

**1301:7-9-12 TEMPORARILY OUT OF SERVICE UST SYSTEMS AND TEMPORARILY CLOSED, PERMANENT ABANDONMENT, PERMANENT REMOVAL, REPLACEMENT, AND CHANGE IN SERVICE UST SYSTEMS.**

**(A) Purpose and scope.**

For the purpose of prescribing rules pursuant to sections 3737.02 and 3737.88 of the Revised Code, the fire marshal hereby adopts this rule to establish requirements for underground storage tanks containing regulated substances that are temporarily out of service, temporarily closed, permanently abandoned, permanently removed, replaced, and changed in service. This rule is adopted by the fire marshal in accordance with Chapter 119. of the Revised Code and shall not be considered a part of the "Ohio Fire Code." The following UST systems are exempted from this rule:

- (1) Any UST system holding hazardous wastes listed or identified under chapter 3745-51 of the Administrative Code, or a mixture of such hazardous waste and other regulated substances;
- (2) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under section 402 or 307(B) of the Federal Water Pollution Control Act (33 U.S.C.A. 1251 and following);
- (3) Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks;
- (4) Any UST system whose capacity is one hundred ten gallons or less;
- (5) Any UST system that contains a *de minimis* concentration of regulated substances;
- (6) Any emergency spill or overflow containment UST system that is expeditiously emptied after use;

- (7) Wastewater treatment tank systems;

(8) Any UST system containing radioactive material that are regulated under the Atomic Energy Act of 1954 (42 U.S.C.A. 2014 and following);

(9) Any UST system that is part of an emergency generator system at nuclear power generation facilities regulated by the United States nuclear regulatory commission;

(10) Airport hydrant fuel distribution systems; and

(11) UST systems with field-constructed tanks.

**(B) Definitions.**

For the purpose of this rule:

- (1) "Out of service" means the normal operation and use of the UST system is deliberately discontinued and no longer fulfilling its designed function.
- (2) "Temporarily out of service" means the normal operation and use of the UST system is deliberately, but temporarily, discontinued for ninety days or less.
- (3) "Temporary closure" means taking an UST system out of service for more than ninety days with the intention of returning the UST system to service within twelve months of when service was first discontinued.
- (4) "Permanent abandonment" means a permanent discontinuance of use of all or a portion of an UST system by leaving it in the ground rather than removing it.
- (5) "Permanent removal" means removing all or a portion of an UST system from the ground without replacement.
- (6) "Replacement" means the removal from the ground of an underground storage tank, all of the underground piping between an

underground storage tank and the dispenser unit, or both followed by replacement with an UST system or an unregulated underground storage tank system.

(7) "Change in service" means a change in the substances managed in the UST system from regulated substances to non-regulated substances, without permanent abandonment, permanent removal, or replacement of the UST system.

(8) "Native soils" means any soil or other materials outside of the backfill material used at the time of the original installation of the UST system.

(C) Certified installer and certified UST inspector.

Owners and operators shall not permanently remove, permanently abandon, initiate a change in service, or replace any UST system unless such permanent removal, permanent abandonment, change in service, or replacement is supervised by an installer certified pursuant to rule 1301:7-9-11 of the Administrative Code. No owner or operator shall permanently remove, permanently abandon, or replace any UST system unless such permanent removal, permanent abandonment, or replacement of any UST system performed by an installer certified pursuant to rule 1301:7-9-11 of the Administrative Code is inspected by an employee of the fire marshal, a certified fire safety inspector whose local fire agency has been delegated authority to conduct such inspections pursuant to rule 1301:7-9-15 of the Administrative Code, or a certified UST inspector who has been certified by the fire marshal to conduct such inspections pursuant to paragraphs (O) to (W)(3)(l) of rule 1301:7-9-11 of the Administrative Code, as appropriate, for activities the permit or this chapter require be inspected.

(D) Permit requirements.

(1) Before beginning a permanent abandonment, permanent removal, replacement, or change in service owners and operators shall notify the fire marshal in writing of their intent to permanently abandon, permanently remove, replace, or initiate a change in service, unless such action is in response to a corrective action pursuant to rule 1301:7-9-13 of the Administrative Code. Permit applications filed with the fire marshal shall fulfill the notice requirement of this paragraph.

