also looking into this issue and OSFM expects that there may be a federal rule change or that at least some additional federal guidance may become available at some point in the near future. Meanwhile, until further guidance is provided by US EPA, OSFM plans to continue the current regulatory practice whereby the owner/operator must replace the device in the event a contractor or the owner/operator observes evidence of an overfill that is not prevented. This interim position is based on the fact that this equipment is tested when installed and that there is a risk of damaging the equipment during the testing process.

**(107) COMMENT:** One comment suggested that field-installed linings be allowed for fiberglass tanks only, for product compatibility purposes only.

**OSFM RESPONSE:** See the response to Comments 14, 18, and 35 above.

## **V. CHANGES AFTER ADDITIONAL INTERNAL AGENCY REVIEW**

**(108) COMMENT:** Following internal discussion, OSFM re-reviewed proposed language providing for a 30-day compliance deadline for OSFM violation notices with the possibility of getting an extension in some cases.

**OSFM RESPONSE:** After reviewing internal concerns over the lack of agency resources to process the many extensions that would likely be needed, OSFM has concluded that allowing 60 days for

compliance but without an extension (the current practice) would be fairer and more efficient. OSFM proposes that the revised language read as follows:

### **Section 176.505 Enforcement Action**

All enforcement action shall begin with the issuance of an NOV by OSFM. The violations cited on the NOV shall be corrected within 60 calendar days after the issuance of the NOV. A copy of the NOV shall be left with any owner, employee or agent of the owner at the facility at the time of inspection or may be mailed or served by other legal process as in the case of a closed or unattended facility.

**(109) COMMENT:** The question came up as to whether all fuels in cans to which the label of gasoline or benzol could be applied<sup>1</sup>, and which are sold in the State of Illinois, must now be removed from all retail store outlets in the State for lack of compliance with the requirements of the Gasoline Receptacle Labeling Act, 430 ILCS 20/0.01 et. seq. (the “red can law”). OSFM re-reviewed the proposed rule language of proposed Part 174, which as written had provided guidance defining the scope of the applicability of that Act. Such review asked whether such law was intended to require manufacturers and sellers of such fuels and fuel-oil mixtures to repackage their consumer products throughout Illinois in a red container with a special label. Generally speaking, current practices by manufacturers do not meet the requirements of the red can law if that law was intended to apply to manufacturer-filled containers of fuel packing not intended for reuse.

**OSFM RESPONSE:** OSFM does not believe that the intent of the red can law was to ban sales of manufacturer-packaged fuel items not in red packaging where the packages are otherwise sold in a manner in compliance with NFPA 30 (Flammable and Combustible Liquids Code, 2008 Edition). Rather, OSFM believes the intent of the red can law was to require that containers used for dispensing gasoline or benzol by the public at gas stations and service stations be red and properly labeled. OSFM believes that NFPA 30, the most widely accepted national standard for such storage and use, provides sufficient protection against fire and other hazards. OSFM proposes that the applicable language be revised to add a condition that the red can law requirement applies only to containers into which gasoline or benzol is intended to be dispensed, as follows:

Any portable container into which gasoline or benzol is to be dispensed, except a tank wagon or truck, shall be red and shall be labeled “gasoline” or “benzol” as the case may be. These containers shall be labeled in letters at least ½" high. It shall be unlawful to use portable containers not complying with this Part. For purposes of the red container requirement under this Section, "portable" shall mean those containers that may be reasonably carried or wheeled

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<sup>1</sup> These would include fuels, for example, that in liquid phase are non-water miscible, with a flash point of approximately -45°F, a specific gravity of 0.72–0.76, an auto-ignition temperature between 536°F and 853°F, a boiling point between 100°F and 400°F, and a fairly narrow flammability range (with an LEL of 1.4 percent and UEL of 7.6 percent), and, in the vapor form would have a vapor density between 3 and 4.

by a single person by hand. Such containers would not include trailers or other wheeled devices intended to be pulled by a motor vehicle.

**(110) COMMENT:** Additional internal comparison of the proposed text to the current UST rules revealed that the proposed text had overlooked a current OSFM practice by which OSFM requires that contractors be ready for OSFM inspections of permitted work by the time OSFM inspections staff are first scheduled to arrive. This policy requires that the contractor conduct all necessary testing and corrections prior to the scheduled arrival time. If this policy is not adhered to, OSFM would not have the resources to conduct all the repeat inspections that would be required and no funding would be available to expand the number of inspections personnel to accommodate such requests.

**OSFM RESPONSE:** OSFM recommends insertion of the following revision to proposed Part 175 where appropriate:

Failure to meet the schedules also includes a failure to complete all UST work and site reparation necessary for the STSS inspection, including any necessary testing and related corrections, prior to the time the STSS is scheduled to first arrive.

## ***VI. MISCELLANEOUS***

OSFM received other individual comments that were either not applicable, not implementable, or requested changes that were already made in the text.

OSFM received one minor comment that was late. This comment, about 2 months late, was not responded to.

Once the comment period had been extended an additional 45 days, OSFM did not receive any requests to further extend the comment period.