(2) A permit shall be obtained by the owners and operators prior to engaging in any of the following:

- (a) A permanent abandonment.
- (b) A permanent removal.
- (c) A replacement.
- (d) A change in service.
- (e) A temporary closure.

(3) A permit for any of the activities described in paragraphs (D)(2)(a) to (D)(2)(e) of this rule shall be obtained from the local fire department that has jurisdiction over the location where the activity is to take place, provided that the local fire department has been delegated authority pursuant to rule 1301:7-9-15 of the Administrative Code. Otherwise, the permit shall be obtained from the fire marshal.

(4) Inspection fees for permits obtained from a local fire department that has been delegated authority pursuant to rule 1301:7-9-15 of the Administrative Code shall be established by the local fire department. For permits obtained from the fire marshal the permit fee shall be thirty-five dollars for each location

described in the permit application. If a fire marshal employee will be conducting the required inspection, the inspection fees are as follows.

- (a) Permanent abandonment inspections conducted by a fire marshal employee shall be billed at a rate of sixty dollars per hour or fraction thereof spent at the inspection location.

Nothing in this paragraph shall be construed to establish inspection fees charged by certified UST inspectors.

- (b) Permanent removal inspections conducted by a fire marshal employee shall be billed at a rate of sixty dollars per hour or fraction thereof spent at the inspection location.

Nothing in this paragraph shall be construed to establish inspection fees charged by certified UST inspectors.

- (c) Replacement inspections conducted by a fire marshal employee shall be billed at a rate of sixty dollars per hour or fraction thereof spent at the inspection location.

No owner or operator shall operate any UST system or portion thereof upon which are past due permit fees or inspection fees. Inspection fees will be considered past due if they are not actually received by the fire marshal within thirty days of the date of the invoice.

Nothing in this paragraph shall be construed to establish inspection fees charged by certified UST inspectors.

- (d) UST system undergoing a change in service requires no inspection.

- (e) An UST system taken temporarily out of service requires no inspection. No owner or operator shall operate any UST system or portion thereof upon which there are past due permit fees.

(5) Permit applications.

- (a) Prior to beginning any permanent abandonment, permanent removal, replacement, change in service, or temporary closure owners and operators shall submit a permit application to either the local fire department that has been delegated authority pursuant to rule 1301:7-9-15 of the Administrative Code or the fire marshal, whichever is appropriate.

- (b) The permit application shall be submitted on a form prescribed by the fire marshal and shall be accompanied by any drawings or additional information required on the prescribed application form and by the applicable permit fee described in paragraph (D)(4) of this rule.

- (c) The fire marshal may allow permit applications for permanent abandonment, permanent removal, replacement, a change in service, or temporary closure to be submitted less than thirty days prior to beginning the activity in emergency situations at the fire marshal's sole discretion.

- (d) Upon a determination by the fire marshal or his designated representatives for permit applications properly submitted to the fire marshal, that the permit application was completed in compliance with this rule, the fire marshal or his designated representatives shall issue the appropriate permit.

(6) Obtaining a permit pursuant to this rule does not relieve the owners and operators from the obligation of obtaining any other applicable federal, state, or local permits. Nor does it relieve the owners and operators from the obligation of complying with any other applicable federal, state, or local laws and regulations.

(E) Complying with rule 1301:7-9-13 of the Administrative Code.

In carrying out any activity under this rule owners and operators shall comply with the provisions of rule 1301:7-9-13 of the Administrative Code.

(F) Temporarily out of service.

(1) UST systems that have been taken temporarily out of service shall have the fill line, gauge opening, and dispensing unit secured against tampering. Vent lines shall remain open and be maintained. Owners and operators shall continue to comply with the applicable requirements of this chapter, except for the release detection requirements of rule 1301:7-9-07 when the UST system is empty.

(2) A UST system shall be considered empty when all regulated substances have been removed so that no more than 2.5 centimeters of residue, or 0.3 per cent by weight of the total capacity of the UST system, remain in the UST system.

(G) Temporary closure.

(1) When an operating UST system is temporarily closed, the owner and operator of the UST system shall comply with the following requirements:

(a) Leave the vent lines open and functioning;

(b) Cap and secure all other lines, pumps, manways, and ancillary equipment; and

(c) Empty the UST system. The UST system shall be considered empty when all regulated substances have been removed so that no more than 2.5 centimeters of residue, or 0.3 per cent by weight of the total capacity of the UST system, remain in the UST system.

(2) If an operating UST system is out of service for more than twelve months, the owners and operators shall permanently remove or permanently abandon the UST system in accordance with the requirements set forth in this rule, unless a demonstration has been made to the satisfaction of the certified fire safety inspector with delegated authority pursuant to rule 1301:7-9-15 of the Administrative Code or the fire marshal, as appropriate, that unusual circumstances require continued maintenance of UST system in its current condition and all procedures specified in paragraph (G)(1) of this rule have been followed. Prior to requesting an extension, owners and operators must perform a closure assessment that meets the requirements of paragraph (K) of this rule.

(3) If an operating UST system is to be temporarily closed for more than twelve months, owners and operators shall:

(a) Permanently remove, permanently abandon, or replace the UST system if it does not meet either the performance standards in paragraph (B) of rule 1301:7-9-06 of the Administrative Code for new UST systems or the upgrading requirements in paragraph (C) rule 1301:7-9-06 of the Administrative Code, except that the spill and overfill equipment requirements do not have to be met; or

(b) Request an extension of the twelve month temporary closure period. Any request for an extension of the twelve month temporary closure period shall be submitted to the fire marshal for his consideration at least thirty days prior to

the end of the initial twelve month temporary closure period. Provided an extension of the twelve month closure period is properly requested as set forth herein, the twelve month temporary closure period shall be extended until the fire marshal acts upon the extension request. If the fire marshal denies the extension request, the twelve month temporary closure period shall be extended for sixty days from the date of the denial of the extension request by the fire marshal, at which time the twelve month temporary closure period shall end and owners and operators of the UST system shall comply with paragraph (G)(3)(a) of this rule. At the end of any extension of the twelve month temporary closure period owners and operators shall comply with paragraph (G)(3)(a) of this rule.

(H) Permanent abandonment.

(1) UST systems shall not be permanently abandoned unless approved by a certified fire safety inspector with delegated authority pursuant to rule 1301:7-9-15 of the Administrative Code for the jurisdiction where the UST system is located or the fire marshal for jurisdictions where authority has not been delegated pursuant to rule 1301:7-9-15 of the Administrative Code. Upon approval, the UST system shall be permanently abandoned in accordance with "American Petroleum Institute publication 2015; Safe Entry and Cleaning Petroleum Storage Tanks," and the following requirements:

(a) The owners and operators shall perform a closure assessment as described in paragraph (K) of this rule to determine whether there has been a release of a regulated substance from the UST system.

(b) The owners and operators of any underground storage tank that is permanently abandoned shall fill same

with a solid inert material. Only solid inert materials which are free of any harmful contaminants or pollutants shall be used to fill the underground storage tank. Acceptable materials include sand, fine gravel, sand and gravel mixtures, and cement/concrete-based slurries. Other materials such as native soils, drilling mud, and commercially marketed fill materials shall not be used for filling the underground storage tank unless the material and filling procedures have been reviewed and approved by the fire marshal.

(I) Permanent removal and replacement.

(1) Permanent removal of an UST system where no replacement of the UST system is anticipated shall be conducted as follows:

(a) All UST systems or any part of a UST system permanently removed shall be removed from the ground unless the fire marshal or a certified fire safety inspector with delegated authority pursuant to rule 1301:7-9-15 of the Administrative Code authorizes the permanent abandonment of the UST system or any part of the UST system.

(b) Prior to permanently removing a UST system, the owners and operators shall comply with the cleaning, removal, and safety requirements of "American Petroleum Institute Recommended Practice 1604; Removal and Disposal of Used Underground Petroleum Storage Tanks", "American Petroleum Institute publication 2015; Safe Entry and Cleaning Petroleum Storage Tanks"; and "The National Institute for Occupational Safety and Health; Criteria for a Recommended Standard \* \* \* Working In Confined Space."

(c) Remove all backfill from the tank cavity excavation, piping trenches, dispensing unit areas, and remote fill pipe trenches.

(d) Remove no more than twelve inches of native soils from the side walls and bottom of the tank cavity excavation, piping trenches, dispensing unit areas, and remote fill pipe trenches. Where bedrock is encountered within the first twelve inches, remove native soils to bedrock. Further removal of soils from the tank cavity, piping trenches, dispensing unit areas, and remote fill pipe trenches for the purposes of corrective action shall not be conducted without prior approval of the fire marshal.

(e) Regulated backfill and native soils removed from the tank cavity excavation, piping trenches, dispensing unit areas, and remote fill pipe trenches may be stored on site for a period not to exceed ninety days, provided it has been placed on a concrete pad, asphalt pad, or impermeable synthetic liner, covered to prevent infiltration of rain water, and has been surrounded with a berm to minimize run off of contaminated rain water. Storage on-site beyond the ninety days shall only occur if prior approval has been granted by the fire marshal.

(f) Owners and operators shall conduct a closure assessment of and prepare a closure report regarding the tank cavity excavation, piping trenches, dispensing unit areas, and remote fill pipe trenches following the permanent removal pursuant to paragraphs (K) and (L) of this rule.

(2) When an UST system is being permanently removed for replacement, the new UST system installation may occur following completion of the actions required in paragraphs (I)(1)(a) to (I)(1)(f) of this rule and the removal of any free product from the tank

cavity, piping trenches, dispensing unit areas, and remote fill pipe trenches in accordance with the requirements of rule 1301:7-9-13 of the Administrative Code, except that the replacement need not await completion of the closure report required by paragraph (L) of this rule or corrective action measures required by rule 1301:7-9-13 of the Administrative Code in the event that a release has been discovered. However, such replacement does not relieve the owners and operators from compliance with rule 1301:7-9-13 of the Administrative Code, including the possibility of permanent removal of the newly installed UST system if necessary to meet corrective action requirements.

(J) Change in service.

(1) As part of a change in service of an UST system owners and operators shall conduct a closure assessment as required in paragraph (K) of this rule and prepare a closure report as required in paragraph (L) of this rule. As part of a change in service of an UST system owners and operators shall empty and clean the tank by removing all liquid and accumulated sludge.

(2) Change in service of the UST system shall not occur prior to the completion of the closure assessment required by paragraph (K) of this rule, but may occur prior to the filing of the closure report required by paragraph (L) of this rule. However, such change in service does not relieve owners and operators from compliance with rule 1301:7-9-13 of the Administrative Code.

(K) Closure assessment.

(1) Owners and operators of UST systems shall conduct a closure assessment when the UST system, or any portion of the UST system:

- (a) Is permanently removed.
- (b) Is replaced.
- (c) Is permanently abandoned.
- (d) Undergoes a change in service.
- (e) Will be temporarily closed for twelve months or more and an extension will be requested.

(2) The owners and operators of UST systems do not have to perform a closure assessment if vapor monitoring or ground water monitoring are used in accordance with paragraphs (E)(5) to (E)(6) of rule 1301:7-9-07 of the Administrative Code as an external release detection method for the UST system and a release is not detected using one or both of these methods up to the time of permanent abandonment, permanent removal, replacement, or change in service.

(3) For UST systems being assessed in a corrective action program under rule 1301:7-9-13 of the Administrative Code, a closure assessment need not be performed for that portion of the UST system in corrective actions.

(4) The closure assessment shall consist of the following:

(a) The owners and operators shall perform a visual site evaluation of the site to identify evidence of past or present operational problems, such as, surface soil staining, concrete staining, concrete patchwork, areas where piping and pump islands existed, and all potential sources of contamination.

(b) All samples collected shall be split into two components. One packaged for field screening, the other packaged for potential laboratory analysis. The sampling and packaging shall be in

accordance with procedures established by the fire marshal. All samples shall be collected within twenty-four hours of completing the excavation.

(c) Soil samples for permanent removal and replacement shall be taken from the following locations:

(i) A sample shall be collected from under both ends of each tank. If a tank is longer than thirty-five feet an additional sample shall be collected from under the middle of the tank.

(ii) A sample shall be taken every twenty feet along piping runs that routinely contain regulated substances. If the piping run is less than twenty feet in length, no sample is required to be collected.

(iii) A sample from underneath each dispensing unit. If the dispensing unit is located directly above the tank, no sample is required to be collected.

(iv) A sample from below any remote fill pipe area located more than ten feet from the tank cavity excavation.

(d) Water in the tank cavity excavation shall be completely evacuated and disposed of in accordance with all federal, state, and local laws and regulations. If water cannot be completely evacuated from the tank cavity excavation or upon recharge of water from surrounding soils into the tank cavity excavation to a level sufficient for sample collection a water sample shall be collected as soon as is practicable, within a period not exceeding twenty-four hours following the evacuation. If water is present in the tank cavity excavation, soil samples required under paragraph (K)(4)(c)(i) of this rule need not be collected. If water does not enter the tank cavity excavation from

surrounding soils to a level sufficient for sample collection within a twenty-four hour period following the evacuation, a water sample does not need to be taken, but the soil samples required by paragraph (K)(4)(c)(i) of this rule shall be collected.

(e) Soil samples for permanent abandonment, change in service, and extensions of temporary closure shall be collected from the locations described in paragraphs (K)(4)(e)(i)(a) to (K)(4)(e)(iv) of this rule. Where water is encountered in a soil boring a soil sample shall be collected at the soil water interface. Soil samples shall be collected using the following methods:

(i)(a) By cutting holes in the bottom of both ends of the tank and collecting samples in the backfill material below the tank bottom using a hand soil sampling tool. This method shall be used only if the tank can be safely entered after proper preparation, purging, and testing are performed in accordance with "American Petroleum Institute Recommended Practice 1604; Removal and Disposal of Used Underground Petroleum Storage Tanks"; or

(b) By installing soil borings in the backfill as close to both ends of each tank as possible. The soil borings shall be installed to a depth where native soils are encountered. The sample shall be taken from the bottom of the backfill material. If the native soil interface can not be determined, the sample shall be taken from materials within twelve inches of the bottom of the tank.

(ii) A soil sample shall be collected from the backfill material every twenty feet along piping runs that routinely contained regulated

substances, if possible. If it is not possible to collect the samples described above the owners and operators shall submit an alternative protocol to the fire marshal for approval.

(iii) A soil sample shall be collected from underneath each dispensing unit. If the dispensing unit is located directly above the tank, no sample needs to be collected.

(iv) A soil sample shall be collected from below each remote fill pipe area located more than ten feet from the tank.

(f) If site conditions interfere with the collection of any samples required by paragraphs (K)(4)(c) to (K)(4)(e)(iv), owners and operators shall obtain approval in writing from the bureau chief for an alternative sampling protocol.

(g) Soil samples collected for field screening shall be screened in the field using equipment calibrated in accordance with manufacturer's instructions and procedures approved by the fire marshal.

(h) The following samples collected in accordance with this rule shall be sent to the laboratory for analysis:

(i) One soil sample from each tank cavity excavation with the highest field screening reading. If the tank cavity excavation contained more than three tanks, an additional soil sample for each multiple or fraction thereof of three tanks.

(ii) One soil sample from each piping run excavation with the highest field screening reading.

(iii) One soil sample from each remote fill pipe area.

(iv) One soil sample from the dispenser unit samples with the highest field screening reading.

(v) Any water samples that were collected.

(5) Samples sent to the laboratory for analysis pursuant to paragraph (K)(4)(h) of this rule shall be analyzed for the parameters listed in Table 1 of paragraph (D)(4) of rule 1301:7-9-13 of the Administrative Code.

(L) Closure report.

(1) Owners and operators shall submit one copy of the written closure report to the fire marshal, which shall be actually received by the fire marshal within forty-five days of receipt by the owner or operator of the laboratory analysis required by paragraph (K)(4)(h) of this rule, but not later than ninety days from the date of collecting the samples required by this rule. The closure report shall be sent to:

"Division of State Fire Marshal  
Bureau of Underground Storage Tank Regulations  
P.O. Box 687  
Reynoldsburg OH 43068-0687  
Attn: Closure Review"

(2) Owners and operators shall assemble, in written report form, the information collected in compliance with paragraph (K) of this rule. The closure report shall include a table of contents listing the item and the page in the closure report where said item is located and the following information:

(a) UST system owner, operator, and facility data.

(i) The facility name, address, zip code, telephone number, and county.

(ii) The facility owners' name, address, zip code, telephone number, and county.

(iii) The UST system owners' name, address, zip code, telephone number, and county.

(iv) The UST system operators' name, address, zip code, telephone number, and county.

(b) UST system data.

(i) The age, capacity, and construction material of the UST system which has been temporarily closed, permanently abandoned, permanently removed, replaced, or has undergone a change in service.

(ii) The substance stored in the UST system.

(iii) Substances, other than petroleum, known to have been formerly stored in the UST system.

(iv) The status of any UST system either permanently removed or permanently abandoned.

(v) The disposition of the UST system.

(vi) A completed copy of the fire marshal closure form as provided by the state fire marshal.

(c) Waste disposal data.

(i) A written description of the disposition of any regulated soils or backfill materials. This description shall include the final location of any regulated soils or backfill materials and the amount of each in cubic yards.

(ii) A written description of the disposition of any regulated liquids. This description shall include the final location of any regulated liquids.

(iii) Laboratory data sheets for any analysis performed on any soils or backfill materials associated with the final disposition of same.

(d) Sampling data.

(i) Description of the sample collection procedures, sample preservation techniques, sample containers, and decontamination procedures associated with the closure assessment required by paragraph (K) of this rule.

(ii) Details of any field screening conducted, including the instrument readings, location And depth of sampling points, sampling methodology, instrument used and instrument calibration associated with the closure assessment required by paragraph (K) of this rule.

(iii) A copy of the chain of custody documentation.

(iv) Date of sample collection.

(v) Name and affiliation of the person(s) collecting the samples.

(vi) Sample locations and depths.

(e) Laboratory data.

(i) Laboratory sample analysis results required as part of the closure assessment performed pursuant to paragraph (K) of this rule, presented in tabular form, with laboratory data sheets attached.

(ii) Name, address, and telephone number of the laboratory.

(iii) Name(s) of the sample analyst(s).

(iv) Instrument calibration information.

(v) Sample analysis method used.

(vi) Laboratory detection and quantitation limits used.

(vii) Description of whether the sample analyzed is soil or water.

(viii) Date the samples were received by the laboratory.

(ix) Date the samples were analyzed by the laboratory.

(f) Miscellaneous data.

(i) A site map which accurately depicts the property boundaries, street locations, above ground structure(s), the UST system(s) including the number of tanks, adjacent properties and their use, any known water wells located on the site, any known monitoring wells located on the site, any utilities uncovered as part of the excavation process, and the location(s) of any other known UST system(s) or portions thereof known to have been permanently abandoned or permanently removed.

(ii) A description of the native soils encountered.

(iii) A description of the visual site evaluation required by paragraph (K)(4)(a) of this rule.

(iv) Name, address, telephone number of the state or local certified fire safety inspector with delegated authority pursuant to rule 1301:7-9-15 of the Administrative Code who was present during the permanent abandonment, permanent removal, replacement, or change in service.

(v) Name of the local fire department with jurisdiction over the UST site.

(vi) Date of the UST system(s) permanent abandonment, permanent removal, replacement, temporary closure, or change in service.

(vii) Copy of any permit required to be obtained pursuant to paragraph (D) of this rule.

(M) Handling of regulated materials associated with the site of the UST system.

(1) The handling, transportation, and disposal of any regulated substances removed from an UST system, and any regulated soils, backfill materials, ground water, wash water, or other similar materials removed from the system or facility shall be in accordance with all applicable federal, state, and local regulations in effect for the type, volume, constituent concentration, and classification of the material.

(N) Applicability to previously closed UST systems.

(1) When directed by the fire marshal, the owner and operator of an UST system permanently closed before December 22, 1988, shall assess the excavation zone and close the UST system in compliance with this rule if releases from the UST system may, in the judgement of the fire marshal, pose a current or potential threat to human health and the environment.

(O) Nothing in this rule shall exempt owners and operators of UST systems from complying with rule 1301:7-7-28 of the Administrative Code.

Effective: January 1, 1997

Promulgated under: 119.03

Rule authorized by: 3737.02 and 3737.88

Rule amplifies: 3737.02 and 3737.88

Prior effective date: 9/1/92

10/23/92 (Emer.)

1/22/93